



# COMPREHENSIVE ANNUAL FINANCIAL REPORT

For the Year Ended December 31, 1996

**The Police  
and  
Firemen's**

**Disability and Pension Fund  
of Ohio**

POLICE AND FIREMEN'S  
DISABILITY AND PENSION FUND OF OHIO

COMPREHENSIVE ANNUAL FINANCIAL REPORT

FOR THE YEAR ENDED DECEMBER 31, 1996

PERPARED THROUGH THE COMBINED EFFORTS OF  
THE PFDPF STAFF

140 East Town Street / Columbus, Ohio 43215-5164 / (614) 228-2975

Certificate of  
Achievement  
for Excellence  
in Financial  
Reporting

Presented to

Police and Firemen's  
Disability and Pension Fund  
of Ohio

For its Comprehensive Annual  
Financial Report  
for the Fiscal Year Ended  
December 31, 1995

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.



*Arthur R. Lynch*  
President

*Jeffrey L. Esser*  
Executive Director

# TABLE OF CONTENTS

## INTRODUCTORY SECTION:

PAGE

GFOA Certificate of Achievement .....	Inside Cover
Board of Trustees .....	2
Administrative Staff .....	3
Letter of Transmittal .....	4

## FINANCIAL SECTION:

Financial Statements:	
Balance Sheets .....	10
Statements of Revenues, Expenses and Changes in Fund Balance .....	11
Statements of Cash Flows .....	12
Independent Auditor's Report .....	13
Notes to Financial Statements .....	14
Required Supplemental Schedules:	
1. Analysis of Funding Progress .....	23
2. Revenues by Source .....	24
3. Expenses by Type .....	24
4. Administrative Expenses .....	26
5. Refunds of Employee Contributions .....	27
Supplemental Schedules:	
1. Fund Balance Accounts .....	28
2. Professional Consultants .....	30
3. Investment Management Fees .....	31

## ACTUARIAL SECTION:

1. Actuary's Certification Letter .....	33
2. Summary of Actuarial Assumptions and Methods .....	35
3. Active Member Valuation Data .....	39
4. Summary of Unfunded Accrued Liabilities .....	39
5. Short-Term Solvency Test .....	41
6. Recommended and Actual Contribution Rates .....	42
7. Retirants and Beneficiaries Added to and Removed from Rolls .....	42
8. Plan Summary .....	43

## STATISTICAL SECTION:

1. Benefit Expenses by Type .....	46
2. Retired Membership by Type of Benefits .....	46
3. Average Monthly Benefit Payments .....	47
4. Participating Employers .....	48

## INVESTMENT SECTION:

1. Investment Report .....	55
2. Investment Portfolio Summary .....	57
3. Investment Policy and Guidelines .....	59

# BOARD OF TRUSTEES

## ELECTED MEMBERS:



**Thomas A. Bennett**  
Chairman  
Dayton Police Department  
Term expires June 2, 1997



**Joseph Walter**  
Toledo Fire Department  
Term expires June 1, 1998



**John Gannon**  
Cleveland Fire Department (Retired)  
Term expires June 7, 1999



**Clark "Chip" Westfall**  
Akron Police Department  
Term expires June 7, 1999



**David K. Harker**  
Dayton Fire Department  
Term expires June 5, 2000



**Steve Young**  
Marion Police Department  
Term expires June 7, 1999

## STATUTORY MEMBERS:



**Richard T. Balazs**  
Director of Finance  
City of Euclid  
Term expires June 1, 1998



**Betty Montgomery**  
Attorney General



**Jim Petro**  
Auditor of State

# ADMINISTRATIVE STAFF



Allen J. Proctor  
Executive Director



Milford Blanton  
Chief Information Officer



E. William Butler  
Chief Operating Officer



Theodore G. Hall  
Chief Investment Officer



David J. Nesbitt  
Director of Member Services



Thomas R. Severns  
Director of Finance



Debbie D. Young  
Director of Benefit Services

# LETTER OF TRANSMITTAL

## The Police and Firemen's Disability and Pension Fund

140 East Town / Columbus, Ohio 43215-5125 / (614) 228-2975

June 26, 1997

### Dear Chairman and Members of the Board of Trustees:

We are pleased to submit to you the Comprehensive Annual Financial Report (CAFR) of the Police and Firemen's Disability and Pension Fund of Ohio (the Fund) for the year ended December 31, 1996. This CAFR was prepared to aid interested parties in assessing the Fund's status at December 31, 1996, and its results for the year then ended. The report is divided into five sections: an Introductory Section which contains this Letter of Transmittal, along with the identification of the administrative organization of the Fund; a Financial Section which includes the Independent Auditors' Report and the financial statements; an Actuarial Section which includes significant data pertaining to the Fund; and an Investment Section which contains the investment report, portfolio summary, and the investment policy and guidelines. The Investment Section is not required but has been included for purposes of added analysis.

### Accounting System and Internal Controls

The financial statements were prepared in accordance with generally accepted accounting principles applicable to governmental units, including the pronouncements of the Governmental Accounting Standards Board (GASB).

The principles promulgated by Statement No. 6 of the National Council On Governmental Accounting (predecessor to GASB) are used in the Fund's accounting and subsequent reporting of financial activities. The accrual basis of accounting is used to record all financial transactions. Gains and losses on sales and exchanges of investments are recognized on the transaction date. Interest, dividends, net realized gains and other investment income are recognized on the accrual basis and included in investment income, net of investment related expenses. Investments in corporate and government bonds and obligations are reported at amortized cost with discounts or premiums amortized using the interest method. All other investments are carried at cost, subject to adjustment for market declines determined to be other than temporary. Income on venture capital is recognized once distributions received are in excess of the Fund's capital contributions. Depreciation on buildings is provided using the straight-line method over 40 years, the estimated useful life of the property. All other assets are carried at cost.

Management is responsible for establishing and maintaining an internal control structure designed to ensure that the assets of the Fund are protected from loss, theft or misuse and to ensure that adequate accounting data are compiled to allow for the preparation of financial statements in conformity with generally accepted accounting principles. The internal control structure is designed to provide reasonable, but not absolute, assurance that these objectives are met. The concept of reasonable assurance recognizes that: (1) the cost of a control should not exceed the benefits likely to be derived; and (2) the valuation of costs and benefits requires estimates and judgments by management. Management believes its internal control structure meets these objectives.

### Plan History and Overview

The Police and Firemen's Disability and Pension Fund (the Fund) was created by the Ohio General Assembly in 1965, replacing 454 separate local police and firemen's relief and pension funds in Ohio. The statewide Fund began operating January 1, 1967. On that date the local pension funds transferred their assets and liabilities to the Fund. Assets transferred to the Fund were approximately \$75 million. The Fund's actuary computed the liabilities accrued up to 1966 at approximately \$490 million. Unfunded accrued liabilities totaling nearly \$207 million as of December 31, 1996 are being paid by employers over a 67-year period which began in 1969. Under the terms of a statute enacted by the Ohio Legislature in 1993, the Fund's Board of Trustees may enter into agreements with municipal corporations permitting them to pay off these liabilities at a discounted amount determined by the Board. Between 1993 and October 1995 36 employers paid a total of \$118,064,834, reducing their liabilities by \$181,638,206.

The Fund provides pension, disability and health care to qualified participants, survivor and death benefits and health care to qualified spouses, children and dependent parents. Please refer to the plan summary in the actuarial section for further information on plan benefits.

The table below is a tabulation of current participating employers at December 31, 1996. The statistical section beginning on page 45 provides more detail of the aforementioned participating employers.

#### Participating Employers

	<u>Police</u>	<u>Fire</u>
Municipalities	242	195
Townships	-	85
Villages	<u>332</u>	<u>30</u>
<b>Total</b>	<u><u>574</u></u>	<u><u>310</u></u>

#### Economic Conditions and Outlook

Following anemic growth in late 1995, the Federal Reserve Board eased the Federal Funds Rate and the Discount Rate one last time in January 1996, by lowering the rates by 25 basis points to 5.25% and 5%, respectively. However, signs of stronger economic growth began to emerge early in the year as did concern over a tightening labor market and the potential effect on inflation. The unemployment rate trended lower and ended the year at 5.3% as the pace of job creation picked up versus the prior year. Also, consumer confidence ascended to levels not seen since 1989. For all of 1996, GDP rose 3.1%. Meanwhile, inflation, as measured by the CPI, trended slightly higher during the year and registered a 3.3% annual increase. This environment allowed the Federal Reserve Board to maintain a stable monetary policy for the remainder of the year despite constant speculation about their next move. Stocks followed up an exceptional performance in 1995 with another excellent year, while bonds slumped to a sub-par showing. The S&P 500 returned a remarkable 23.1%. However, the bond market stumbled to a paltry 3.6% return for the Lehman Aggregate Index as investors worried that a stronger economy would lead to higher inflation. This market environment helped the Fund achieve a 1996 total return for the overall investment portfolio of 13.56%.

1997 has gotten off to a strong start in terms of the economy and the stock market. New jobs continue to be created at a healthy pace and consumer confidence has risen even higher. In fact, first quarter GDP rose a strong 5.8%. Yet, inflation has so far remained benign. Worried about the strengthening economy and the tightening labor market, the Federal Reserve Board, in March, raised the Federal Funds rate by 25 basis points to 5.5%. Thriving on this economic backdrop, stock indexes are up strongly to new highs, but the bond market has continued its recent mediocre performance as interest rates have risen. However, second quarter growth seems to have slowed and inflation remains tame. Therefore, any further rise in rates should be fairly limited. Given somewhat higher interest rates and projections of slower earnings growth, stocks are not likely to continue upward at the exceptional pace of the last two and one-half years.

#### Major Initiatives

To help fulfill our goal of providing the best quality information and services for our membership, twelve pre-retirement seminars and seven health fairs were conducted by Fund staff at locations throughout the state. Six publications relating to retirement were extensively revised and issued.

A highlight of 1996 was the June launch of the Fund's Internet website. The site, whose address is <http://www.pfdpf.state.oh.us/>, provides members and other interested parties with an extensive array of information regarding the Fund. A partial listing of the information available includes monthly Board reports, news releases, member newsletters, booklets and brochures, and helpful informational guides concerning service and disability retirement and the medical benefit program. In addition, members may contact Fund staff via Internet e-mail with questions or comments.

Once again in 1996 the Fund's efforts at cost containment and managed care achieved the Board of Trustees' goal of maintaining health care expense at no more than 6.5% of payroll, with a rate of only 6.22%. During 1996 the preferred provider organization (PPO) network was expanded to cover the entire state, and out-of-state coverage was also significantly expanded. In addition retirants were provided with optional dental and vision coverage.

### Financial Overview

The Fund receives virtually all of its funds from the following sources: member contributions, employer contributions, retiree medical benefit contributions, state subsidies and reimbursements, and investment earnings. Revenues from all sources totaled \$829,370,209 in 1996, compared to \$756,724,362 in 1995. The increase in revenues is primarily due to increased investment income along with increased employer and employee contributions. The Fund's total rate of return on its investment portfolio decreased from 25.1% in 1995 to 13.6% in 1996, still well in excess of the actuarial assumption of 8.35%. A summary of revenues for 1996 and 1995 is as follows:

<u>REVENUES BY SOURCE</u>	1996		1995		INCREASE (DECREASE)
	<u>Amount</u>	<u>Percent</u>	<u>Amount</u>	<u>Percent</u>	
Contributions	\$360,594,486	44%	\$341,354,918	45%	\$ 19,239,568
Net Investment Income	457,910,608	55%	405,458,383	52%	52,452,225
Interest on Local Funds Receivable	8,798,709	1%	8,926,285	1%	(127,576)
Other Income	2,066,406	0%	984,775	0%	1,081,630
<b>Total</b>	<b><u>\$829,370,209</u></b>	<b><u>100%</u></b>	<b><u>\$756,724,362</u></b>	<b><u>100%</u></b>	<b><u>\$ 72,645,847</u></b>

Benefit payments are the primary expense of the Fund. Total expenses for the Fund were \$444,076,374 in 1996, compared to \$415,237,352 in 1995. The increase in total expenses is primarily due to an increase in benefit payments. A summary of expenses for 1996 and 1995 is as follows:

<u>EXPENSES BY TYPE</u>	1996		1995		INCREASE (DECREASE)
	<u>Amount</u>	<u>Percent</u>	<u>Amount</u>	<u>Percent</u>	
Benefits	\$420,382,559	95%	\$395,058,132	95%	\$ 25,324,427
Administrative Expenses	17,778,992	4%	14,066,160	4%	3,712,832
Refund of Employee Contributions	5,602,382	1%	5,553,638	1%	48,744
Other Expenses	312,441	0%	559,622	0%	(247,181)
<b>Total</b>	<b><u>\$444,076,374</u></b>	<b><u>100%</u></b>	<b><u>\$415,237,352</u></b>	<b><u>100%</u></b>	<b><u>\$ 28,839,022</u></b>

### Funding Practices and Actuarial Overview

Funds are derived from the excess of revenues over expenses, and are accumulated by the Fund in order to meet current and future benefit obligations to retirees and beneficiaries. Net income for the year ended December 31, 1996, increased the fund balance by approximately \$385.3 million. This increase is approximately \$43.8 million more than the total fund balance increase recognized in the prior year.

The actuarial valuation for funding purposes dated January 1, 1996, the most recent actuarial valuation, reported an unfunded actuarial accrued liability of \$3,295.2 million, which represents the difference between the actuarial accrued liability for benefits to be paid members and retirees (\$8,245.4 million) and total valuation assets (\$4,950.2 million). The unfunded actuarial accrued liability is being amortized in an orderly fashion over future years. The January 1, 1996 pension benefit obligation was \$6,220.8 million.

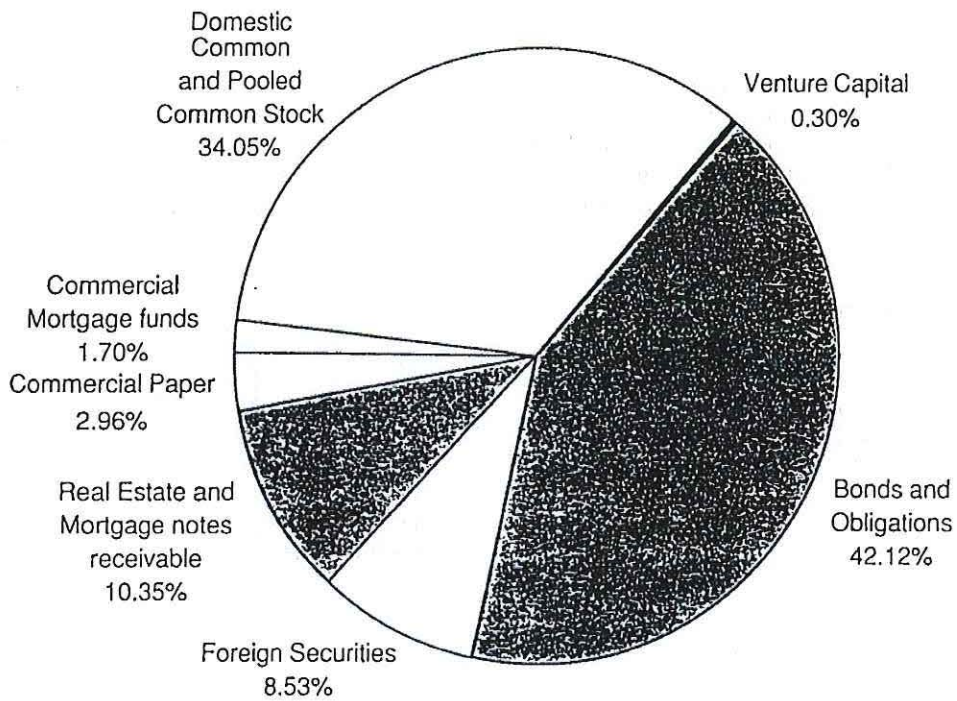


**Investment Policy**

The Fund invests all available funds in order to maximize both current income yield and long-term appreciation. For the year ended December 31, 1996, the investment portfolio provided 55% of the Fund's total revenues while employee and employer contributions provided 14% and 29%, respectively. All other sources provided the remaining 2%.

The primary objective of the Fund's investment policy is to assure that the Fund meets its responsibilities for providing retirement and other benefits. The portfolio is diversified to provide adequate cash flow, and to provide the highest possible total return on the Fund's assets with the least exposure to risk.

**Investment Portfolio at December 31, 1996**



Details of portfolio composition, rates of return, analysis of significant economic conditions, and additional information concerning the Fund's investment policy are provided on pages 54 through 64 of this comprehensive annual financial report.

**Material Plan Amendments**

There are no material plan amendments in 1996.

**Independent Auditors**

The financial statements of the Fund for the year ended December 31, 1996, were audited by Deloitte & Touche LLP, independent certified public accountants, whose opinion thereon is included in of the Financial Section of this report.

### Notes to the Financial Statements

The notes to the financial statements which follow the financial statements contain additional information and are an integral part of such statements.

### 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 Fund for its Comprehensive Annual Financial Report for the fiscal year ended December 31, 1995. The Certificate of Achievement is the highest form of recognition for excellence in state and local government financial reporting.

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

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

### Acknowledgments

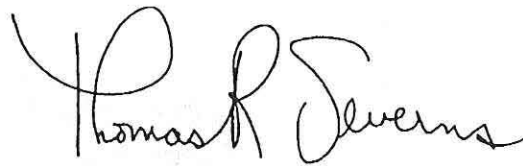
The preparation of this report reflects the combined efforts of the Fund's staff under the direction of the Board of Trustees. It is intended to provide complete and reliable information as a basis for making management decisions, to disclose compliance with legal provisions, and as a means of determining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

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

Respectfully submitted,



ALLEN J. PROCTOR  
Executive Director



THOMAS R. SEVERNS  
Director of Finance

# FINANCIAL SECTION

**Balance Sheets**

**Statements of Revenues, Expenses and Changes in Fund Balance**

**Statements of Cash Flows**

**Independent Auditors' Report**

**Notes to Financial Statements**

**Required Supplemental Schedules:**

1. Analysis of Funding Progress
2. Revenues by Source
3. Expenses by Type
4. Administrative Expenses
5. Refunds of Employee Contributions

**Supplemental Schedules:**

1. Fund Balance Accounts
2. Professional Consultants
3. Investment Management Fees

# BALANCE SHEETS

DECEMBER 31, 1996 and 1995

## Assets:

	<u>1996</u>	<u>1995</u>
Cash (note 5)	\$25,578,302	\$ 32,910,302
Receivables:		
Employers' contributions	70,787,724	69,152,659
Employees' contributions	9,892,293	10,755,075
Accrued investment income	65,164,233	64,960,806
Investment sale proceeds	4,438,598	5,458,551
Total receivables	<u>150,282,848</u>	<u>150,327,091</u>
Collateral held under security lending program (note 5)	1,172,043,094	815,042,481
Investments at cost (market value \$6,335,032,006 and \$5,619,333,015 in 1996 and 1995, respectively) (notes 5, 6, 8 and 12)	5,271,803,802	4,853,075,637
Local funds receivable (note 7)	206,992,946	209,135,978
Property and Equipment, net of accumulated depreciation of \$2,085,254 and \$1,831,502 in 1996 and 1995 respectively	3,025,920	3,597,209
Other assets	1,214,114	1,998,445
Deposits with deferred compensation plan (note 9)	731,555	602,800
Total assets	<u>6,831,672,581</u>	<u>6,066,689,943</u>

## Liabilities:

Health care benefits payable (note 2)	9,688,220	10,373,369
Investment commitments payable	45,012,142	21,706,404
Accounts payable and accrued expenses	2,252,556	2,208,375
Notes payable (note 8)	30,132,113	30,573,125
Liabilities for Death Benefit Fund benefits (note 16)	11,585,278	10,559,193
Other liabilities	3,164,003	3,854,411
Obligations under securities lending program (note 5)	1,172,043,094	815,042,481
Deferred compensation plan payable (note 9)	731,555	602,800
Total liabilities	<u>1,274,608,961</u>	<u>894,920,158</u>
Net assets available for benefits	<u>\$5,557,063,620</u>	<u>\$5,171,769,785</u>

## Fund balance (note 3):

Pension benefit obligation:		
Retirees and beneficiaries currently receiving benefits and terminated employees not yet receiving benefits	3,236,800,000	2,997,100,000
Current employees:		
Accumulated employee contribution	824,500,000	770,200,000
Employers financed portion	2,159,500,000	2,085,900,000
Total pension benefit obligation	<u>6,220,800,000</u>	<u>5,853,200,000</u>
Unfunded pension benefit obligation	(663,736,380)	(681,430,215)
Total fund balance	<u>\$5,557,063,620</u>	<u>\$5,171,769,785</u>

See accompanying notes to financial statements.

# STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN FUND BALANCE

YEARS ENDED DECEMBER 31, 1996 and 1995

	<u>1996</u>	<u>1995</u>
<b>Operating revenue:</b>		
Contributions:		
Employers (note 4)	\$ 236,214,576	\$ 223,206,380
Employees (note 4)	115,314,953	109,000,755
Medical Benefits	5,119,628	4,965,059
State of Ohio-subsidies (note 4)	3,945,329	4,182,724
	360,594,486	341,354,918
Net investment income (notes 5 and 6)	457,910,608	405,458,383
Interest on local funds receivable	8,798,709	8,926,285
Other income	2,066,406	984,775
Total operating revenues	829,370,209	756,724,361
 <b>Operating expenses:</b>		
Benefits (note 3):		
Retirement	225,448,375	207,355,087
Disability	91,638,835	86,763,675
Health care	71,674,335	70,170,717
Survivor	31,621,014	30,768,653
	420,382,559	395,058,132
Loss on write-downs of long term local funds receivable (note 2)	-	167,105
Administrative expenses, including depreciation on operating properties (note 10)	17,778,992	14,066,160
Refund of employee contributions (note 4)	5,602,382	5,553,638
Other expenses	312,441	392,317
Total operating expenses	444,076,374	415,237,352
Net operating income	385,293,835	341,487,009
Fund balance, beginning of year	5,171,769,785	4,830,282,776
Fund balance, end of year	\$5,557,063,620	\$5,171,769,785

See accompanying notes to financial statements.

# STATEMENTS OF CASH FLOWS

YEARS ENDED DECEMBER 31, 1996 and 1995

	<u>1996</u>	<u>1995</u>
<b>Reconciliation of net operating income to net cash provided by operating activities:</b>		
Net operating income	\$ 385,293,835	\$ 341,487,009
Adjustments to reconcile net operating income to net cash provided by operating activities:		
Investment income	(457,910,608 )	(405,458,383 )
Depreciation on property and equipment	676,146	572,119
Local funds' receivable principal payments	2,143,033	3,998,498
Loss on writedowns of long term local funds receivable	-	167,106
Change in assets and liabilities:		
Increase in receivables	(772,284 )	(2,336,072 )
(Decrease) Increase in other assets	784,331	(1,023,947 )
(Decrease) Increase in health care benefits payable	(685,149 )	918,333
Increase in accounts payable and accrued expenses	44,181	645,073
(Decrease) in other liabilities	(690,408 )	(456,541 )
(Decrease) Increase in note payable	(441,012 )	28,392,424
Increase in liabilities for death benefit fund benefits	1,026,085	9,276,812
<b>Total adjustments</b>	<u>(455,825,685 )</u>	<u>(365,304,578 )</u>
<b>Net cash provided by operating activities:</b>	<b>(70,531,850 )</b>	<b>(23,817,569 )</b>
 <b>Cash flows from capital and related financing activities:</b>		
Purchase of property and equipment	<u>(104,857 )</u>	<u>(1,180,045 )</u>
 <b>Cash flows from investing activities:</b>		
Purchase of investments	(7,349,013,462 )	(8,154,668,882 )
Proceeds from sale and maturities of investments	7,188,768,149	7,997,856,752
Net investment income	214,422,415	204,516,762
Depreciation on investment in real estate	9,127,605	5,222,194
<b>Net cash provided by investing activities</b>	<u>63,304,707</u>	<u>52,926,826</u>
<b>Net (decrease) increase in cash and cash equivalents</b>	<b>(7,332,000 )</b>	<b>27,929,212</b>
 <b>Cash and cash equivalents at beginning of year</b>	<u>32,910,302</u>	<u>4,981,090</u>
<b>Cash and cash equivalents year to date</b>	<u><u>\$ 25,578,302</u></u>	<u><u>\$ 32,910,302</u></u>
 <b>Noncash Transaction</b>		
Change in collateral and related obligations related to securities lending program	\$ 357,000,613	\$ (87,357,877 )

See accompanying notes to financial statements.

# INDEPENDENT AUDITORS' REPORT

**Deloitte &  
Touche LLP**



155 East Broad Street  
Columbus, Ohio 43215-3611

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

To the Board of Trustees of the Police  
and Firemen's Disability and Pension Fund of Ohio:

We have audited the accompanying balance sheets of the Police and Firemen's Disability and Pension Fund of Ohio (the Fund) as of December 31, 1996 and 1995, and the related statements of revenues, expenses and changes in fund balance and of cash flows for the years then ended. These financial statements are the responsibility of the Fund's management. Our responsibility is to express an opinion on these financial statements based on our audits.

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

In our opinion, such financial statements present fairly, in all material respects, the financial position of the Fund at December 31, 1996 and 1995, and the results of its operations and its cash flows for the years then ended in conformity with generally accepted accounting principles.

Our audits were made for the purpose of forming an opinion on the basic financial statements taken as a whole. The accompanying financial information listed as supplemental schedules in the foregoing table of contents, which is also the responsibility of the management of the Fund, is presented for the purpose of additional analysis and is not a required part of the basic financial statements of the Fund. Such additional information has been subjected to the auditing procedures applied in our audits of the basic 1996 and 1995 financial statements and, in our opinion, is fairly presented in all material respects when considered in relation to the basic 1996 and 1995 financial statements taken as a whole. The schedules as of and for the years ended December 31, 1987, 1988, 1989 and 1990 were subjected to auditing procedures by other auditors whose report dated June 7, 1991 stated that such schedules were fairly stated in all material respects when considered in relation to the basic financial statements.

*Deloitte & Touche LLP*

May 30, 1997

**Deloitte Touche  
Tohmatsu  
International**

# NOTES TO FINANCIAL STATEMENTS

YEARS ENDED DECEMBER 31, 1996 AND 1995

## I. DESCRIPTION OF THE SYSTEM

### (a) Organization

The Police and Firemen's Disability and Pension Fund of Ohio (the Fund) is a cost-sharing multiple-employer public employee retirement system established by Chapter 742 of the Ohio Revised code (ORC) in 1967 to consolidate the various local police and firemen's relief and pension funds into one statewide plan. The Fund administers pension, disability and health care to qualified participants, and survivor and death benefits and health care to qualified spouses, children and dependent parents.

Employer and employee membership data as of January 1, 1996, date of the most recent actuarial valuation, follows:

Employee Members	Police	Fire	Total
Retirees and beneficiaries currently receiving benefits and terminated employees entitled to benefits but not yet receiving them	<u>11,177</u>	<u>8,989</u>	<u>20,166</u>
Current employees:			
Vested	5,202	3,944	9,146
Nonvested	<u>9,356</u>	<u>6,784</u>	<u>16,140</u>
	<u>14,558</u>	<u>10,728</u>	<u>25,286</u>
<b>Employer Members</b>			
Municipalities	242	195	
Townships	-	85	
Villages	<u>332</u>	<u>30</u>	
<b>Total</b>	<u>574</u>	<u>310</u>	

### (b) Benefits

Members are eligible for normal retirement benefits at age 48 with 25 years of service credit or at age 62 with 15 years of service credit. The normal retirement benefit is equal to 2.5% of annual earnings for each of the first 20 years of service, 2.0% for each of the next 5 years of service, and 1.5% for each year of service thereafter. However, this normal retirement benefit is not to exceed 72% of the member's average and annual earnings for the three consecutive years during which the total earnings were greatest or the member's recalculated average annual salary for any three years during which earnings were the greatest. Retirement with reduced benefits is available upon reaching age 48 with 15 years of service credit or 25 years from the date the member became a qualified employee.

In addition to retirement benefits, the Fund also provides disability, survivor and medical benefits. Disability benefits are available to all members and vary by length of service and type of disability. Survivor benefits are specified dollar amounts paid to eligible survivors upon the death of an active member or retiree. The Fund provides medical benefits to eligible benefit recipients and their eligible dependents. The medical benefits are not guaranteed and are subject to change at any time upon action of the Board of Trustees. Coverage includes a comprehensive medical expense benefit plan along with a prescription drug program for retail and mail order prescriptions.

An eligible spouse or dependent of a member whose death resulted from injury or disease sustained while on active duty as a police officer or fire fighter is entitled to receive the member's full monthly salary, which will be reduced at the member's retirement eligibility date. The payment will be terminated at the spouse's remarriage or the dependent's attainment of age 18 (or 22 if attending school). These death benefit payments are in addition to any optional payment plan benefits elected by the member. Funding for death benefits is received from the State of Ohio, as the ORC requires the State to finance 100% of death benefit payments.

### (c) The Financial Reporting Entity

The Police and Firemen's Disability and Pension Fund is a public employee retirement system governed by a Board of Trustees consisting of nine members. Six members are elected by the employee groups they represent. The Auditor of State, the Attorney General and a municipal fiscal officer appointed by the Governor are statutory members. The Fund is a separate financial reporting entity in accordance with criteria established by Governmental Accounting Standards Board Statement No. 14 because it is legally separate, a voting majority of the governing board is not appointed by the State, and it is fiscally independent of other state and local governments.

## 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

### (a) Basis of Accounting

The Fund's financial statements have been prepared using the accrual basis of accounting. The following are the significant accounting policies followed by the Fund.

### (b) Investments

Income on all investments is recognized on the accrual basis. Gains and losses on sales and exchanges of investments are recognized on the transaction date. Interest, dividends, net realized gains and other investment income is included in investment income, net of depreciation on investment in real estate and unrealized losses. All investment transactions are recorded on a trade date basis.



Investments in corporate and government bonds and obligations are reported at amortized cost with discounts or premiums amortized using the interest method.

Investments in common and preferred stocks are carried at cost, subject to adjustment for market declines determined to be other than temporary. Advisers manage the Fund's stock portfolio. Gains and losses on sale of stocks are recognized on the transaction date based upon first in, first out (FIFO) cost of the shares managed by each adviser.

Investments in commercial paper are carried at amortized cost, which approximates market value.

Investments in venture capital limited partnerships and real estate are accounted for at cost, subject to adjustment for market declines determined to be other than temporary. Income on venture capital is recognized once distributions received are in excess of the Fund's capital contributions. Depreciation on buildings owned through real estate investments is provided using the straight-line method over 40 years, the estimated useful life of the property.

Investments in assets held under the deferred compensation program (note 9) are carried at market.

**(c) Federal Income Tax Status**

The Fund was determined to be exempt from Federal income taxes under Section 501(a) of the Internal Revenue Code.

**(d) Health Care Benefits Payable**

The Fund provides a postretirement health care program which is self-insured and is administered by an insurance carrier. Amounts accrued for health care claims payable and for incurred but not reported health care claims are based upon estimates furnished by the insurance carrier and management. Such estimates have been developed from prior claims experience. The liabilities at December 31, 1996 and 1995 are not discounted.

	<u>1996</u>	<u>1995</u>
Claims liability at January 1	\$10,373,369	\$ 9,455,036
Incurred claims	71,674,335	70,170,717
Claims paid	<u>(72,359,484)</u>	<u>(69,252,384)</u>
Claims liability at December 31	<u>\$ 9,688,220</u>	<u>\$10,373,369</u>

**(e) Property and Equipment**

Property and equipment 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:

Buildings	40 years
Furniture, fixtures and equipment	3 to 10 years

**(f) Cash and Cash Equivalents**

The Fund considers all highly liquid investments with a maturity of three months or less when purchased, to be cash equivalents, excluding commercial paper which is classified as an investment.

**(g) Loss on Write-downs of Long Term Local Funds Receivable**

In 1993 the Ohio Legislature authorized the Fund's Board of Trustees to enter into agreements with municipal corporations permitting them to pay off the remaining balance of their "Employers' Accrued Liability" (see Note 7) at a discounted amount to be determined by the Board. The Board adopted 65 percent as the discounted amount it would accept for payments received by October 15, 1995. Early payoff under this option is no longer available after that date.

Because of a preliminary ruling by the Internal Revenue Service that interest on debt issued by cities to provide funds for paying off this obligation would not be considered tax exempt, only a limited number of cities have entered into payoff agreements.

On the Fund's 1995 Statement of Revenues, Expenses and Changes in Fund Balance and Statement of Cash Flows, the amount shown as "Loss on Write-downs of Long Term Local Funds Receivable" represents the amount of discounts on payments received in 1995.

**(h) GASB Statements 25 and 26**

In November 1994 the Governmental Accounting Standards Board (GASB) issued Statements 25 and 26, effective for periods beginning after June 15, 1996, with early implementation encouraged. For 1996, the Fund has elected to defer implementation of these statements, which require plan investments to be recorded at fair value and be split between pension and health care. They also require a change in financial statement format.

**(i) GASB Statement No. 20**

Pursuant to GASB Statement No. 20: *Accounting and Financial Reporting for Proprietary Funds and Other Governmental Entities that use Proprietary Fund Accounting*, the Fund 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.

**(j) Reclassifications**

Certain 1995 balances have been reclassified to conform with the 1996 presentation.

**3. FUNDING STATUS AND PROGRESS**

The amount shown as "pension benefit obligation" is a standardized disclosure measure of the present value of pension benefits, adjusted for the effects of projected salary increases, estimated to be payable in the future as a result of employee service to date.

The measure is called the "actuarial present value of credited projected benefits" and is intended to help users assess the funding status of the Fund on a going-concern

basis, assess progress made in accumulating sufficient assets to pay benefits when due, and allow for comparisons among public employee retirement systems. The measure is independent of the actuarial funding method used to determine contributions to the Fund.

The pension benefit obligation was determined as part of the January 1, 1996 actuarial valuation, the date of the most recent actuarial valuation. The calculation excludes the present value of credited projected benefits for death benefits and a 1972 statutory benefit increase and health care benefits. The cost of death benefits and the 1972 statutory benefit increase are fully funded by State of Ohio appropriations. Health care benefits are funded on a pay-as-you-go basis from the Health Care Stabilization Fund (see note 14). The pension benefit obligation of the Fund as a whole is presented separately for police and fire fighters due to different actuarial assumptions for each group. Significant actuarial assumptions used in the 1996 and 1995 valuations are as follows:

- (a) 8.25% rate of return on investments, compounded annually.
- (b) Future salary increases based on inflationary increase of 4% per year, and an age-graded promotional increase of 1.0 to 3.0% per year.

- (c) Pre-retirement mortality is based on the 1951 Group Annuity Mortality Table as projected to 1980 using Scale C, with a one-year set-forward in age. The projected values are multiplied by 0.5.
- (d) For service retirees and survivors, mortality is based on the 1951 Group Annuity Mortality Table projected to 1980 using Scale C, with a one-year set-forward.  
For disability retirees, mortality is based on the 1951 Group Annuity Mortality Table projected to 1980 using Scale C and includes loads for disability.
- (e) Rates of retirement are based on experience for the period 1990-1993.
- (f) Rates of withdrawal from active service for reasons other than death and rates of disability have been developed based on actual plan experience.
- (g) Assets are valued for actuarial purposes at cost, except common and preferred stocks are included in valuation assets with a value equal to that developed under the 4-year Market Adjustment Method, with an initial value equal to market value.

At January 1, 1996, the unfunded pension benefit obligation was computed to be approximately \$1,252,497 as follows:

January 1, 1996 Analysis of unfunded pension benefit obligation (in thousands):

	<u>Police</u>	<u>Fire</u>	<u>Total</u>
<b>Pension benefit obligation:</b>			
Retirees and beneficiaries currently receiving benefits and terminated employees not yet receiving benefits	\$1,818,600	\$1,418,200	\$3,236,800
<b>Current employees:</b>			
Accumulated employee contributions	468,200	356,300	824,500
Employer-financed vested	906,900	658,200	1,565,100
Employer-financed nonvested	334,000	260,400	594,400
	<u>1,709,100</u>	<u>1,274,900</u>	<u>2,984,000</u>
<b>Total pension benefit obligation</b>	<u><b>\$3,527,700</b></u>	<u><b>\$2,693,100</b></u>	6,220,800
Net assets available for pension benefits, at cost (market value \$5,734,560) (excluding Health Care Stabilization Fund of \$203,467)			<u>4,968,303</u>
<b>Unfunded pension benefit obligation at January 1, 1996</b>			<u><b>\$1,252,497</b></u>

The actuarial effect of 1996 membership changes on the pension benefit obligation has not been determined and is therefore not reflected in the December 31, 1996 balance sheet value of the unfunded pension benefit obligation.

At January 1, 1995, the unfunded pension benefit obligation was computed to be approximately \$1,207,483 as follows:

**January 1, 1995 Analysis of unfunded pension benefit obligation (in thousands):**

	<u>Police</u>	<u>Fire</u>	<u>Total</u>
<b>Pension benefit obligation:</b>			
Retirees and beneficiaries currently receiving benefits and terminated employees not yet receiving benefits	\$1,665,700	\$1,331,400	\$2,997,100
<b>Current employees:</b>			
Accumulated employee contributions	437,900	332,300	770,200
Employer-financed vested	880,700	628,500	1,509,200
Employer-financed nonvested	322,500	254,200	576,700
	<u>1,641,100</u>	<u>1,215,000</u>	<u>2,856,100</u>
<b>Total pension benefit obligation</b>	<u><b>\$3,306,800</b></u>	<u><b>\$2,546,400</b></u>	<b>5,853,200</b>
Net assets available for pension benefits, at cost (market value \$4,749,036) (excluding Health Care Stabilization Fund of \$184,566)			<u>4,645,717</u>
<b>Unfunded pension benefit obligation at January 1, 1995</b>			<u><b>\$1,207,483</b></u>

The actuarial effect of 1995 membership changes and plan amendments on the pension benefit obligation had not been determined and is therefore not reflected in the December 31, 1995 balance sheet value for the unfunded pension benefit obligation. These changes and amendments have been reflected in the 1996 valuation.

**4. CONTRIBUTIONS REQUIRED AND CONTRIBUTIONS MADE**

The ORC requires contributions by active members and their employers. The contribution requirement was not actuarially determined but rather established by law under the ORC. Contribution rates are, however, subject to annual review by the Ohio Retirement Study Commission. Additionally, an actuary is used to determine the actuarial implications of the requirement. The adequacy of contribution rates is determined annually using the entry age normal with frozen initial liability actuarial cost method. Contribution rates as required by the ORC and as calculated by the Fund's actuary are as follows:

	<u>Police</u>	<u>Fire</u>
	(% of active member payroll)	
Rates established by the ORC at December 31, 1996:		
Employer	19.50	24.00
Member	10.00	10.00
<b>Total actual rate</b>	<u><b>29.50</b></u>	<u><b>34.00</b></u>
<b>Actuarially determined rate as of January 1, 1996</b>	<u><b>36.28</b></u>	<u><b>33.07</b></u>
The Fund's actuary allocated 6.50% of the current actuarial		

contribution rate to health care and the remaining to basic retirement benefits. Funding for health care benefits is on a pay-as-you-go basis. Significant actuarial assumptions used to determine the adequacy of contribution rates were the same as those used to compute the standardized measure of the pension benefit obligation. There were no material changes in the current year in actuarial assumptions, actuarial funding method or benefit provisions.

Contributions as a percentage of active member payroll required and made for 1996 represented 29.50% for police and 34.00% for fire fighters. Employer and member contributions were approximately \$122,878,000 and \$62,867,000 respectively for police and \$113,337,000 and \$47,064,000 respectively for fire fighters for the year ended December 31, 1996.

Contributions as a percentage of active member payroll required and made for 1995 represented 29.50% for police and 34.00% for fire fighters. Employer and member contributions were approximately \$116,282,000 and \$62,706,000 respectively for police and \$106,924,000 and \$46,295,000 respectively for fire fighters for the year ended December 31, 1995.

Member contributions may be refunded, without interest, to a member who withdraws from the Fund. Accumulated employer contributions for the withdrawn member remain in the Fund and are used to finance current and future benefit payments of remaining members.

In accordance with the ORC, the State of Ohio is required to contribute additional amounts to finance the cost of State-legislated benefit improvements. Total amounts contributed by the State for the years ended December 31, 1996 and 1995 were \$3,945,329 and \$4,182,724 respectively.

## 5. DEPOSITS AND INVESTMENTS

### (a) Deposits

The Fund's deposits are categorized based on the following criteria: Category 1 includes deposits insured or collateralized with securities held by the Fund or by its agent in the Fund's name. Category 2 includes deposits collateralized with securities held by the pledging financial institution's trust department or agent in the Fund's name. Category 3 includes uncollateralized deposits. This category also includes any bank balance that is collateralized with securities held by the pledging financial institution, or by its trust department or agent but not in the Fund's name.

The carrying amount of the Fund's cash deposits at December 31, 1996 was \$25,578,302 and the depository balance was \$25,537,561. Of this total, \$1,448,047 was covered by federal depository insurance and \$3,228,628 was covered by collateral held in the name of the Fund's legally-designated custodian, the Treasurer of the State of Ohio (Category 1). The remaining depository balance of \$20,860,886 consisting of amounts held by the OP & F Trusts, was uninsured and uncollateralized (Category 3). Deposits with the Ohio Public Employees Deferred Compensation Program are recorded as other assets and due to their nature are not required to be categorized.

### (b) Investments

The Fund is authorized to invest in bonds, notes, certificates of indebtedness, mortgage notes, real estate, stock shares, debentures, and other obligations or securities as set forth in the ORC.

The Fund's investments are categorized to give an indication of the level of collateral risk assumed by the Fund as of December 31, 1996 and 1995. Category 1 includes investments that are insured or registered or for which the securities are held by the Fund or its agent in the Fund's name. Category 2 includes uninsured and unregistered investments for which the securities are held by the counterparty's trust department or agent in the Fund's name. 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 the Fund's name.

All investments of the Fund met the criteria of Category 1 at December 31, 1996 and 1995, except for the investments in domestic pooled common stocks, real estate, mortgage notes receivable, commercial mortgage funds and venture capital which, by their nature, are not required to be categorized.

A summary of investments for each year follows:

	Years Ended December 31, 1996						
	December 31, 1995		Purchases and Accretions	Sales, Redemptions and Accruals	December 31, 1996		% of Total Market Value
Carrying Value	Market Value	Carrying Value			Market Value		
Canadian bonds and obligations	\$ 94,206,979	\$ 102,898,115	\$ 35,057,042	\$ 24,230,290	\$ 105,033,731	\$ 108,602,049	1.71%
Government bonds and obligations	882,505,049	943,869,929	1,108,983,573	936,697,962	1,054,790,660	1,071,387,586	16.91%
Corporate bonds and obligations	955,220,914	996,254,025	636,568,842	531,202,991	1,060,586,765	1,068,528,565	16.87%
Domestic common stocks	1,285,911,654	1,647,283,656	1,183,730,070	966,116,902	1,503,524,822	2,081,870,370	32.86%
Domestic pooled common stocks	319,237,461	589,325,934	-	27,794,549	291,442,912	645,129,572	10.18%
Foreign securities	430,352,918	452,381,860	445,876,605	426,551,031	449,678,492	523,895,973	8.27%
Commercial paper	342,771,989	342,771,989	3,874,992,339	4,061,949,000	155,815,328	155,815,329	2.46%
Real estate, net of accumulated depreciation (note 6)	449,605,453	446,734,097	94,743,821	11,349,997	532,999,277	556,569,916	8.79%
Mortgage notes receivable	12,345,000	12,345,000	144,000	-	12,489,000	12,489,000	0.20%
Commercial mortgage funds	67,355,949	67,850,456	29,748,468	7,498,627	89,605,790	90,206,177	1.42%
Venture capital	13,562,270	17,617,954	5,192,288	2,917,533	15,837,025	20,537,469	0.32%
	<u>\$4,853,075,637</u>	<u>\$5,619,333,015</u>	<u>\$7,415,037,048</u>	<u>\$6,996,308,882</u>	<u>\$5,271,803,802</u>	<u>\$6,335,032,006</u>	<u>100.00%</u>

Years Ended December 31, 1995

	December 31, 1994 Carrying Value	December 31, 1994 Market Value	Purchases and Accretions	Sales, Re- demptions and Accruals	December 31, 1995 Carrying Value	December 31, 1995 Market Value	% of Total Market Value
Canadian bonds and obligations	\$ 66,269,937	\$ 63,334,058	\$ 40,758,254	\$ 12,821,212	\$ 94,206,979	\$ 102,898,115	1.83%
Government bonds and obligations	1,165,403,741	1,091,114,548	412,612,815	695,511,507	882,505,049	943,869,929	16.80%
Corporate bonds and obligations	955,992,242	930,094,996	210,323,644	211,094,972	955,220,914	996,254,025	17.73%
Common stocks	1,121,544,162	1,218,977,417	1,279,148,661	1,114,781,168	1,285,911,655	1,647,283,656	29.31%
Pooled common stocks	339,960,060	468,738,271	-	20,722,599	319,237,461	589,325,934	10.49%
Foreign securities	150,000,000	143,530,348	1,173,343,514	892,990,596	430,352,918	452,381,860	8.05%
Commercial paper	413,995,280	413,995,280	5,662,963,709	5,734,187,000	342,771,989	342,771,989	6.10%
Real estate, net of accumulated depreciation (note 6)	248,050,675	228,292,210	220,669,410	19,114,632	449,605,453	446,734,097	7.95%
Mortgage notes receivable	15,249,000	15,249,000	-	2,904,000	12,345,000	12,345,000	0.22%
Commercial mortgage funds	20,022,477	20,022,477	49,921,184	2,587,712	67,355,949	67,850,456	1.21%
Venture capital	7,580,389	12,722,805	6,318,743	336,862	13,562,270	17,617,954	0.31%
	<b>\$4,504,067,963</b>	<b>\$4,606,071,410</b>	<b>\$9,056,059,934</b>	<b>\$8,707,052,260</b>	<b>\$4,853,075,637</b>	<b>\$5,619,333,015</b>	<b>100.00%</b>

Market values of bonds and stocks are based primarily on quotations from national security exchanges. Real estate market values are based upon external or management appraisals. Mortgage notes receivable and venture capital do not have quoted market prices and are therefore shown at cost.

In accordance with the Fund's policy (see note 2) venture capital limited partnerships are accounted for at cost.

The Fund participates in a security lending program, administered by the custodial agent bank, whereby certain securities are transferred to an independent broker/dealer (borrower) in exchange for collateral equal to no less than 102% of the market value of the loaned securities. The Fund has minimized its exposure to credit risk due to borrower default by having the custodial agent bank determine daily that required collateral meets 100% of the market value of securities on loan. The Fund has not experienced any losses due to credit or market risk on security lending activity since implementation of the program. Securities loaned to brokers/dealers at December 31, 1996 and 1995 totaled \$1,172,043,094 and \$815,042,481 respectively. Security lending income totaled \$1,451,042 and \$1,248,083 for the years ended December 31, 1996 and 1995 respectively.

## 6. INVESTMENT IN REAL ESTATE

The Fund's investment in real estate as of each December 31 consists of:

	1996	1995
Land	\$ 96,100,153	\$ 83,154,409
Buildings	348,214,303	300,127,897
Capital improvements	54,643,219	32,659,989
	<u>498,957,675</u>	<u>415,942,295</u>
Accumulated depreciation	36,246,348	27,118,743
Net book value	<u>462,711,327</u>	<u>388,823,552</u>
Commingled fund limited partnerships	70,287,949	60,781,901
<b>Total</b>	<b><u>\$532,999,276</u></b>	<b><u>\$449,605,453</u></b>

Real estate rental income was approximately \$30,073,732 and \$26,799,153 in 1996 and 1995, respectively, net of depreciation of approximately \$9,127,605 and \$5,222,194. Real estate income is included in net investment income.

The following is a schedule by years of minimum future rentals on noncancelable operating leases related to the Fund's investment in real estate as of December 31, 1996:

Year ending December 31,	
1997	44,904,447
1998	36,082,404
1999	32,282,618
2000	27,754,155
2001	22,138,747
Thereafter	117,264,821
<b>Total minimum future rentals</b>	<b><u>\$280,427,192</u></b>

## 7. LOCAL FUNDS RECEIVABLE

Local governments are required by state statute to pay the unfunded portion of the actuarially determined liability of the local police and firemen's relief and pension funds that were merged to form the Fund in 1967. The ORC names this obligation of local governments the "Employers' Accrued Liability". Interest on the outstanding balance is being accrued at a rate of 4.25%, compounded semiannually. Local governments began repayment in 1969 and payments are required to be made until 2035. Between 1969 and 1973, payments of principal and interest were received at incremental semiannual rates ranging from 1% to 2% of the original receivable balance. Between 1973 and 2035, semiannual payments of principal and interest are required to be made by the local governments at a rate of 2.5% of the original receivable balance. The balance due at December 31, 1996 includes \$1,242,881 due from local governments which had previously underpaid their semiannual payment and from local governments which joined the Fund subsequent to 1967 according to a 20-year payment plan.

In 1993 the Ohio Legislature authorized the Fund's Board of Trustees to enter into agreements with municipal corporations permitting the cities to pay off the remaining balance of their "Employers' Accrued Liability" at a discounted amount to be determined by the Board. The Board adopted 65 percent as the discounted amount it would accept for payments received by October 15, 1995.

The following is a summary of the amounts due on the local funds receivable:

Year ending December 31,	
1997	11,342,897
1998	10,924,258
1999	10,923,419
2000	10,922,551
2001	10,921,666
Thereafter	<u>362,847,216</u>
Total projected payments	417,882,007
Less interest portion	<u>210,889,061</u>
Balance due at December 31, 1996	<u><u>\$206,992,946</u></u>

## 8. MORTGAGE NOTES PAYABLE

In 1995, the Fund assumed two mortgage notes payable of \$15,840,000 and \$14,729,395. These notes are secured by Vista Ridge Village and Belmont/Carlton Apartments respectively. The former note bears an interest of 7.8% per annum and the latter accrues interest at 7.9% per annum.

Aggregate and annual payments of principal on the mortgage loans are as follows:

Year ending December 31,	
1997	465,152
1998	501,558
1999	542,321
2000	585,548
2001	632,353
Thereafter	<u>27,405,181</u>
Total payments	<u><u>\$30,132,113</u></u>

## 9. DEFERRED COMPENSATION

All Fund employees may elect to participate in the Ohio Public Employees' Deferred Compensation Program, a deferred compensation plan created in accordance with Internal Revenue Code Section 457. Participating employees defer a designated amount of their salary until some future date, and such compensation is not available to the participant prior to termination, retirement, death, or some unforeseeable emergency.

The compensation so deferred, any property and rights purchased with the deferrals, and any income attributable to the deferrals, property or rights are, until paid or made available to the participant or a participant's beneficiary, solely the property of the Fund subject only to the claims of the Fund's general creditors. The rights of a plan participant are equal to those of a general creditor of the Fund to the amount equal to the fair market value of the participant's account. The total market value of the accounts of participating Fund employees was approximately \$731,555 and \$602,800 as of December 31, 1996 and 1995 respectively. These amounts are reported on the Fund's balance sheet as an asset, "deposits with deferred compensation plan," with a corresponding liability "deferred compensation plan payable."

It is the opinion of the Fund's legal counsel that the Fund has no liability for losses under the plan but does have the duty of due care that would be required of an ordinary prudent adviser. The Fund believes that it is unlikely that it will use the assets to satisfy the claims of general creditors in the future.

## 10. DEFINED BENEFIT PENSION PLAN

The Fund contributes to the Public Employees Retirement System of Ohio, (PERS), a cost-sharing multiple-employer defined benefit pension plan. PERS provides retirement and disability benefits, annual cost-of-living adjustments, and death benefits to plan members and beneficiaries. Benefit provisions and contribution requirements are established by the Ohio State Legislature and are codified in Chapter 145 of the Ohio Revised Code. PERS issues a publicly available financial report that includes financial information and required supplementary information for the plan. That report may be obtained by writing to PERS, 277 East Town Street, Columbus, Ohio 43215-4642.

Plan members are required to contribute 8.5% of their annual covered salary, while employers are required to contribute 13.55%. The Fund's contributions to PERS for the years ending December 31, 1996, 1995, and 1994 were \$734,710, \$603,732, and \$535,374, respectively, equal to the required contributions for each year.

## 11. OTHER POSTEMPLOYMENT BENEFITS

In addition to the pension benefits described in note 10, PERS provides postemployment health care benefits to all employees who retire with 10 or more years of qualifying Ohio service credit. The plan has 369,467 active contributing participants as of December 31, 1995.

The Fund and all employees are required to contribute to PERS as in note 10. A portion of each employer's contribution is set aside for advanced funding of postemployment health care. Of the 13.55% of employee payroll contributed by the Fund, 5.11% or approximately \$170,266 was the portion used to fund health care. Statutory rates equal the actuarially determined contribution requirements.

The actuarial present value of accrued other postemployment benefits was determined based on the entry age normal method of funding. Significant actuarial assumptions used in the December 31, 1995 actuarial valuation (most recent valuation available) were (a) a 7.75% rate of return on investments, (b) investments valued at cost or amortized cost, adjusted to reflect 25% of unrealized appreciation or depreciation on investment assets, (c) no change in the number of active employees, (d) base pay rate increases of 5.25% and annual pay increases over and above the 5.25% base increase ranging from 0% to 5.1% and (d) health care cost increases of 5.25% annually.

The total Ohio PERS actuarial present value of accrued other postemployment benefits as of December 31, 1995 (most recent valuation available) was \$8.60 billion; the net assets available for these benefits at that date were \$7.23 billion.

## 12. COMMITMENTS AND CONTINGENCIES

The Fund holds a mortgage note receivable secured by a deed of trust on a shopping center located at 1700 McHenry Avenue, Modesto, California. The mortgage loan receivable was to mature on July 16, 1995. The loan was extended until March 1, 1996. A five year extension of the mortgage loan was signed and took effect on June 1, 1996. For the year ended December 31, 1996, the borrower made interest payments of \$1,119,000 which is included in the net investment income on the Statement of Revenues, Expenses and Changes in Fund Balance.

The detail of the mortgage note receivable at December 31 is as follows (in thousands):

	<u>1996</u>	<u>1995</u>
Receivable from borrower	\$15,000	\$15,000
Capitalized acquisition fee	126	126
Deferred interest	305	305
Capital legal cost	54	-
Unrealized loss	(2,996)	(2,996)
<b>Total</b>	<u>\$12,489</u>	<u>\$12,435</u>

The Fund is a defendant in a number of lawsuits pertaining to matters which are incidental to performing routine business functions. Fund management is of the opinion that ultimate settlement of such claims will not result in a material adverse effect on the Fund's financial position as of December 31, 1996.

The Fund is committed to make additional capital contributions of \$30,263,816 to existing venture capital investments and \$70,540,000 towards purchases of additional real estate.

## 13. HISTORICAL TREND INFORMATION

Historical trend information designed to provide information about the Fund's progress made in accumulating sufficient assets to pay benefits when due, is presented in the required supplemental schedules which immediately follow the notes to financial statements.

## 14. MEDICAL BENEFIT FUNDING

Since July 1, 1992 most retirees have been required to contribute a portion of the cost of their health care coverage. These contributions, which vary in amount depending on the type and amount of the retiree's pension, are credited to a Health Care Stabilization Fund created in 1992. This fund, which received an initial allocation of \$150,000,000, is also credited with a portion of employer contributions equal to 6.5% of payroll, and 8.25% effective annual interest, and is charged with all health care expenses. The fund's assets at December 31, 1996 and 1995 were \$226,773,541 and \$203,467,204 respectively.

## 15. DERIVATIVES

The Fund invested in Planned Amortization Class and Sequential Pay Real Estate Mortgage Investment Conduit bonds issued by GNMA, FHLMC and FNMA. Planned Amortization Class bonds are retired according to a payment schedule so as to have a stable average life and yield even if expected prepayment rates change within a specified broad range of prepayment possibilities. Sequential Pay bonds begin to pay principal when classes with an earlier priority have paid to a zero balance. Such bonds enjoy uninterrupted payment of principal until paid to a zero balance. In terms of credit risk the United States government explicitly backs GNMA mortgage securities programs and implicitly backs FHLMC and FNMA mortgage securities programs. The Fund has not violated any legal, regulatory, or contractual provisions by such participation and there is no undue credit, market or legal risk. These securities were purchased in order to enhance the Fund's overall total rate of return.

The Fund also has invested in one commingled EAFE (Europe, Australia, Far East) and two commingled S&P 500 index funds. Those funds to a minor extent utilized futures contracts to maintain a fully invested posture, and also utilized certain derivative money market instruments in their short term investment funds. The Fund's indirect exposure represented less than 1% of the total portfolio market value at year end. The Fund has not violated any legal, regulatory, or contractual provisions by such participation and there is no undue credit, market or legal risk.

#### **16. STATE OF OHIO DEATH BENEFIT FUND**

Pursuant to Section 742.63 of the Ohio Revised Code, the Fund administers the State of Ohio Death Benefit Fund. This program was established by the State of Ohio to provide monthly benefit payments to surviving family members of Ohio fire fighters and law enforcement officers who have been killed in the line of duty or die of a duty-related accident or illness. Funds are disbursed to the Fund each State fiscal year (July 1-June 30) and are paid monthly by the Fund to eligible recipients. The unused balance at June 30 is returned to the State. Death Benefit Fund assets of \$11,585,278 and \$10,559,193, and the related liability for unpaid benefits are included in the accompanying financial statements as of December 31, 1996 and 1995, respectively.



# REQUIRED SUPPLEMENTAL SCHEDULES

## 1. ANALYSIS OF FUNDING PROGRESS (IN THOUSANDS)

<u>As of January 1,</u>	<u>Net assets available for benefits (2)(4)</u>	<u>Pension benefit obligation</u>	<u>Percentage funded (3)</u>	<u>Unfunded pension benefit obligation (3)</u>	<u>Covered payroll (1)(3)</u>	<u>Unfunded pension benefit obligation as a percentage of covered payroll (3)</u>
1987	\$2,661,079	\$2,930,400	90.8%	\$ 269,321	\$ 622,187	43.3%
1988	2,852,301	3,381,200	84.4	528,899	651,435	81.2
1989	3,074,215	3,769,400	81.6	695,185	692,029	100.5
1990	3,374,331	4,079,200	82.7	704,869	732,417	96.2
1991	3,579,044	4,426,700	80.9	847,656	778,097	108.9
1992	3,924,473	4,764,700	82.4	840,227	822,958	102.1
1993	4,137,708	5,132,800	80.6	995,092	871,352	114.2
1994	4,459,812	5,530,600	80.6	1,070,788	922,988	116.0
1995	4,645,717	5,853,200	79.4	1,207,483	984,134	122.7
1996	4,968,303	6,220,800	79.9	1,252,497	1,042,638	120.1

(1) Equal to annual average salary multiplied by the number of members at the valuation date.

(2) The local funds receivable is included in this amount. This receivable is considered an asset for financial reporting purposes, but not considered available for actuarially determined funding status.

(3) Analysis of the dollar amounts of net assets available for benefits, pension benefit obligation for active and inactive accounts, 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 for active and inactive accounts provides one indication of the Fund's funding status on a going-concern basis. Analysis of this percentage over time indicates whether the Fund is becoming financially stronger or weaker. Generally,

the greater this percentage, the stronger the Fund is. Trends in unfunded pension benefit obligation and valuation payroll are both affected by inflation. Expressing the unfunded pension benefit obligation as a percentage of valuation payroll approximately adjusts for the effects of inflation and aids analysis of the Fund's progress made in accumulating sufficient assets to pay benefits when due. Generally, the smaller this percentage, the stronger the Fund is. The actuarial assumptions for investment return, and post-retirement mortality are revised periodically based on the Fund's experience.

(4) For 1993-1996, net assets available for benefits is net of the balance of the Health Care Stabilization Fund established in 1992.

## 2. REVENUES BY SOURCE

<u>Year ended December 31,</u>	<u>Employer contributions (1)</u>	<u>Employee contributions (1)</u>	<u>Medical Benefit contributions (2)</u>	<u>State of Ohio subsidies</u>	<u>Net investment income (3)</u>
1987	\$139,543,550	\$ 63,363,415	-	\$6,635,000	\$174,772,550
1988	149,640,020	70,671,103	-	6,470,000	207,473,616
1989	159,472,669	77,657,290	-	5,857,000	299,006,174
1990	168,224,004	82,529,663	-	5,674,000	215,178,390
1991	178,858,413	87,786,090	-	5,429,000	368,882,582
1992	189,566,606	91,957,848	\$2,400,094	4,927,194	403,209,178
1993	200,703,066	97,158,960	5,048,847	4,645,952	422,969,125
1994	213,918,612	103,553,011	4,897,139	4,405,120	254,446,930
1995	223,206,380	109,000,755	4,965,059	4,182,724	405,458,383
1996	236,214,576	115,314,953	5,119,628	3,945,329	457,910,608

(1) The contribution requirement for the years presented was not actuarially determined but rather established by law under the Ohio Revised Code. Contributions actually made are in accordance with the legal requirement.

(2) Member contributions for health care coverage commenced July 1, 1992.

See accompanying independent auditors' report.

## 3. EXPENSES BY TYPE

<u>Year ended December 31,</u>	<u>Retirement, disability and survivor benefits</u>	<u>Health care benefits</u>	<u>Refund of employee contributions</u>
1987	\$164,367,103	\$39,465,273	\$2,915,311
1988	180,575,729	43,703,422	3,528,968
1989	200,702,890	47,818,789	3,906,362
1990	219,768,664	52,979,696	3,768,579
1991	239,464,824	61,748,019	2,540,360
1992	260,762,112	67,419,506	3,723,998
1993	281,418,240	63,135,402	5,007,473
1994	301,511,992	63,698,537	3,831,328
1995	324,887,415	70,170,717	5,553,638
1996	348,708,224	71,674,335	5,602,382

See accompanying independent auditors' report.

<u>Interest on local funds receivable</u>	<u>Other income</u>	<u>Total</u>	<u>Employer contributions as a percentage of covered payroll</u>
\$17,508,079	\$ 643,607	\$ 402,466,201	21.4
19,902,971	1,435,015	455,592,725	21.4
17,257,042	325,775	559,575,950	21.4
16,391,934	1,190,386	489,188,377	21.4
17,148,388	49,579	658,154,052	21.2
17,411,423	139,736	709,612,079	21.4
16,026,269	728,798	747,281,017	21.4
12,067,479	1,107,499	294,395,790	21.5
8,926,285	984,775	756,724,361	21.3
8,798,709	2,066,406	829,370,209	21.5

(3) For 1987 net realized gain on sale of investments is excluded.

<u>Administrative expenses</u>	<u>Other expense</u>	<u>Loss on write-down of local funds receivable</u>	<u>Total</u>
\$ 3,903,646	\$ 592,220	-	\$211,243,553
5,341,465	529,537	-	233,679,121
6,601,071	431,049	-	259,460,161
7,602,060	355,696	-	284,474,695
8,200,798	771,421	-	312,725,422
8,475,243	1,088,276	-	341,469,135
9,063,687	1,545,134	\$51,969,625	412,139,561
10,442,185	930,434	11,455,963	391,870,439
14,066,160	392,317	167,105	415,237,352
17,778,992	312,441	-	444,076,374

## 4. ADMINISTRATIVE EXPENSES

YEARS ENDED DECEMBER 31, 1996 AND 1995

	<u>1996</u>	<u>1995</u>
<b>Personnel Services:</b>		
Administrative salaries	\$ 3,675,872	\$ 3,154,357
Employee benefits	506,178	421,523
Employer contributions-PERS	<u>451,489</u>	<u>400,143</u>
	<u>4,633,539</u>	<u>3,976,023</u>
Professional services	<u>10,387,647</u>	<u>8,036,138</u>
<b>Other services and charges:</b>		
Equipment—rental and maintenance	186,882	155,900
Travel expenses	109,642	62,568
Postage	237,447	235,487
Printing	169,529	70,340
Insurance—administrative	90,036	78,252
Office supplies and maintenance	183,094	172,828
Utilities	110,865	140,468
Ohio Retirement Study Commission	40,573	33,551
Dues and subscriptions	37,966	32,735
Depreciation expenses	661,923	572,119
Miscellaneous expenses	8,474	71,950
Rent	<u>921,375</u>	<u>427,801</u>
	<u>2,757,806</u>	<u>2,053,999</u>
Total administrative expenses	<u>\$17,778,992</u>	<u>\$14,066,160</u>

See accompanying independent auditors' report.

## 5. REFUNDS OF EMPLOYEE CONTRIBUTIONS

<u>Year Ended December 31,</u>	<u>Police</u>	<u>Fire</u>	<u>Total</u>
1987	\$2,307,728	\$ 607,583	\$2,915,311
1988	2,562,415	966,553	3,528,968
1989	2,802,932	1,103,430	3,906,362
1990	2,750,115	1,018,464	3,768,579
1991	1,904,000	636,360	2,540,360
1992	2,670,680	1,053,318	3,723,998
1993	3,752,052	1,255,421	5,007,473
1994	2,900,754	930,574	3,831,328
1995	3,694,184	1,859,454	5,553,638
1996	4,387,177	1,215,205	5,602,382

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See accompanying independent auditors' report.

# SUPPLEMENTAL SCHEDULES

## 1. FUND BALANCE ACCOUNTS

YEAR ENDED DECEMBER 31, 1996

### Description of Accounts (Funds)

Chapter 742 of the Ohio Revised Code requires the establishment and maintenance of specific funds. These funds are classified as accounts for financial reporting purposes and are noted as follows:

#### (A) Members' Contribution Funds

The Policemen's and Firemen's Contribution Funds accumulate the contributions deducted from the salaries of members. Upon retirement, a member's accumulated contributions are transferred to the Policemen's or Firemen's Pension Reserve Fund.

#### (B) Employers' Contribution Funds

The Policemen and Firemen Employers' Contribution Funds are the depositories for employer contributions. Based on actuarial valuations, amounts are transferred from this fund to the Policemen's and Firemen's Pension Reserve Fund.

#### (C) Pension Reserve Funds

The Policemen's and Firemen's Pension Reserve Funds are the funds from which all retirement, disability, health care and survivor benefits are paid. Amounts are transferred into the Pension Reserve Funds from the Contribution Funds and the Employers' Contribution Funds.

	Members' Contribution Funds		Employers' Contribution Funds	
	Police	Fire Fighters	Police	Fire Fighters
Fund balance at beginning of year	\$468,407,337	\$356,026,071	\$795,045,064	\$563,797,234
Changes for the year:				
Contributions:				
Employers	-	-	122,877,913	113,336,662
Employees	66,644,729	48,670,224	-	-
Medical benefits	-	-	-	-
State of Ohio subsidies	-	-	-	-
Death benefit fund	-	-	-	-
Investment income	-	-	-	-
Interest on local funds' receivable	-	-	4,352,555	4,446,155
Other income	-	-	-	-
Benefits:				
Retirement	-	-	-	-
Disability	-	-	-	-
Health care	-	-	-	-
Survivor	-	-	-	-
Death benefit fund	-	-	-	-
Loss on write-downs of long-term local funds receivable	-	-	-	-
Administrative expenses	-	-	-	-
Refund of employee contributions	(4,387,177)	(1,215,205)	-	-
Other expenses	-	-	-	-
Transfers	(26,769,771)	(17,060,196)	(108,691,392)	(56,916,583)
Net Changes	<u>35,487,781</u>	<u>30,394,823</u>	<u>18,539,076</u>	<u>60,866,234</u>
Fund balance at end of year	<u>\$503,895,118</u>	<u>\$386,420,894</u>	<u>\$813,584,140</u>	<u>\$624,663,468</u>
See accompanying independent auditors' report.				

(D) Guarantee Fund

The Guarantee Fund records all investment earnings of the Fund. In addition, contributions from the State of Ohio, exclusive of death benefit contributions, are recorded in this fund. Annually, investment earnings are transferred to the Pension Reserve Funds and the Expense Fund.

(E) Expense Fund

The Expense Fund is used to record all expenses for the administration and management of the Fund. Annually, funds are transferred from the Guarantee Fund to cover expenses incurred.

(F) Death Benefit Fund

The Death Benefit Fund is used to record the death benefit contributions from the State of Ohio and the death benefit payments made to a spouse or dependent of a member whose death resulted from injury or illness sustained while on active duty as a policeman or fireman.

Annuitant & Pension Reserve Funds		Guarantee Fund	Expense Fund	Death Benefit Fund	Totals	
Police	Fire Fighters				1995	1994
\$1,660,021,330	\$1,328,472,749	\$ 0	\$ 0	\$ 0	\$5,171,769,785	\$4,830,282,776
-	-	-	-	-	236,214,575	223,206,377
-	-	-	-	-	115,314,953	109,000,755
-	-	5,119,628	-	-	5,119,628	4,965,059
-	-	3,945,329	-	-	3,945,329	4,182,724
-	-	-	-	18,243,146	18,243,146	14,385,716
-	-	457,910,608	-	-	457,910,608	405,458,383
-	-	-	-	-	8,798,710	8,926,285
-	-	2,066,406	-	-	2,066,406	984,777
(120,422,943)	(105,025,432)	-	-	-	(225,448,375)	(207,355,087)
(54,137,250)	(37,501,585)	-	-	-	(91,638,835)	(86,763,675)
(38,268,581)	(33,405,754)	-	-	-	(71,674,335)	(70,170,717)
(17,876,515)	(13,744,499)	-	-	-	(31,621,014)	(30,768,653)
-	-	-	-	(18,243,146)	(18,243,146)	(14,385,716)
-	-	-	-	-	-	(167,105)
-	-	-	(17,778,992)	-	(17,778,992)	(14,091,357)
-	-	-	-	-	(5,602,382)	(5,553,638)
-	-	(312,441)	-	-	(312,441)	(367,119)
383,483,959	276,904,521	(468,729,530)	17,778,992	-	-	-
152,778,670	87,227,251	0	0	0	385,293,835	341,487,009
\$1,812,800,000	\$1,415,700,000	\$ 0	\$ 0	\$ 0	\$5,557,063,620	\$5,171,769,785

## 2. PROFESSIONAL CONSULTANTS

### Actuary:

Watson Wyatt Worldwide

### Auditors:

Deloitte & Touche LLP

### Legal Counsel:

Attorney General Betty Montgomery

### Investment Consultants:

Callan Associates, Inc.

Wilshire Associates Inc.

The Townsend Group

### Real Estate

AEW Capital Management

Cabot Partners

DLS Real Estate Capital Partners, Inc.

Equitable Real Estate Investment Management

Lowe Enterprises Investment Management

MIG Realty Advisors

The RREEF Funds

Schroeder Real Estate Associates

TA Associates Realty

Westbrook Partners, LLC

Westmark Realty Advisors

Yarmouth Capital Partners

### Investment Managers:

#### Equity

Atalanta/Sosnoff Capital Corporation

Bankers Trust Company

Bond Procope Capital Management

Capital Guardian Trust Company

Fleet Financial Advisors, Inc.

Gelfand Partners Asset Management

Invesco Trust Company

Lakefront Capital Investors, Inc.

Lombard Odier International Portfolio Management, Ltd.

Nicholas-Applegate Capital Management

Oppenheimer Capital

Scudder, Stevens & Clark, Inc.

Smith Barney Capital Management

Society Asset Management

Value Line Asset Management

#### Fixed Income

Brinson Partners, Inc.

#### Venture Capital

Alpha Capital Partners

Blue Chip Venture Partners

Brantley Venture Partners

Cardinal Development Capital Fund

Chemicals & Materials Enterprise

Morgenthaler Ventures

North Coast Fund, L.P.

Northwest Ohio Venture Fund

Primus Venture Partners



### 3. INVESTMENT MANAGEMENT FEES

YEAR ENDED DECEMBER 31, 1996

INVESTMENT MANAGER	MANAGEMENT FEES
Oppenheimer Capital	\$1,316,405
Equitable Real Estate Investment Management Inc.	1,033,564
Nicholas-Applegate	997,512
Invesco Trust Co., Inc.	830,705
Atlanta/Sosnoff Capital Corporation	648,903
Fleet Investment Advisors	575,678
Society Asset Management	565,931
The RREEF Funds	555,000
Capital Guardian Trust Co.	470,710
Bankers Trust Company	447,579
Lombard Odier International	421,372
Scudder, Stevens & Clark, Inc.	414,140
Cabot Partners LP	404,452
Smith Barney Capital Management	389,708
Schroder Real Estate Associates	387,172
The Townsend Group	365,671
Value Line Asset Management	344,859
Gelfand Partners	335,499
Lowe Enterprises	311,994
Bond, Procope Capital Mgt.	309,318
Brinson Partners, Inc.	121,592
Lakefront Capital Investment Inc.	64,946

See accompanying independent auditors' report.

# ACTUARIAL SECTION

1. Actuary's Certification Letter
2. Summary of Actuarial Assumptions and Methods
3. Active Member Valuation Data
4. Summary of Unfunded Accrued Liabilities
5. Short-term Solvency Test
6. Recommended and Actual Contribution Rates
7. Retirants and Beneficiaries Added to and Removed from Rolls
8. Plan Summary

# 1. ACTUARY'S CERTIFICATION LETTER



The Wyatt Company

Suite 1400  
1801 East Ninth Street  
Cleveland, OH 44114-3149

Telephone 216 696 6250  
Fax 216 687 0675

May 16, 1997

Board of Trustees  
The Police and Firemen's Disability  
and Pension Fund of Ohio  
140 East Town Street  
Columbus, Ohio 43215

Gentlemen:

Watson Wyatt Worldwide, as Actuary, prepares an actuarial valuation of The Police and Firemen's Disability and Pension Fund of Ohio on an annual basis. The purpose of the valuation is to determine contribution rates for disability and retirement benefits based on sound actuarial principles. For retiree health care benefits, the valuation reports on the adequacy of a 6.5% contribution rate with respect to maintaining the Health Care Stabilization Fund at a reasonable value. The actuarially determined contribution rates for pension and disability benefits, in conjunction with the 6.5% assumed health care rate, are to be used to assess the adequacy of contribution rates provided under Sections 742.33 and 742.34 of the Revised Code. The most recent actuarial valuation was as of January 1, 1996.

The actuarial valuations are based upon census data and audited financial information submitted by the Fund. Watson Wyatt Worldwide checks the data for reasonability. Information suspected of being in error is submitted to the Fund for correction.

The actuarial assumptions used in the valuation are recommended by Watson Wyatt and approved by the Board. The decrement assumptions reflect actual Fund experience as measured in the quinquennial evaluations. The 1996 valuation reflects rates of mortality, termination from employment and remarriage of surviving spouses as developed in the quinquennial evaluation covering the period 1987 through 1991. The rates of disablement and the distribution of disabilities by type are based on experience for 1987 through 1993. The rates of retirement are based on experience during the period 1990 through 1993. The assumed mortality for future disabilities represents a two-year age setback in the 1987-1991 experience rates for disabled lives.

The interest rate and salary scale assumptions reflect both recent salary increases and Fund rates of return along with expected returns and salary increases over a long period in the future. The 1996 valuation is based on the same assumptions as used in the 1995 valuation.



For most asset classes the actuarial value of assets used in the valuation is the cost value as presented in the audited Financial Statements reduced by (1) the value of the employer accrued liability, (2) the member contributions which have yet to be refunded to members who terminated with less than 15 years of service, (3) Total Liabilities and (4) the reported value of the Health care Stabilization Fund. In addition, the actuarial value of stocks is determined under the 4-Year Market Adjustment method, under which realized and unrealized gains or losses are recognized in the assets over 4-year periods.

The benefit provisions valued in the valuation report reflect the status of the Revised Code as of the valuation date.

The financial objective of The Police and Firemen's Disability and Pension Fund of Ohio is to collect employers' and members' contributions which, when expressed as percentages of the payroll for active members, separately for police and firemen, are close in value to the actuarially determined contributions. The actuarially determined contributions, in turn, are such that together with existing assets, including expected payments on the cities' initial unfunded liability and expected future investment earnings, they will fully provide for all expected pension, disability, and death benefit payments for current members if such contributions are made over the future working lifetime of the active members.

Under current law, the actuarially determined contributions plus 6.5% Health Care Stabilization Fund allocation are to be compared to the statutory contributions to determine if the statutory contributions are adequate. Based upon the results of the 1996 valuation and the 15-year forecast prepared in 1994 by the Wyatt, it is our opinion that the current statutory rates are adequate for 1996.

Under current law the Ohio Retirement Study Commission is to review the actuarial report and make recommendations to the General Assembly concerning proper financing of the Fund. This policy of actuarial contribution rate determination, review, and, if necessary, legislative change in the statutory rates should ensure that the financial condition of the Fund remains sound.

Respectfully Submitted,

WATSON WYATT WORLDWIDE

*Wayne E. Dydo*

Wayne E. Dydo  
Fellow – Society of Actuaries

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## 2. SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS

### A. INTEREST

A rate of 8 $\frac{1}{4}$ % per annum, compounded annually.

### B. RATES AND OTHER ASSUMPTIONS AMONG ACTIVE MEMBERS

#### 1. Before Retirement:

##### (a) Mortality:

Mortality is based on the 1951 Group Annuity Mortality Table projected to 1980 using Scale C, with a one-year set-forward in age. The projected values are multiplied by 0.5 at all ages to obtain the assumed mortality rates. The following rates at selected ages are illustrative:

Age	Rate of Mortality	
	Police	Fire
25	.000307	.000307
30	.000406	.000406
35	.000569	.000569
40	.000845	.000845
45	.001568	.001568
50	.002773	.002773
55	.004377	.004377

##### (b) Termination:

The rates of termination are based upon the results of the 1987-1991 Quinquennial Evaluation. The following rates at selected ages are illustrative:

Age	Rate of Termination	
	Police	Fire
25	.047001	.016655
30	.031525	.015071
35	.022161	.012432
40	.014759	.007482
45	.009658	.004385
50	.012847	.004884

Note: The present values of future benefits for active members resulting from the use of these withdrawal rates are actuarially adjusted to include provision for prospective terminated employees eligible for vested termination benefits arising from the vesting provisions of the 1971 Amended Substitute Senate Bill No. 137.

##### (c) Disability:

The rates of disability are based upon the disability experience for 1992 and 1993. The following rates at selected ages are illustrative:

Age	Rate of Disability	
	Police	Fire
25	.001175	.000236
30	.002370	.001254
35	.005326	.002934
40	.011544	.007136
45	.021970	.015119
50	.033918	.028520
55	.051672	.046271

Note: The present values of future benefits for active members resulting from the use of these disability rates reflect the fact that the occurrence of disability by type approximates the following

	Police	Fire
On duty permanent and total	22%	27%
On duty partial	75	70
Off duty ordinary	3	3

##### (d) Salary Increase Rate:

The per annum rates of future salary increase can be divided into two component parts: (i) inflationary increase of 4% per year and (ii) age-graded promotional increases as follows:

Age(s)	Promotional Increase	Total Increase
under 30	3.00%	7.00%
30-34	1.75%	5.75%
over 34	1.00%	5.00%

##### (e) Retirement:

The rates of retirement are based upon the experience during the periods 1989 through 1993. These rates are applicable after the member has satisfied the conditions for retirement. The rates are as follows:

Police		Fire	
Age(s)	Rate	Age(s)	Rate
48	0.35	48	0.35
49-53	0.25	49-59	0.25
54-60	0.20	60-64	0.35
61-64	0.25	65	1.00
65	1.00		

**2. After Retirement:**

**(a) On Service Retirement Pension:**

The mortality, after retirement of active members expected to go on service retirement, is based on the 1951 Group Annuity Mortality Table as Projected to 1980 using Scale C, with a one-year set-forward in age. The following probabilities at selected ages are illustrative:

<u>Age</u>	<u>Probability of Mortality</u>
55	.008753
60	.013012
65	.020979
70	.033316
75	.056741
80	.099390
85	.158333
90	.236172
95	.316061

**(b) On Disability Retirement Pension:**

The mortality, after retirement of active members expected to go on disability retirement, is based on the results of the 1987-1991 Quinquennial Evaluation. The rates are based on the 1951 Group Annuity Mortality Table projected to 1980 using Scale C and include loads for disability. These rates are then set-back by two years in age to reflect the greater percentage of partial disabilities. The following probabilities at selected ages are illustrative:

<u>Age</u>	<u>Probability of Mortality</u>
35	.008424
45	.009636
55	.016736
65	.035482
75	.060183
85	.136516
95	.265027

**C. PROBABILITIES OF MORTALITY AMONG PENSIONERS**

**1. Nondisabled Pensioners:**

The mortality among all nondisabled retirants is equal to the 1951 Group Annuity Mortality Table rates projected to 1980 using Scale C, with a one-year set-forward in age. The following probabilities at selected ages are illustrative:

<u>Age</u>	<u>Probability of Mortality</u>
35	.001138
40	.001691
45	.003136
50	.005545
55	.008753
60	.013012
65	.020979
70	.033316
75	.056741
80	.099390
85	.158333
90	.236172
95	.316061

**2. Disabled Pensioners:**

The mortality among all disabled retirants is based on the 1951 Group Annuity Mortality Table projected to 1980 using Scale C and includes loads for disability. The following probabilities at selected ages are illustrative:

<u>Age</u>	<u>Probability of Mortality</u>
35	.008560
40	.009043
45	.010262
50	.012495
55	.018051
60	.022001
65	.038838
70	.050322
75	.071826
80	.111137
85	.168254
90	.222882
95	.297806

**D. PROBABILITIES AMONG SURVIVORS**

**1. Probabilities of Mortality Among Surviving Spouses:**

The mortality among all present surviving spouses is based on the Projected Annuity Mortality Table rates, decreased by 15% at all ages. The following probabilities at selected ages are illustrative:

<u>Age</u>	<u>Probability of Mortality</u>
35	.001326
40	.001938
45	.002950
50	.004471
55	.006775
60	.010464
65	.016448
70	.026121
75	.042560
80	.067465
85	.102527
90	.151530
95	.219657

## 2. Probability of Remarriage Among Surviving Spouses:

The probabilities of remarriage of surviving spouses are based upon the results of the 1987-1991 Quinquennial Evaluation. The following probabilities at selected ages are illustrative:

<u>Age</u>	<u>Probability of Remarriage</u>
35	.030686
40	.025594
45	.017015
50	.008101
55	.006225
60	.005491
65	.002442
70	.001092
75	.000491

## 3. Dependent Children:

No specific allowance has been made, in the valuation of this benefit, for the probability of mortality prior to age 18, or the probability of disability at age 18 and thereafter. In valuing the benefit beyond age 18, it is assumed that  $\frac{1}{3}$  of the dependent children will be students and eligible for payments to age 22.

## 4. Dependent Parents:

Costs based upon allowance for mortality (the Projected Annuity Mortality Table rates), but no specific allowance for change in dependency status.

## E. COLA ANNUITIES

It has been assumed that, where an election is possible, all members will elect the COLA annuity. It has also been assumed that the Consumer Price Index will increase each year at a rate equal to or greater than 3%.

## F. EXPENSE LOADING

The net costs were loaded by  $\frac{3}{4}$  of 1% to allow for future administrative expenses of the Fund.

## G. ACTUARIAL COST METHOD

The "frozen initial liability" method has been used in developing the required contributions to the Fund. Under this approach, the present value of future benefits is reduced by valuation assets and the present value of the employer accrued liability. This net amount is then expressed as a percentage of the present value of active member future compensation and that percentage is applied to current payroll to determine the actual contribution.

The employer accrued liability was determined for each separate police and firemen's fund as of April 1, 1966. Each employer with an existing liability is presently making payments at the rate of 5% of the original liability (adjusted for any excess payments) pursuant to the schedule set forth in Section 742.30 of the Ohio Revised Code.

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

## H. VALUATION ASSETS

Valuation assets equal the net cost (book) value of all Fund assets, except common and preferred stocks are included in valuation assets with a value equal to that developed under the 4-year Market Adjustment Method, with an initial value equal to market value. Under this method realized and unrealized gains are recognized in the assets over a 4-year period: valuation assets equal market value less 75% of the previous year's realized and unrealized gains, 50% of the second previous year's realized and unrealized gains, and 25% of the third previous year's realized and unrealized gains. The balance in the Health Care Stabilization Fund is excluded from total assets to arrive at valuation assets for pension and disability benefits. Contributions due to be refunded to terminated members are also excluded from valuation assets.

## I. CHANGES IN ACTUARIAL ASSUMPTIONS

The original actuarial assumptions have been modified thirteen times since their adoption in 1966. The changes were as follows.

### (1) 1970 valuation:

- The interest rate was increased from  $4\frac{1}{4}\%$  to  $4\frac{5}{8}\%$ .

### (2) 1972 valuation:

- The interest rate was increased from  $4\frac{5}{8}\%$  to  $4\frac{3}{4}\%$ .
- A loading was adopted to provide for the cost of 1972 Senate Bill No. 137 that, among other things, provided for special service retirement for late hires, vesting of service pension after 15 years of service under a  $1\frac{1}{2}\%$  formula, and vesting of service pension after 25 years of service under the 2% formula.

### (3) 1974 valuation:

- The interest rate was further increased from  $4\frac{3}{4}\%$  to 5%.
- Adjustments were made in six assumption areas as a result of the findings in our first quinquennial evaluation; those adjustments were as follows:
  - (a) The termination rates for active members were increased by approximately two-thirds of the former rates;
  - (b) the mortality rates for active members eliminated the original accidental loading of .001;
  - (c) the disability rates for active members were increased by 25% for ages above 40, grading down to a reduction of rates by 50% for ages below 30;

- (d) the mortality rates for retirants were increased by 50% (instead of the former 10% load) of the standard tables rates before age 65, grading down to a decrease of 20% after age 85;
- (e) the mortality rates for widows were reduced by 15% at all ages; and
- (f) the remarriage rates for widows were increased by 300% at ages prior to 45, grading down to an increase of 50% after age 60.

**(4) 1979 valuation:**

- The interest rate was increased from 5% to 6%.
- The salary scale was increased from 3% to 4½%.
- The projected final salary was increased by 4% to allow for the sick pay allowance.
- The assumed retirement age was increased from 56 to 57 years for police and decreased from 58 to 57 years for firemen.
- Adjustments were made in four other assumption areas as a result of the findings in our second quinquennial evaluation; those adjustments were as follows:
  - (a) the termination rates for active members were decreased by approximately 20%;
  - (b) the disability rates for active members were increased by over 200%;
  - (c) the assumption that all disabilities are on-duty-permanent and total was changed to provide for 35% of-duty-partial and 5% off-duty-ordinary;
  - (d) the remarriage rates for widows were decreased by approximately 40%.

**(5) 1980 valuation:**

- The interest rate was further increased from 6% to 6⅞%.

**(6) 1983 valuation:**

- The interest rate was increased from 6⅞% to 7½%.
- The salary scale was increased from 4½% to 5½%.
- The terminal pay adjustment was increased from 4% to 13%.
- The assumed retirement age was decreased from 57 to 55 for both police and firemen.
- As a result of the third quinquennial evaluation, the mortality rates for active firemen were decreased by 33%.

**(7) 1986 valuation:**

- The interest rate was increased from 7½% to 7⅞%.

**(8) 1987 valuation:**

- The 13% terminal pay adjustment was replaced with the assumption that all active members would retire under the COLA annuity.
- In valuing the COLA annuity, it is assumed that each

year the change in the Consumer Price Index will be at least 3%.

**(9) 1988 valuation:**

- A decrease in the termination rates to the graduated 1982-86 experience rates.
- An increase in the disability rates to the graduated 1982-86 experience rates.
- A change in the service retirement assumption from a fixed age of 55 or, if later, after satisfying the conditions for retirement, to rates based upon the 1982-86 experience. The rates are applicable for ages 48 through 65.
- A change in the post retirement mortality probabilities for retired members to separate sets of probabilities for nondisabled retirees and disabled retirees.
- A decrease in the probabilities of remarriage among surviving spouses to the graduated 1982-86 experience rates.

**(10) 1989 valuation:**

- The interest rate increased from 7¼% to 8¼%.
- The salary scale increased from 5½% to 5¾%.
- New retirement rates have been developed for ages 48 through 52 to account for the effect of increased retirement of those ages.
- The assumption as to the occurrence of disability by type has been changed to reflect recent experience, which shows more partial and fewer permanent and total disabilities.

**(11) 1992 valuation:**

- The method of determining the value of Fund assets was changed. Assets are valued at an amount not less than 85% of market value nor more than 115% of market value.

**(12) 1993 valuation:**

Adjustments were made in four areas as a result of the findings of the Fund's fourth quinquennial evaluation, which covered the years 1987 through 1991:

- (a) A change in the termination rates to the graduated 1987-91 experience rates. In general the rates decreased.
- (b) A change in the 5.75% salary scale to an age-graded salary increase assumption.
- (c) Changes in the pre- and post-retirement mortality probabilities for active members, service retirees and disability retirees. All of these probabilities are to be based on the 1951 Group Annuity Mortality Table projected to 1980.
- (d) A decrease in the probabilities of remarriage among surviving spouses to the graduated 1987-91 experience rates.



The method of determining the value of Fund assets was changed. For stocks, the value is that amount determined under the 4-year Market Adjustment Method, with an initial value equal to market value, less \$2,696,000 of contributions that have yet to be refunded to employees with less than 15 years of service.

The valuation recognized the establishment of the Health Care Stabilization Fund which was created in 1992. Initially \$150,000,000 was allocated for future health care expenses. The fund is credited with retiree health care contributions, a portion of employer contributions equal to 6.5% of payroll, and 8.25% effective annual interest, and charged for all medical expense payments, including Medicare reimbursements. The fund value is excluded from valuation assets.

(13) 1994 valuation:

- A change in the retirement rates to reflect experience for the period 1990-1993.
- A change in the rates of disability incidence to reflect the results of the 1987-1991 Quinquennial Report and the 1992-93 experience study.
- A change in the assumed distribution of disability to reflect a higher proportion of partial disabilities.
- A change in the post-disability mortality assumption for active members.

### 3. ACTIVE MEMBER VALUATION DATA

1987 TO 1996

Actuarial Valuation as of Jan. 1	Number of Employers		Number of Active Members		Average Annual Salary		Percentage of Average Annual Salary Increases		Annual Payroll (millions)
	Police	Fire	Police	Fire	Police	Fire	Police	Fire	
1987			12,652	9,231	\$28,443	\$28,418	5.4%	5.4%	\$622.2
1988	523	278	12,862	9,292	29,391	29,424	3.3	3.5	651.4
1989	520	288	12,993	9,374	30,853	31,060	5.0	5.6	692.0
1990	526	292	13,088	9,698	32,351	31,863	3.5	2.6	732.4
1991	533	297	13,273	9,801	33,910	33,467	4.8	5.0	778.1
1992	533	297	13,325	9,996	35,305	35,266	4.1	5.4	823.0
1993	545	288	13,540	10,149	36,783	36,783	4.2	4.3	871.3
1994	552	293	13,851	10,340	38,017	38,338	3.4	4.2	923.0
1995	559	299	14,072	10,511	39,951	40,143	5.1	4.7	984.1
1996	574	310	14,558	10,728	41,017	41,528	2.7	3.5	1,042.6

Information concerning employer numbers is not readily available for years before 1988.

### 4. SUMMARY OF UNFUNDED ACCRUED LIABILITIES

Each time a new benefit is added which applies to service already rendered, an "unfunded accrued liability" is created. The "unfunded accrued liability" was developed for funding requirement determinations. The value differs from the unfunded Pension Benefit Obligation reported in the financial statements because different actuarial cost methods were used for the two purposes. Laws governing the Fund require that "unfunded accrued liability" 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 and retirement benefits 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' dollars divided by active employee payroll dollars 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 UNFUNDED ACCRUED LIABILITIES (continued)

(\$ Amounts in Thousands)

Police	Valuation Year	Actuarial Accrued Liabilities (AAL)	(A) Valuation Assets	Unfunded Actuarial Accrued Liabilities (UAAL)	Ratio of Assets to AAL	(B) Active Member Payroll	UAAL as a % of Active Member Payroll
	1987	\$2,400,100	\$1,246,100	\$1,154,000	52%	\$359.9	321%
	1988	2,607,400	1,341,700	1,265,700	51	378.0	335
	1989	2,810,100	1,499,800	1,310,300	53	400.8	327
	1990	3,038,600	1,648,500	1,390,100	54	423.4	328
	1991	3,264,700	1,769,000	1,495,700	54	450.1	332
	1992	3,493,000	2,056,600*	1,436,400	59	470.4	305
	1993	3,806,500	2,252,113*	1,554,387	59	498.0	312
	1994	4,088,300	2,432,000*	1,656,343	59	526.6	315
	1995	4,348,200	2,571,300*	1,776,900	59	562.2	316
	1996	4,640,700	2,746,000*	1,894,700	59	597.1	317
<b>Fire</b>							
	1987	\$2,008,400	\$ 985,100	\$1,023,300	49%	\$262.3	390%
	1988	2,200,700	1,094,400	1,106,300	50	273.4	405
	1989	2,365,400	1,159,300	1,206,100	49	291.2	414
	1990	2,535,000	1,313,000	1,222,000	52	309.0	395
	1991	2,678,600	1,401,200	1,277,400	52	328.0	389
	1992	2,882,700	1,621,900*	1,260,800	56	352.5	358
	1993	3,019,700	1,775,354*	1,244,346	59	373.3	333
	1994	3,227,800	1,925,800*	1,301,947	60	396.4	328
	1995	3,409,200	2,054,200*	1,355,000	60	421.9	321
	1996	3,604,700	2,204,200*	1,400,500	61	445.5	314

\*includes market adjustment

**(A) Valuation assets are based upon the following:**

For 1993 through 1996—net assets available for benefits as provided in the December 31, 1992 through 1995 audited financial statements, adjusted to value assets to an amount determined using the 4-Year Market Adjustment Method, with an initial value equal to market value, less the local funds receivable, contributions which had yet to be refunded to employees who terminated with less than 15 years of service, and the value of the Health Care Stabilization Fund.

For 1992—net assets available for benefits as provided in the December 31, 1991 audited financial statements, adjusted to value assets at an amount not less than 85% of market value nor more than 115% of market value, less the local funds receivable and contributions which had yet to be refunded to employees who terminated with less than 15 years of service.

For 1988 through 1991—net assets available for benefits as provided in the December 31, 1987, 1988, 1989 and 1990, respectively, audited financial statements, less the local funds receivable and contributions which had yet to be refunded to employees who terminated with less than 15 years of service.

For 1987—cost value of assets as reported by the Fund, less amounts reserved to the Death Benefit Fund, less contributions which had yet to be refunded to the employees who terminated with less than 15 years of service and plus member contributions which had not been deposited as of the reporting date.

**(B) Equal to average salary multiplied by the number of members at the valuation date.**

# 5. SHORT-TERM SOLVENCY TEST

## Accrued Liabilities (\$ Amounts in Thousands)

Police	Aggregate Accrued Liability For:			Portion of Accrued				
	(1)	(2)	(3)	Active Members (Employer Financed Portion)	Valuation Assets	Liabilities Covered by Reported Assets		
	Valuation Year	Active Member Contributions	Retirants and Beneficiaries			(1)	(2)	(3)
	1987	\$231,300	\$ 702,200	\$1,466,600	\$1,246,100	100%	100%	21%
	1988	252,600	773,900	1,580,900	1,341,700	100	100	20
	1989	278,500	907,300	1,624,300	1,499,800	100	100	19
	1990	301,000	1,042,400	1,699,300	1,648,500	100	100	18
	1991	325,600	1,159,100	1,785,200	1,769,000	100	100	16
	1992	349,700	1,287,200	1,856,100	2,056,600*	100	100	23
	1993	379,000	1,423,800	2,003,700	2,252,113*	100	100	22
	1994	409,300	1,557,200	2,121,800	2,243,000*	100	100	22
	1995	437,900	1,659,400	2,250,900	2,571,300*	100	100	21
	1996	468,200	1,812,800	2,359,700	2,746,000*	100	100	20
<b>Fire</b>								
	1987	\$168,000	\$ 660,700	\$1,179,700	\$ 985,100	100%	100%	13%
	1988	184,000	717,200	1,299,500	1,094,400	100	100	15
	1989	199,200	844,300	1,321,900	1,159,300	100	100	9
	1990	217,300	935,600	1,384,600	1,313,000	100	100	12
	1991	237,500	1,001,900	1,443,400	1,401,200	100	100	11
	1992	258,800	1,081,900	1,541,900	1,621,900*	100	100	18
	1993	281,300	1,175,100	1,563,300	1,775,354*	100	100	20
	1994	305,800	1,271,900	1,650,100	1,925,800*	100	100	21
	1995	332,300	1,328,200	1,748,800	2,054,200*	100	100	22
	1996	356,300	1,415,700	1,832,700	2,204,200*	100	100	24

\*includes market adjustment

The Fund's 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 valuation assets 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.

## 6. RECOMMENDED AND ACTUAL CONTRIBUTION RATES

Year	Police		Fire	
	(% of active member payroll)		(% of active member payroll)	
	Recommended	Actual	Recommended	Actual
1987	31.12	29.00	34.11	33.50
1988	32.38	29.50	34.02	34.00
1989	34.49	29.50	37.82	34.00
1990	34.28	29.50	35.60	34.00
1991	36.05	29.50	36.41	34.00
1992	33.78	29.50	34.18	34.00
1993	33.16	29.50	32.13	34.00
1994	34.78	29.50	32.62	34.00
1995	36.26	29.50	33.55	34.00
1996	36.28	29.50	33.07	34.00

## 7. RETIRANTS AND BENEFICIARIES ADDED TO AND REMOVED FROM ROLLS

Year at Jan. 1	Police		Fire	
	Additions	Deletions	Additions	Deletions
1987	589	351	426	277
1988	612	499	476	417
1989	587	360	507	292
1990	579	304	413	240
1991	675	373	466	289
1992	813	397	566	362
1993	671	342	504	320
1994	665	332	517	304
1995	677	379	464	301
1996	821	391	580	366

## 8. PLAN SUMMARY

### PURPOSE

The Police and Firemen's Disability and Pension Fund of Ohio (the Fund) was established by the Ohio General Assembly to provide disability benefits and pensions to members of the Fund and their surviving spouses, children, and dependent parents.

### ADMINISTRATION

The administration, control, and management of the Fund are vested in the Police and Firemen's Disability and Pension Board of Ohio which is comprised of nine members as follows:

- Three representatives of police departments
- Three representatives of fire departments
- One municipal fiscal officer
- The Auditor of State
- The Attorney General

The representatives of police and fire departments are elected for four-year terms by the members with one being a retired member or surviving spouse, alternating between the police and fire. The municipal fiscal officer is appointed by the Governor.

The Auditor of State and Attorney General serve by virtue of their office and are also members of other state retirement boards.

The Board appoints an executive director as the chief administrative officer of the Fund. The executive director oversees the daily activity of the staff.

### MEMBERSHIP

Membership in the Fund is mandatory under Ohio law for all full-time police officers employed by Ohio municipalities. Full-time fire fighters employed by townships, municipalities, township joint fire districts or other political subdivisions must become members of the Fund if satisfactory completion of a fire fighter training course approved under Section 3303.07 or conducted under Section 3737.33 of the Ohio Revised Code is required for employment.

### CONTRIBUTIONS

Contributions are established by statute. Employers of police officers pay 19.5% of salary; employers of fire fighters pay 24% of salary. Members contribute 10% of salary.

### BENEFITS

#### A. Service Retirement

Upon attaining a qualifying age with sufficient service credit, a member of the Fund may retire and receive a lifetime monthly cash pension.

##### 1. Normal Pension

- (a) Eligibility: Age 48 and 25 years of service.
- (b) Benefit: An annual pension equal to a percentage of the average annual salary. The percentage equals 2.5% for

each of the first 20 years of service, 2% for each of the next five years of service, and 1.5% for each year of service in excess of 25 years, to a maximum of 72% of the average annual salary. Average annual salary means one-third of the total salary during the three years of highest earnings.

##### 2. Age Commuted

- (a) Eligibility: Age 62 and 15 years of service
- (b) Benefit: The same formula applies as for the normal service pension.

##### 3. Age/Service Commuted

- (a) Eligibility: Age 48 and 15 years of service.
- (b) Benefit: Commencing at age 48 or 25 years elapsing from full-time hire date, whichever is later; an annual pension equal to 1.5% of the average annual salary multiplied by the number of complete years of service.

### B. Disability Retirement

Members who become unable to perform their official duties and whose earning capacities are impaired, may qualify for disability retirement benefits.

Disability retirement benefits are classified as either service-incurred (on-duty) or non-service-incurred (off-duty), and differ in eligibility requirements and benefit formulas. Annual medical evaluations are required for disability benefit recipients who would not have met the age and service requirements for normal service retirement.

##### 1. Permanent and Total Disability (On-Duty)

- (a) Eligibility: No age or service requirement.
- (b) Benefit: An annual pension equal to 72% of the annual earnings during the last year of active service.

##### 2. Partial disability (On-Duty)

- (a) Eligibility: No age or service requirement.
- (b) Benefit: An annual pension fixed by the Board of Trustees to be a certain percent of the average annual salary up to 60%. If the member has 25 or more years of service the annual disability pension is equal to the accrued normal service pension.

##### 3. Ordinary Disability (Off-Duty)

- (a) Eligibility: Any age and five years of service.
- (b) Benefit: An annual pension fixed by the Board not to exceed the accrued normal service pension, or 60% of the average annual salary, whichever is less.

### C. Rights upon separation from service

##### 1. Deferred Pension

If a member meets the service credit requirement for any service retirement pension but leaves service before attaining the required age, a pension becomes payable upon attainment of the qualifying age.

##### 2. Refund of contributions

Upon separation from service, a member can receive the contributions made to the plan by himself or, on his behalf, by his employer.

#### D. Flat Survivor Benefits

1. Eligibility: Upon death of any member of the Fund, active or retired.
2. Benefit:
  - (a) Surviving Spouse's Benefit—An annual amount equal to \$4,920. Terminates upon remarriage or death.
  - (b) Surviving Child—An annual amount equal to \$1,416, payable until such child attains age 18 or marries, whichever occurs first. The payment can continue to an unmarried full-time student until age 22. A dependent disabled child is entitled to a benefit regardless of age at time of member's death until marriage, death, or recovery.
  - (c) Dependent Parents—If there be no surviving spouse or children, an annual amount of \$1,896 is payable to one dependent parent or \$948 each to two dependent parents for life or until dependency ceases or remarriage.

#### E. Lump Sum Death Benefit

On the death of a retired member of the Fund, a lump sum payment of one thousand dollars (\$1,000) is paid to the member's surviving spouse, or the estate if there be no surviving spouse.

#### F. Annuities

Effective February 28, 1980 for those retiring on either service pensions or disability benefits, optional annuity plans could be chosen. Members could elect actuarially reduced benefits under life annuity certain and continuous or joint and survivor annuity plans.

Effective for one year beginning September 26, 1984, any member who retired before February 28, 1980 could cancel his single life annuity plan and elect a joint and survivor annuity plan continuing a portion of his reduced benefit to his surviving spouse as survivor annuitant.

Effective April 25, 1984, Pre-retirement Survivor Annuity was added to the plan.

##### 1. Pre-retirement Survivor Annuity

(a) Eligibility: Upon death before retirement but after having satisfied the requirements for normal service retirement.

(b) Benefit: The surviving spouse or contingent dependent beneficiary will receive the equivalent of a 50% joint and survivor annuity calculated under the fiction that the decedent had retired effective the day following his death.

##### 2. Single Life Annuity

For unmarried members, this is the normal annuity plan. Married members may elect this plan only if the spouse acknowledges the selection.

##### 3. Joint and Survivor Annuity

For married members, this is the normal annuity plan at the 50% continuation level. Any percent between 1% and 100% of the members reduced pension may be continued to the surviving nominated beneficiary. This plan automatically terminates upon death of the beneficiary or it may be cancelled upon divorce with the approval of the designated beneficiary.

#### 4. Life Annuity Certain and Continuous

The minimum guarantee is 5 years and the maximum is 20 years.

#### G. Group Health Insurance and Medicare

Commencing January 1, 1974, the Board may contract for group health insurance on the basis of part or all of the cost of the premium for the coverage to be paid by the Fund. Medical expense benefits are not a vested right and are subject to change at any time upon action of the Board of Trustees.

Effective January 1, 1977, the Fund will pay the premium for supplemental Medicare (Part B).

#### H. Tiered Retirement Plan: COLA or Terminal Pay

Members retiring after July 24, 1986 who had 15 or more years of service as of January 1, 1989, are allowed to select between two different pension calculation plans. Under the terminal pay method, a pension is calculated using terminal payments such as accrued sick leave and vacation compensation to increase the average annual salary. Under the COLA method, no terminal payments are added, but the pension is subject to contingent annual 3% increases equal to the base pension after one year on the roll. The 3% COLA is paid only if the annual increase in the Consumer Price Index, plus unused prior net accumulations, equal or exceed 3%. The COLA method is the automatic calculation method for an active member with fewer than 15 years of service as of January 1, 1989.

#### I. Post-retirement Cost-of-Living Allowance (COLA)

Members who retired prior to July 25, 1986 or their surviving beneficiaries under optional plans, are entitled to contingent cost-of-living increases based on changes in the Consumer Price Index. The annual increase is paid on July 1st of each year whenever the index plus unused prior net accumulations equal or exceed 3% and the member's annual single life annuity equivalent is less than a certain amount. The qualifying amount was \$22,000 per year in 1996. The "Cap" increases by \$500 per year. The annual COLA increase is \$360 under a Single Life Annuity Plan with proportional reductions for optional payment plans.

#### J. Re-employed Retirants' Defined Contribution Plan Benefit

Effective June 30, 1991, every person who is retired under an Ohio Public pension plan and who is employed in a Fund-covered position must contribute to the Fund at the same rate as other police officer or fire fighters. The employer pays the normal rate as well. When the re-employed retirant terminates employment he or she has the option of receiving either a lump sum payment or a lifetime annuity paid monthly.

The lump sum payment is an amount equal to twice his contributions plus interest. The lifetime monthly cash payment is based on the value of the lump sum option. If the monthly annuity would be less than \$25, then only the lump sum option is available.

# STATISTICAL SECTION

1. **Benefit Expenses by Type**
2. **Retired Membership by Type of Benefits**
3. **Average Monthly Benefit Payments**
4. **Participating Employers**

# 1. BENEFIT EXPENSES BY TYPE

1987 TO 1996

Year ended December 31,	Retirement	Disability	Survivor	Subtotal	Health Care	Total Benefits
1987	\$105,307,595	\$38,247,807	\$20,811,701	\$164,367,103	\$39,465,273	\$203,832,376
1988	113,022,120	43,739,268	23,814,341	180,575,729	43,703,422	224,279,151
1989	125,271,895	49,481,413	25,949,582	200,802,890	47,818,789	248,621,679
1990	137,176,452	55,855,530	26,736,682	229,768,664	52,979,696	282,748,360
1991	150,003,030	62,137,040	27,324,754	239,464,824	61,748,019	301,212,843
1992	163,441,985	69,277,993	28,042,134	260,762,112	67,419,506	328,181,618
1993	177,838,542	74,969,707	28,609,991	291,418,240	63,135,402	354,553,642
1994	191,306,643	80,672,276	29,533,073	301,511,992	63,698,537	365,210,529
1995	207,355,087	86,763,675	30,768,653	324,887,415	70,170,717	395,058,132
1996	225,448,375	91,638,835	31,621,014	348,708,224	71,674,335	420,382,559

# 2. RETIRED MEMBERSHIP BY TYPE OF BENEFITS

1987 TO 1996

Year	Service		Disability		Survivors		Combined Total Beneficiaries
	Police	Firemen	Police	Firemen	Police	Firemen	
1987	3,687	3,703	1,534	1,216	2,949	2,289	15,378
1988	3,784	3,830	1,741	1,352	3,046	2,321	16,074
1989	4,020	4,009	1,893	1,426	2,856	2,182	16,386
1990	4,219	4,103	2,024	1,490	2,547	2,038	16,421
1991	4,469	4,265	2,188	1,587	2,698	2,159	17,366
1992	4,606	4,367	2,320	1,641	2,743	2,199	17,876
1993	4,762	4,484	2,430	1,682	2,756	2,203	18,317
1994	4,928	4,561	2,532	1,726	2,788	2,223	18,758
1995	5,174	4,674	2,630	1,784	2,847	2,257	19,366
1996	5,399	4,765	2,686	1,823	2,885	2,286	19,844

Note: For years 1987 and 1988, survivors who received payments under two different benefit types (e.g.

Statutory plus Joint and Survivor) were counted twice.



### 3. AVERAGE MONTHLY BENEFIT PAYMENTS

FOR POLICE OFFICERS AND FIRE FIGHTERS  
PLACED ON RETIREMENT ROLLS, 1987-1996

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
<b>Service</b>										
Normal	\$1,928	\$2,022	\$1,988	\$2,062	\$2,145	\$2,195	\$2,379	\$2,386	\$2,447	\$2,508
Age commuted	1,514	1,585	392	0	0	0	433	0	0	0
Service Commuted	337	394	412	705	389	570	0	508	664	614
Age/Service	920	886	1,258	1,322	1,211	2,281	0	1,610	627	1,351
Pre-1947	35	947	0	35	35	0	0	0	0	0
Service Average	1,840	1,960	1,946	2,036	2,102	2,177	2,359	2,375	2,400	2,495
<b>Disability</b>										
Permanent & Total	\$1,855	\$1,963	\$2,106	\$2,073	\$2,201	\$2,277	\$2,318	\$2,228	\$1,929	\$2,549
P&T Presumptive	1,823	2,038	2,065	2,072	2,339	2,314	2,363	2,149	2,589	2,467
Partial	1,273	1,337	1,450	1,579	1,741	1,830	1,776	1,814	1,830	1,974
Partial Presumptive	1,376	1,398	1,546	1,741	1,753	1,728	1,848	2,020	2,043	2,143
Off-duty	437	1,354	713	593	1,162	1,267	1,009	1,258	1,534	1,442
Pre-1947	0	0	0	0	0	0	0	0	0	0
Disability Average	1,538	1,617	1,679	1,782	1,884	1,946	1,908	1,911	1,977	2,080
<b>Service and Disability</b>										
Combined Average	\$1,719	\$1,817	\$1,853	\$1,945	\$2,025	\$2,094	\$2,191	\$2,218	\$2,273	\$2,421

## 4. PARTICIPATING EMPLOYERS

AS OF DECEMBER 31, 1996

Villages	Municipalities	Townships (County)
Aberdeen	Akron	Allen (Union)
Ada	Alliance	Anderson (Hamilton)
Addyston	Amherst	Ashtabula (Ashtabula)
Adelphi	Ashland	Austintown (Mahoning)
Adena	Ashtabula	Batavia (Clermont)
Alexandria	Athens	Bath (Summit)
Amberley	Aurora	Bazetta (Trumbull)
Amelia	Avon	Bazetta Cortland Joint EMS (Trumbull)
Andover	Avon Lake	Beavercreek (Greene)
Ansonia	Barberton	Bloom (Fairfield)
Antwerp	Bay Village	Boardman (Mahoning)
Apple Creek	Beachwood	Brookfield (Trumbull)
Arcanum	Beavercreek	Butler (Montgomery)
Archbold	Bedford	Canton (Stark)
Arlington Heights	Bedford Heights	Cardinal Joint Fire Dis. (Mahoning)
Ashley	Bellaire	Carlisle (Lorain)
Ashville	Bellbrook	Champion (Trumbull)
Attica	Bellefontaine	Clearcreek (Warren)
Bainbridge	Bellevue	Clinton (Franklin)
Barnesville	Belpre	Colerain (Hamilton)
Batavia	Berea	Concord (Delaware)
Beach City	Bexley	Concord (Lake)
Beaver	Blue Ash	Copley (Summit)
Beaverdam	Bowling Green	Cortland East Bazetta Fire (Trumbull)
Bellville	Brecksville	Coventry (Summit)
Bentleyville	Broadview Heights	Crosby (Hamilton)
Berlin Heights	Brook Park	Cumberland Trail Fire District (Belmont)
Bethel	Brooklyn	Delhi (Hamilton)
Bethesda	Brookville	Fairfax/Madison Place (Hamilton)
Beverly	Brunswick	Franklin (Franklin)
Blanchester	Bryan	Franklin (Summit)
Bloomville	Bucyrus	Green (Hamilton)
Bluffton	Cambridge	Hamilton (Warren)
Boston Heights	Campbell	Hamilton (Hamilton)
Botkins	Canfield	Harrison (Montgomery)
Bradford	Canton	Harrison (Pickaway)
Bratenahl	Celina	Holmes (Holmes)
Bremen	Centerville	Howland (Trumbull)
Brewster	Cheviot	Jackson (Franklin)
Bridgeport	Chillicothe	Jackson (Stark)
Brooklyn Heights	Cincinnati	Jefferson (Franklin)
Buckeye Lake	Circleville	Jefferson (Madison)
Burton	Cleveland	Jerome (Union)
Byesville	Cleveland Heights	Leroy (Lake)
Cadiz	Clyde	Liberty (Butler)
Caldwell	Columbus	Liberty (Delaware)
Camden	Conneaut	Liberty (Trumbull)
Canal Fulton	Cortland	Mad River (Montgomery)
Carey	Coshocton	Maderia-Indian Hill Joint District (Hamilton)
Carlisle	Cuyahoga Falls	Madison (Franklin)
Carroll Corp	Dayton	Madison (Montgomery)
Carrollton	Deer Park	Madison (Richland)
Castalia	Defiance	Madison Fire (Lake)
Cedarville	Delaware	Mantua-Shalersville (Portage)
Chagrin Falls	Delphos	Margaretta (Erie)
Chardon	Dover	Marion (Marion)

# PARTICIPATING EMPLOYERS (continued)

Villages	Municipalities	Townships (County)
Chauncey	Dublin	Mason Deerfield Joint (Warren)
Chesapeake	East Cleveland	Miami (Clermont)
Cleves	East Liverpool	Miami (Montgomery)
Coal Grove	East Palestine	Mifflin (Franklin)
Coalton	Eastlake	Mifflin (Richland)
Coldwater	Eaton	Moorefield (Clark)
Columbiana	Elyria	Northfield Center (Summit)
Columbus Grove	Englewood	Norwich (Franklin)
Continental	Euclid	Olmsted (Cuyahoga)
Coming	Fairborn	Orange (Delaware)
Covington	Fairfield	Painesville (Lake)
Crestline	Fairlawn	Perkins (Erie)
Creston	Fairview Park	Perry (Franklin)
Cridersville	Findlay	Perry (Lake)
Crooksville	Forest Park	Perry (Stark)
Cuyahoga Heights	Fostoria	Pierce (Clermont)
Dalton	Franklin	Plain (Franklin)
Danville	Fremont	Plain (Stark)
Delta	Gahanna	Pleasant (Fairfield)
Dennison	Galion	Pleasant (Franklin)
Deshler	Gallipolis	Pleasant Valley Fire Dist. (Madison)
Doylestown	Garfield Heights	Porter (Scioto)
Dresden	Geneva	Prairie (Franklin)
East Canton	Girard	Randolph (Montgomery)
Edgerton	Grandview Heights	Ravenna (Portage)
Edon	Green	Saybrook (Ashtabula)
Elmore	Greenfield	Scioto (Pickaway)
Elmwood Place	Greenville	Shawnee (Allen)
Evendale	Grove City	Springfield (Hamilton)
Fairfax	Hamilton	Springfield (Lucas)
Fairport Harbor	Harrison	Springfield (Richland)
Fayette	Heath	Springfield (Summit)
Felicity	Highland Heights	Sugarcreek (Greene)
Forest	Hilliard	Sycamore (Hamilton)
Fort Loramie	Hillsboro	Sylvania (Lucas)
Fort Recovery	Hubbard	Tate (Clermont)
Fort Shawnee	Huber Heights	Tri-Township Fire (Delaware)
Frazeysburg	Huron	Truro (Franklin)
Fredericktown	Independence	Union (Butler)
Galena	Indian Hill	Union (Clermont)
Garrettsville	Ironton	Violet (Fairfield)
Gates Mills	Jackson	Warren (Trumbull)
Geneva on the Lake	Kent	Washington (Clermont)
Genoa	Kenton	Washington (Franklin)
Georgetown	Kettering	Washington (Montgomery)
Germantown	Kirtland	Wellington (Lorain)
Gibsonburg	Lakewood	West Licking Joint Fire (Licking)
Glendale	Lancaster	Whitewater (Hamilton)
Glouster	Lebanon	Wooster (Wayne)
Golf Manor	Lima	Xenia (Greene)
Grafton	Logan	
Grand Rapids	London	
Grand River	Lorain	
Granville	Louisville	
Green Springs	Loveland	
Greenhills	Lyndhurst	

## PARTICIPATING EMPLOYERS (continued)

Villages	Municipalities
Greenwich	Macedonia
Groveport	Madeira
Hanging Rock	Mansfield
Hartville	Maple Heights
Hebron	Marietta
Hicksville	Marion
Higginsport	Martins Ferry
Highland Hills	Marysville
Hiram	Mason
Holgate	Massillon
Holland	Maumee
Hudson	Mayfield Heights
Hunting Valley	Medina
Jackson Center	Mentor
Jamestown	Mentor-on-the-Lake
Jefferson	Miamisburg
Johnstown	Middleburg Heights
Kirkersville	Middletown
Kirtland Hills	Milford
Lagrange	Monroe
Lakemore	Montgomery
Lakeview	Moraine
Laurelville	Mount Healthy
Leesburg	Mount Vernon
Leetonia	Munroe Falls
Leipsic	Napoleon
Lewisburg	Nelsonville
Lexington	New Lexington
Liberty Center	New Philadelphia
Lincoln Heights	Newark
Linddale	Niles
Lisbon	North Canton
Lithopolis	North College Hill
Lockland	North Olmsted
Lodi	North Ridgeville
Lordstown	North Royalton
Loudonville	Northwood
Lowell	Norton
Lowellville	Norwalk
Lynchburg	Norwood
Madison	Oakwood
Magnolia	Oberlin
Malvern	Olmsted Falls
Manchester	Oregon
Mantua	Orrville
Marblehead	Oxford
Mariemont	Painesville
Mayfield	Parma
McArthur	Parma Heights
McClure	Pepper Pike
McComb	Perrysburg
McConnellsville	Pickerington
McDonald	Piqua
Mechanicsburg	Port Clinton
Mendon	Portsmouth
Middlefield	Ravenna
Middleport	Reading
Midvale	Reynoldsburg
Milan	Richmond Heights

# PARTICIPATING EMPLOYERS (continued)

Villages	Municipalities
Millersburg	Rittman
Minerva	Riverside
Minerva Park	Rocky River
Mingo Junction	Rossford
Minster	Salem
Mogadore	Sandusky
Monroeville	Seven Hills
Montpelier	Shaker Heights
Moreland Hills	Sharonville
Morrow	Sheffield Lake
Moscow	Shelby
Mount Eaton	Sidney
Mount Gilead	Silverton
Mount Orab	Solon
Mount Sterling	South Euclid
Navarre	Springdale
New Albany	Springfield
New Boston	St. Bernard
New Bremen	St. Clairsville
New Concord	St. Marys
New Lebanon	Steubenville
New London	Stow
New Madison	Streetsboro
New Miami	Strongsville
New Paris	Struthers
New Richmond	Sylvania
New Vienna	Tallmadge
New Washington	Tiffin
New Waterford	Tipp City
Newburgh Heights	Toledo
Newcomerstown	Toronto
Newton Falls	Trenton
Newtown	Trotwood
North Baltimore	Troy
North Hampton	Twinsburg
North Kingsville	Uhrichsville
North Randall	Union
Northfield	University Heights
Oak Harbor	Upper Arlington
Oak Hill	Upper Sandusky
Oakwood (Cuyahoga)	Urbana
Oakwood (Paulding)	Vandalia
Obetz	Vanwert
Ontario	Vermilion
Orange	Wadsworth
Orwell	Wapakoneta
Ottawa	Warren
Ottawa Hills	Warrensville Heights
Ottoville	Washington Court House
Owensville	Wauseon
Pandora	Waverly
Pataskala	Wellston
Paulding	Wellsville
Payne	West Carrollton
Peebles	Westerville
Pemberville	Westlake
Peninsula	Whitehall
Perry	Wickliffe

## PARTICIPATING EMPLOYERS (continued)

### Villages

Piketon  
Pioneer  
Plain City  
Pleasant Hill  
Plymouth  
Poland  
Pomeroy  
Powell  
Powhatan Point  
Proctorville  
Put-in-Bay  
Reminderville  
Richfield  
Richwood  
Rio Grande  
Ripley  
Riverside  
Roaming Shores  
Rockford  
Roseville  
Russellville  
Russells Point  
Sabina  
Salineville  
Sardinia  
Seaman  
Sebring  
Seville  
Shadyside  
Shawnee  
Shawnee Hills  
Sheffield  
Sherwood  
Shreve  
Silver Lake  
Smithville  
Somerset  
South Bloomfield  
South Charleston  
South Lebanon  
South Point  
South Russell  
South Vienna  
South Zanesville  
Spencer  
Spencerville  
Springboro  
St. Henry  
St. Paris  
Strasburg  
Stratton  
Stryker  
Sugarcreek  
Sunbury  
Swanton  
Sycamore  
Terrace Park  
Tiltonville

### Municipalities

Willard  
Willoughby  
Willoughby Hills  
Willowick  
Wilmington  
Wooster  
Worthington  
Wyoming  
Xenia  
Youngstown  
Zanesville

# PARTICIPATING EMPLOYERS (continued)

## Villages

Union City  
Utica  
Valley View  
Valleyview  
Versailles  
Waite Hill  
Walbridge  
Walton Hills  
Waterville  
Waynesville  
Wellington  
West Alexandria  
West Jefferson  
West Lafayette  
West Liberty  
West Millgrove  
West Milton  
West Union  
West Unity  
Weston  
Whitehouse  
Wilkesville  
Williamsburg  
Winchester  
Windham  
Wintersville  
Woodlawn  
Woodmere  
Woodsfield  
Woodville  
Yellow springs  
Yorkville

# INVESTMENT SECTION

1. Investment Report
2. Investment Portfolio Summary
3. Investment Policy and Guidelines



# 1. INVESTMENT REPORT

Following anemic growth in late 1995, the Federal Open Market Committee in January 1996, lowered the Federal Funds Rate and the Discount Rate by 25 basis points to 5.25% and 5%, respectively. This was the third and last of a series of easing moves begun in July of 1995. Signs of stronger economic growth began to emerge early in the year as did concern over a tightening labor market and the potential effect on inflation. The unemployment rate trended lower through the year, dropping to as low as 5.1% in August before ending the year at 5.3%. The pace of growth in non-farm payroll employment picked up versus the prior year by averaging roughly 215,000 per month. Also, consumer confidence fell briefly, but then began a solid ascent to levels not seen since 1989. Quarterly gains in GDP ranged from 2% to 4.7%, providing further confirmation of the pick up in growth. For all of 1996, GDP rose 3.1%. Meanwhile, inflation, as measured by the CPI, trended somewhat higher throughout the year and registered a 3.3% increase for 1996. Although a manageable number, this broke a four year string of annual CPI increases below 3%. Producer prices also moved modestly higher, but increased at only a 2.8% annual rate. This environment allowed the Federal Reserve Board to maintain a stable monetary policy for the remainder of the year despite constant speculation about their next move. Looking abroad, most developed countries experienced a year which can be characterized as one of moderate growth and low inflation.

As opposed to most recent years, stocks and bonds took different roads in 1996. Stocks followed up an exceptional performance in 1995 with another excellent year, while bonds slumped to a sub-par showing. Stock market performance, as measured by the S&P 500, was a remarkable 23.1%. Large capitalization stocks again bested their smaller brethren. The Russell 2000, a good small cap proxy, lagged the S&P 500, but still provided a very respectable 16.5% return. Increasing economic growth, modest inflation and continued growth of corporate profits all helped provide a boost to stocks. However, the bond market spent the first half of 1996 in a bearish mode as investors focused on the strengthening economy and tightening labor markets. This combination led bond investors to fear that higher inflation and Fed tightening were just around the corner. The sell off took the 30 year US Treasury bond yield from 5.95% at the beginning of the year to a high of 7.19% in early July. A better second half brought the 30 year yield down to 6.64% at year end as it became clearer that growth and inflation were not getting out of hand and that the Fed would not act. Unfortunately, the damage had already been done as shown by the paltry 3.6% return of the Lehman Aggregate Index for the year. International equities, represented by the EAFE Index, registered a 6.1% return when adjusted for conversion to US dollars. The relative gains of the dollar basically cut the local market return of the EAFE Index in half. Finally, the real estate market continued its recovery as shown by a solid NCREIF return of 9.6%.

In 1996, the Fund enjoyed another strong year in the

growth of its investment assets. The market value of the investment portfolio surged upward over 12.7% to nearly \$6.34 billion from \$5.62 billion a year earlier. Meanwhile, the book value of our portfolio grew from \$4.85 billion in 1995 to over \$5.27 billion in 1996, an 8.6% increase. The 1996 total return for the overall investment portfolio was 13.56%, which by far outpaced the return of our policy benchmark and bettered the median return of Wilshire's Public Fund Universe. Over the past five years, the annualized total portfolio return of 10.90% handily beat our policy benchmark and ranked slightly above the median performer in the Wilshire universe. Also, our composite equity portfolio return of 22.54% beat both the Wilshire equity database median and the Wilshire 5000, but fell short of the S&P 500 last year. However, for the past five years our annualized equity return of 14.18% fell short of these same benchmarks. Our international equity composite's performance of 13.21% far exceeded that of EAFE, but did not match the median return of Wilshire's International equity Universe. Our fixed income composite portfolio generated a return of 4.30% in 1996, which ranked it in the top third of Wilshire's Core Fixed Income Universe. In addition, over the past five years, the bond portfolio has generated an annualized return of 7.44%, which places it ahead of both Wilshire's fixed income median and our benchmark. Also, our real estate portfolio had a total return last year of 13.4% which easily surpassed the NCREIF index and other industry benchmarks. Finally, while only small allocations, our commercial mortgage and venture capital portfolios both beat their respective benchmarks in 1996.

The Board made a number of important moves affecting investments last year. Early on, the Board adopted a new, more comprehensive Investment Policy and Guidelines Statement. The Board also decided that it wished to diversify its business risk in the fixed income area. As a result, we conducted a search for and hired the first external fixed income manager in the history of this fund. Over the course of the third quarter, we funded Brinson Partners with \$150 million from our internal bond portfolio. We also conducted a lengthy search and due diligence process for a general investment consultant. These efforts culminated in the selection of Wilshire Associates. Because of pending legislation, much of our focus was on how a consultant could help us move from a legal list environment to the "prudent person" standard. Importantly, this legislation was ultimately passed and signed into law with an effective date of March of 1997. On the real estate front, we committed roughly \$100 million to new investments while at the same time approved the sale of seven of our long term property holdings. Finally, the Board made additional commitments to three commercial mortgage funds and three new venture capital funds.

This year has certainly gotten off to a strong start in terms of the economy and the stock market. Industrial production has continued its upward path. The economy continues to create new jobs at a pace similar to last year which has driven the unemployment rate down to 4.9%. Consumer

confidence has maintained a strong move higher leading to increases in spending and retail sales. Worried about the strengthening economy and the tightening labor market, the Federal Reserve Board, in March, raised the Federal Funds rate by 25 basis points to 5.5%. The statistical evidence was on track as was shown by a strong 5.8% rise in first quarter GDP. Despite this strength, inflation has so far remained benign. The capital markets have continued on similar paths as last year. Thriving on this economic backdrop, stock indexes are up strongly to new highs after recovering from a March swoon. Large cap stocks continue to outperform small and mid cap stocks. Foreign equities have performed reasonably well after receiving a recent boost from a stronger Japanese market. Unfortunately, the bond market has also continued its mediocre performance. The Fed's tightening and continued worries over potential inflationary pressures have pushed the 30 year Treasury yield back up to the 7% area. Sentiment seems to be leaning toward at least one more Fed rate boost this year. However, second quarter growth seems to have dropped to a more reasonable rate and inflation is not likely to get out of hand. Therefore, any further rise in rates should be fairly limited. Given somewhat higher interest rates and projections of slower earnings growth, stocks are not likely to continue upward at the exceptional pace of the last two

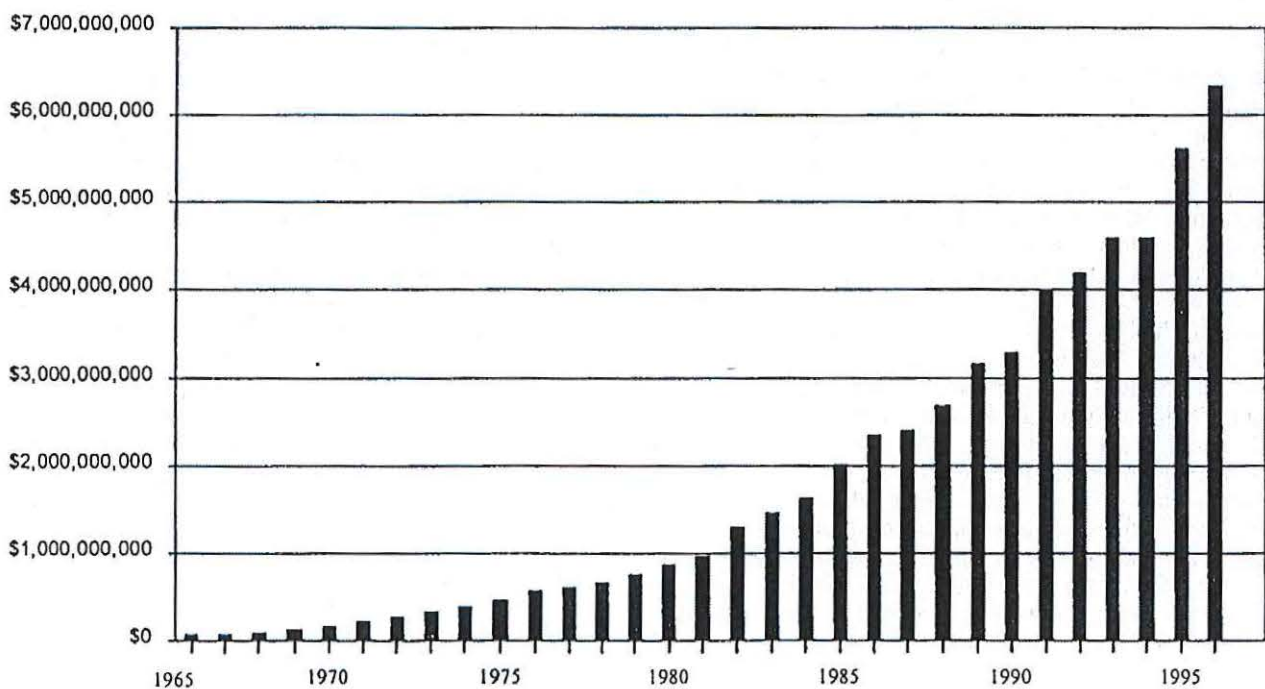
and one-half years. Lastly, real estate is expected to provide a solid return to the investment portfolio again in 1997.

Much of the first quarter was spent revising the investment guidelines of our managers in preparation for "prudent person" taking effect in early March. Generally, more latitude has been given to managers in terms of security selection. However, risk control has also been emphasized. The Board has begun careful consideration of a new asset allocation mix as we move through the study process with Wilshire Associates. A good deal of effort is being spent on studying new asset classes, their risk/reward characteristics and what the impact of their addition to our portfolio might be. Once an appropriate asset mix is chosen, we will begin to review the manager structure within each asset class. Our intention will be to determine the most efficient structure for performance, administration and cost. Until then, our existing manager structure and current investment approach will remain largely intact. Although, in real estate we have become more selective about potential acquisitions and are placing increasing emphasis on asset and property management. Finally, as always, we will continue to seek to achieve at least an 8.25% return over time, which is our actuarial assumption rate.

## 31-year Growth of the Fund—1965 to 1996

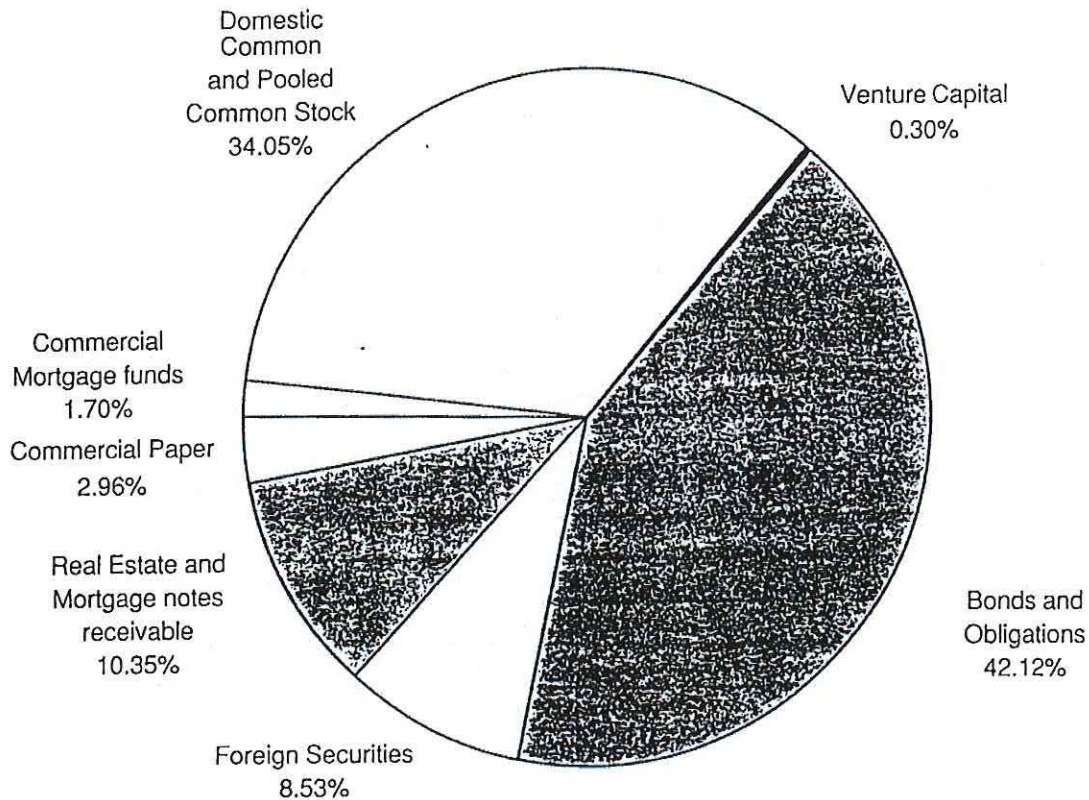
### PFDPF INVESTMENTS

YEAR-END MARKET VALUES



## 2. INVESTMENT PORTFOLIO SUMMARY

DECEMBER 31, 1996



Type	% of Book Value	Book Value	% of Market Value	Market Value
Canadian bonds and obligations	1.99%	\$ 105,033,731	1.71%	\$ 108,602,049
Government bonds and obligations	20.01	1,054,790,660	16.91	1,071,387,586
Corporate bonds and obligations	20.12	1,060,586,765	16.87	1,068,528,565
Domestic common stocks	28.52	1,503,524,822	32.86	2,081,870,370
Domestic pooled common stocks	5.53	291,442,912	10.18	645,129,572
Foreign securities	8.53	449,678,492	8.27	523,895,973
Commercial paper	2.96	155,815,328	2.46	155,815,329
Real estate	10.11	532,999,277	8.79	556,569,916
Mortgage notes receivable	0.24	12,489,000	0.20	12,489,000
Commercial mortgage funds	1.70	89,605,790	1.42	90,206,177
Venture capital	0.30	15,837,025	0.32	20,537,469
<b>Total All Investments</b>	<b>100%</b>	<b>\$5,271,803,802</b>	<b>100.00%</b>	<b>\$6,335,032,006</b>

## TEN LARGEST BONDS AND OBLIGATIONS (BY BOOK VALUE)

	Coupon	Maturity	Par Value	Book Value	Market Value
US Treasury	6.250	02/15/03	\$224,400,000	\$220,945,566	\$224,224,744
US Treasury	5.750	08/15/03	126,380,000	123,583,344	122,628,157
US Treasury	11.625	11/15/04	56,740,000	76,912,500	74,958,874
US Treasury	9.250	02/15/16	56,200,000	68,933,238	71,435,483
Mid States TR II A-4 04/01/03	9.625	10/01/03	57,675,000	59,004,073	62,865,750
Lehman Brothers Inc.	9.500	06/15/97	43,545,000	44,045,236	44,272,637
Lehman Brothers Holdings (MTN)	8.875	02/15/00	30,775,000	32,421,069	32,652,275
Bear Sterns Co.	9.125	04/15/98	30,725,000	31,733,066	31,863,054
Goldman Sachs Group L.P. 144A	6.200	12/15/00	31,100,000	30,640,691	30,673,930
FNMA 92-145 ZA	8.000	09/25/19	32,334,000	29,708,496	33,304,020

## TEN LARGEST COMMON STOCKS (BY COST)

	Shares	Cost	Market Value
McDonalds Corp.	577,800	\$26,278,823	\$26,217,675
Wells Fargo Corp.	92,465	20,734,635	24,942,434
Hercules, Inc.	525,000	19,429,017	22,706,250
Citicorp	404,400	18,164,337	41,653,200
AMR Corp. DEL	200,000	17,675,137	17,625,000
Caterpillar Inc.	250,000	17,022,694	18,812,500
Federal Home Loan Mtg. Corp.	270,000	15,423,415	29,801,250
Donnelley RR & Sons	450,000	15,391,606	14,118,750
McDonnell Douglas Corp.	370,000	15,223,020	24,281,250
E.I. DuPont de Nemours	218,500	15,220,641	20,566,313

## TEN LARGEST REAL ESTATE HOLDINGS (BY BOOK VALUE)

	Book Value	Market Value
Vista Ridge Shopping Center	\$40,955,130	\$40,340,000
Park Central Office Bldg.	36,226,213	40,828,000
Belmont Carlton Apartments	35,105,809	38,000,000
Bernard 78	26,863,454	27,500,000
Harbour Town of Boca	25,845,667	26,196,000
San Mateo Apartments	24,815,810	24,700,000
Great Southwest Industrial	21,125,851	21,935,000
Skyview Plaza	20,886,308	20,300,000
Inland Empire Industrial	20,596,672	21,083,429
Memphis Industrial Properties	20,244,978	20,894,876

Space and cost restrictions make it impractical to print the entire investment portfolio in this report. However, a portfolio listing is available for review at the Fund's office or the listing will be mailed upon request.

# 3. INVESTMENT POLICY AND GUIDELINES

## I. INTRODUCTION

The purpose of this Statement of Investment Policy and Guidelines is to define the framework for investing the assets of The Police and Firemen's Disability and Pension Fund of Ohio (the Fund). This Statement is intended to provide general principles for establishing the goals of the Fund, the allocation of assets and the employment of outside asset management. The Statutory authority of the Board is set forth in Section 742.11 to 742.11.2 of the Ohio Revised Code and these policies are established and adopted as required under that authority.

The objectives of the Fund have been established in conjunction with a comprehensive review of the current and projected financial requirements. These objectives are:

- To have the ability to pay all benefit and expense obligations when due.
- To maintain the purchasing power of the current assets and all future contributions by maximizing the rate of return on Fund assets.
- To achieve and maintain a fully funded status with regard to the accumulated benefit obligation.
- To control costs of administering the Fund and managing the investments.

In order to achieve these objectives, the Board of Trustees will conduct itself in accordance with Sec. 742.11 of the Ohio Revised Code: "The Board and other Fiduciaries shall discharge their duties with respect to the funds solely in the interest of the participants and beneficiaries." These duties shall be carried out "with care, skill, prudence, and diligence under the circumstances then prevailing that a prudent man acting in a like capacity and familiar with such matters would use in the conduct of an enterprise of a like character and like aims." All aspects of this statement should be interpreted in a manner consistent with the Fund's objectives. The Board shall adopt in regular meetings, policies, objectives or criteria for the operation of the investment program at least annually.

## II. DEFINITION OF RESPONSIBILITIES

### A. Board of Trustees' Responsibilities

- Establish the strategic investment policy for the Fund (asset allocation) and periodically review policy in light of any changes in actuarial variables and market conditions.
- Select qualified consultants and investment managers to advise on and manage the Fund's assets.
- Monitor and review the performance of selected managers to determine achievement of goals and compliance with policy guidelines.
- Monitor the costs of the investment operations on a quarterly basis.

### B. Staff Responsibilities

- Manage the Fund assets under its care, custody and/

or control in accordance with the Investment Policy Statement objectives and guidelines set forth herein.

- Monitor both internally & externally managed assets to insure compliance with the guidelines set forth in this policy statement.
- Promptly vote all proxies and related actions in a manner consistent with the long-term interests and objectives of the Plan set forth herein. Maintain detailed records of said voting of proxies and related actions and comply with all regulatory obligations related thereto.
- Report to the Board monthly regarding the status of the portfolio including derivative usage, and quarterly regarding its performance for various time periods.
- Report on the costs of the investment operations on a quarterly basis.

### C. Investment Consultants' Responsibilities

- Provide independent and unbiased information
- Assist in the development of Investment Policy Statement
- Monitor compliance with Investment Policy Statement
- Assist in the development of strategic asset allocation targets
- Assist in development of performance measurement standards
- Monitor and evaluate manager performance on an ongoing basis
- Conduct due diligence when a manager fails to meet a standard
- Establish a procedural due diligence search process
- Conduct manager searches when needed for policy implementation

### D. Investment Managers' Responsibilities

- Manage the Fund assets under its care, custody and/ or control in accordance with the Investment Policy Statement objectives and guidelines set forth herein.
- Exercise full investment discretion over the assets in their care within the guidelines set forth in this policy statement.
- Promptly inform the Board and staff in writing regarding all changes of a material nature pertaining to the firm's organization and professional staff.
- If directed, promptly vote all proxies and related actions in a manner consistent with the long-term interests and objectives of the Fund set forth herein. Each manager designated to vote shall keep detailed records of said voting of proxies and related actions and will comply with all regulatory

obligations related thereto.

- Report to the Board quarterly regarding the status of the portfolio and its performance for various time periods. Meet with the Board at least annually to report on their performance and compliance with goals and objectives.
- Acknowledge and agree in writing to their fiduciary responsibility to fully comply with the entire Investment Policy Statement set forth herein, and as modified in the future.

### III. ASSET ALLOCATION

It is the responsibility of the Board to determine the allocation of assets among distinct capital markets. The allocation will be completed in a manner consistent with commonly recognized financial principles. Application of these principles is expected to lead to a portfolio with the highest level of return consistent with the risk tolerance of the Fund.

The procedure for determining the allocation will consider the relevant characteristics of the liabilities and potential assets of the Fund. The liability considerations shall include, but not be limited to, current and expected future values of the benefits, contributions and total assets. These factors are important for identifying the investment horizon of the Fund and its cash flow requirements. The asset characteristics considered shall include, but not be limited to, the potential return relative to the potential risk.

The asset allocation must be consistent with the investment standards specified in Section 742.11 of the Ohio Revised Code.

Based on an asset allocation and liability study, dated September, 1993, which analyzed the expected returns of various asset classes, projected liabilities and the risks associated with alternative asset mix strategies, the Board has established the following asset allocation:

Asset Class	Target Allocation (%)	Range (%)
Large Cap Equity	31	±4
Mid/Small Cap Equity	10	±2
International Equity	10	±2
Domestic Fixed Income	37	±4
Real Estate	9	±2
Commercial Mortgages	2	-
Venture Capital	1	-
Cash Equivalents	0	-
<b>Total</b>	<b>100%</b>	

The study has shown that this asset mix offers the best combination of meeting longer term goals under both good and bad market conditions.

The asset allocation represents a long term strategy. Short term market shifts may cause the asset mix to drift from the allocation targets. Should the target percentage fall out of the indicated range for a particular asset class, the Board will cause the investment manager(s) to rebalance from the over-allocated class to the under-allocated class.

Section 742.11(d) of the Ohio Revised Code limits the Fund's investment in domestic Common and Preferred stock, American Depository Receipts, Equity related Derivative Instruments and Commingled Stock Investment Funds to 50% of the value of all funds described in Section 742.38 of the Ohio Revised Code. Therefore the combined value of Large Cap and Mid/Small Cap Equity shall not exceed 50% of the Fund's total asset value.

### IV. PERFORMANCE EXPECTATIONS

The most important expectation is the achievement of results consistent with this Policy Statement and the analysis set forth in the asset allocation study of September 1993. A long term 4% annualized real rate of return (net of inflation as measured by the Consumer Price Index) is a reasonable expectation in light of this policy. Long term is defined as a market cycle (generally 3-5 years).

The Fund shall also achieve a long term rate of return which is equal to or greater than the actuarial rate assumption. The Board expects the total fund to rank in the top half of a comparable public fund universe.

The Fund shall attempt to achieve these return goals without unnecessary risk to principal. The risk/return characteristics of the Fund shall be reviewed on a periodic basis (no less than every five years) through a comprehensive asset allocation and liability study. The goal of the study shall be to formulate a portfolio which maximizes return while minimizing overall risk through the most efficient combination of legal asset classes.

### V. INVESTMENT IMPLEMENTATION

The implementation of an investment portfolio designed to achieve the above objectives must be consistent with governing statutes as specified in Section 742.11 to 742.11.2.

An Investment committee composed of all 9 Board members shall be responsible for working closely with the Investment Staff in conjunction with the advisors, and shall make recommendations to the Board on investment matters.

Where appropriate, the Fund will invest assets through the use of Qualified Pension Asset Managers. The allocations to these managers will be made in accordance with the results of the Asset Allocation process and established procedures.

The Board, in conjunction with the Consultant, will establish specific search procedures, including the specification of minimum criteria for the selection of new qualified investment managers, to implement the strategic asset allocation plan. Among the criteria that will be used for screening purposes will be assets managed, manager style, track record, staff, communication, fees, risk/reward statistics, etc. All managers, with the exception of emerging management firms that may warrant specialized criteria, must meet the criteria established by the Board. The general investment manager search procedures shall include, but not be limited to, the following:

- Establish specific criteria
- Screen appropriate universes
- Develop list of initial candidates

- Conduct quality control
- Develop list of semi-finalists
- Select finalists for interviews
- Select new managers

The Board shall give equal consideration to minority owned and controlled firms and firms owned and controlled by women which otherwise meet the criteria established by the Board. Ohio based firms shall also be given consideration, providing that specified criteria are met.

## VI. SPECIFIC GUIDELINES

### A. Large Capitalization Specialist Managers

The Board of Trustees has determined that diversification of the equity asset base into large capitalized companies (over \$5 billion) will offer the opportunity for enhanced returns, while lessening overall risk due to the broader diversification benefits of additional asset classes.

Assets eligible to be managed in this class of investments will be found in the Ohio Revised Code Sec. 742.11. The following objectives and guidelines shall apply:

- Eligible equity purchases include all stocks in the S&P 500 Index, S&P 400 Mid Cap Index, listed on the New York or American Stock Exchanges or stocks issued or guaranteed by a corporation created or existing under the laws of the United States or any state, district, or territory thereof, subjects to the provisions of Sec. 742.11 regarding over-the-counter stocks.
- The main focus of investing will be on companies with a market capitalization in excess of \$5 billion.
- All investments in non-dividend paying stocks shall be brought to the attention of the Director of Investments.
- No single holding shall account for more than 5% of the entire portfolio at market, or 5% of the outstanding common stock of any one corporation.
- Specialist manager shall be subject to all other investment provisions listed under Sec. 742.11 of the Amended Substitute Senate Bill Number 43 that are not specifically mentioned above.
- Trading recommendations shall be submitted by the various investment managers to the Chief Investment Officer and staff who shall be responsible for all trading activity of the portfolio. In no event shall a manager/ advisor execute a trade involving a total loss in excess of five hundred thousand dollars without notification to the Board of Trustees.
- Cash equivalent positions shall be limited to a maximum of 5% unless otherwise approved by the Board of Trustees.
- Derivatives whose underlying asset is allowed by statute may be used in the management of the portfolio.

### B. Small/Mid Capitalization Specialist Managers

The Board of Trustees has determined that diversification of the equity asset base into small capitalized (under \$1.0 billion) and mid-range capitalized (\$1.0 billion-\$5.0 billion) companies will offer the opportunity for enhanced returns, while lessening overall risk due to the broader diversification benefits of additional asset classes. The structure of this asset class shall consist of several

complementary style managers with a demonstrated 'growth' and 'value' style of investing.

The following objectives and guidelines shall apply to the asset class:

- The guidelines which apply to the large cap specialist managers shall also apply to the small/mid cap managers except that:
  - The main focus of investing will be on companies with market capitalization in the range of \$100 million to \$5 billion.
  - Trading shall be left to the discretion of the investment manager.

#### *Investment Objectives*

- Total return of the managed large cap portfolio should exceed the return of the S&P 500 Index over a three year period on an annualized basis.
- Total return of each manager's portfolio should rank above median when compared to their peer groups (growth, value) over a three year period on an annualized basis.

#### 'Growth' Manager A

- Total return of the portfolio should exceed the return of a blended index consisting of 80% Russell 2000 Index and 20% S&P 400 Mid Cap Index over a three year period on an annualized basis.
- Total return should rank above median in a universe of small cap, growth managers over a three year period on an annualized basis.

#### 'Growth' Manager B

- Total return of the portfolio should exceed the return of a blended index consisting of 50% Russell 2000 Index and 50% S&P 400 Mid Cap Index over a three year period on an annualized basis.
- Total return should rank above median in a universe of small cap, growth managers over a three year period on an annualized basis.

#### 'Value' Manager A

- Total return of the portfolio should exceed the return of a blended index consisting of 80% Russell 2000 Index and 20% S&P 400 Mid Cap Index over a three year period on an annualized basis.
- Total return should rank above median in a universe of small cap, growth managers over a three year period on an annualized basis.

#### 'Value' Manager B

- Total return of the portfolio should exceed the return of a blended index consisting of 25% Russell 2000 Index and 75% S&P 400 Mid Cap Index over a three year period on an annualized basis.
- Total return should rank above median in a universe of small cap, growth managers over a three year period on an annualized basis.

### C. International

The Fund will allocate a portion of the investment portfolio to international securities in accordance with allowable limits. This is intended to enhance the overall return of the portfolio while lowering risk through increased diversification. The structure of the international equity

allocation will be diversified among three approaches: passive, active and regional. Trading shall be left to the discretion of the investment manager.

#### *Passive International Equity Investments*

The passive component has a target allocation of one-third of the International allocation. This is an index fund portfolio intended to provide diversification to the Fund's U.S. investments through holdings in non-U.S. equities and is to be constructed so as to track the MSCI-EAFE Index. Non-U.S. equity securities in EAFE countries are authorized. The portfolio will be fully-invested at all times and cash at no time should exceed 2% of the total market value of the account. The holding of cash is permitted to facilitate transactions and is not to be used as a market timing instrument. Lastly, currency hedging is not permitted in the account. The manager will have the MSCI-EAFE Index as a benchmark.

#### *Active International Equity Investment*

The active component also has a target allocation of one-third of the International allocation and will be equally divided among two managers. These will be discretionary portfolios intended to provide diversification to the Fund's U.S. investments as well as the Fund's passive EAFE Index manager.

For each active manager, the use of American Depository Receipts (ADRSs) and Global Depository Receipts (GDRs) will be limited to 20% of the portfolio.

While the geographic and economic sector diversification will be left to the manager's discretion, the portfolio shall be appropriately diversified as consistent with the manager's stated investment approach.

The investment managers may enter into forward exchange or futures contracts on currency provided that use of such contracts is designed for defensive purposes.

One manager will undertake a "core" investment, limiting the manager to investing between 0-15% of their portfolio in emerging markets with the remainder invested in the EAFE markets. Emerging markets represent those markets not contained in the MSCI-World Index. This manager is meant to be one which invests mainly in EAFE, but is allowed to opportunistically invest in emerging markets. Given the "core" mandate, the portfolio should be broadly diversified. Since the focus of the manager's portfolio is EAFE, the manager will be given an EAFE benchmark.

The second manager will be given a "core plus" mandate enabling this manager to invest 10-30% of the portfolio in emerging markets, with the remainder in the EAFE markets. This manager is meant to invest more systematically in emerging markets, maintaining a target allocation of 20% of the portfolio to these markets. Accordingly, this manager will be given a benchmark consisting of 80% MSCI-EAFE/20% MSCI-Emerging Markets Free.

#### *Regional Component*

The regional allocation will comprise the final one-third of the International allocation and will be split equally between Europe including the U.K. and Pacific Basin including Japan. These discretionary portfolios will serve to provide diversification to the Fund's U.S. investments as well as the passive EAFE Index manager and the two active international equity managers. The Europe manager

will be measured against the MSCI-Europe Index; the Pacific Basin manager will be measured against a customized Pacific Basin Index.

For each active manager, the use of American Depository Receipts (ADRs) and Global Depository Receipts (GDRs) will be limited to 20% of the portfolio.

The geographic and economic sector diversification, together with the number of issues held, will be left to the manager's discretion. The portfolio shall be appropriately diversified as consistent with the manager's stated investment approach.

The investment managers may enter into forward exchange or futures contracts on currency provided that use of such contracts is designed for defensive purposes.

#### **D. Fixed Income**

It shall be the responsibility of the Investment Staff to give careful consideration to the needs of the system in recommendation for bond investments, emphasizing relative value, quality and marketability.

The portfolio shall be actively managed in an effort to outperform the Lehman Aggregate Index over a market cycle. The effective duration of the portfolio shall not deviate beyond + or - 25% from that of the benchmark.

In order to qualify for inclusion in the fixed income portfolio, securities shall be rated "A-" or better by two standard rating services at the time of purchase.

No more than 10 percent of the fixed income portfolio may be invested in the securities of any one issuer, and no more than 5 percent in any one issue, with the exception of United States Government or Agency securities.

Derivatives whose underlying asset is allowed by statute may be used in the management of the portfolio.

Cash equivalents positions shall be included in the calculation of the portfolio's effective duration.

#### **E. Real Estate**

The Fund has adopted Strategic and Investment Plans that provide for the completion of the Fund's allocation to real estate.

The Fund's policy is a "managed opportunistic" investment strategy. This strategy has been adopted to take advantage of recovering real estate markets and the attractive potential returns available from real estate investments in such markets. Other investment objectives of the Fund include providing an inflation hedge and returns that negatively correlate with stock and bond returns. The Fund is primarily interested in investing in core properties (i.e., operating and substantially leased office, retail, industrial and apartment properties located in major metropolitan markets or key distribution centers exhibiting strong and diversified economic bases). The Fund will, however, consider "opportunistic" investments that provide greater lease-up risk (e.g., 65% occupancy), so long as the investment otherwise possesses core attributes and satisfactory protections (e.g., a purchase price at a significant discount to replacement costs). The Fund will also consider investment opportunities from markets that have experienced economic downturns and are currently exhibiting signs of market recovery and good potential appreciation and income returns.

The Fund will consider investments in specialized



investments (i.e., developmental properties, investments in land and other non-traditional property type investments). Specialized investments typically exhibit more risk than core investments and may require specialized acquisition or asset management skills to mitigate the high risk associated with the investments.

The minimal acceptable projected or benchmark return for new core and specialized investments are real rates of return (i.e., inflation adjusted) net of fees of five percent (5%) and six percent (6%), respectively, or ten percent (10%) and eleven percent (11%) on an nominal basis before fees. Core investments are to comprise a minimum of eighty percent (80%) of the Fund's portfolio and specialized investments are to comprise a maximum of twenty percent (20%) of the portfolio.

The Fund's preferred investment vehicle is a separate account because it affords the Fund the most control over its investments. Commingled fund investments will be made to a lesser degree to provide diversification and interests in larger property investments.

The Fund employs a number of risk management strategies to minimize portfolio return volatility. These strategies include diversifying the real estate portfolio by advisor, property type, location and economy. The Fund further monitors closely the performance of its advisors in commingled fund investments. Also, leverage will be utilized only if acceptable debt service coverage, loan to value and other protections can be provided. The maximum debt to equity ratio for the portfolio is 1:1 and 2:1 for an individual asset.

#### F. Commercial Mortgages

The Board of Trustees has determined that inclusions of Commercial Mortgage Investments secured by real estate, will enhance the risk/return characteristics of the fund. Therefore, the allocation to this asset class shall be targeted at 2% of the fund's total investable assets.

Commercial Mortgage investments provide for fixed income payments derived from underlying property cash flows. Flexibility in investing in commercial mortgage backed securities or whole loans shall be provided. Risk shall be controlled through diversification strategies and the retention of qualified managers with acceptable loan underwriting and/or commercial mortgage acquisition experience.

The benchmark return for the commercial mortgage portfolio, consistent with investment risk, is a real rate of return of four percent, net of investment management fees, over rolling ten year periods.

The policies and guidelines set forth in the Fund's "Commercial Mortgage Strategic and Investment Plan" are incorporated herein by reference.

#### G. Venture Capital Investments

The venture capital class of investments is designed to provide an attractive risk adjusted rate of return to benefit the Fund. By its very nature, it possesses a long term investment horizon, illiquidity and a high degree of risk.

For these reasons, this asset class is limited to 1% of the overall fund and expected returns must exceed those of other asset classes. The Fund seeks a target return of 10% in excess of inflation over the long term.

To assist in diversifying the risks of this asset class, the Fund shall invest only in eligible venture capital partnerships or funds and shall avoid individual direct company investments. The Ohio Revised Code 742.11(d) (5) states eligibility as, "Venture Capital firms having an office within this state, provided that, as a condition of the Board making an investment in a venture capital firm, the firm must agree to use its best efforts to make investments, in an aggregate amount at least equal to the investment to be made by the Board in that venture capital firm, in small businesses having their principal offices within this state and having either more than one-half of their assets within this state or more than one-half of their employees employed within this state."

#### H. Cash Equivalents

To provide effective cash management when investing cash balances, emphasis shall be placed on the protection of principal through the purchase of higher quality money market instruments, while at the same time attempting to achieve the highest available return.

Short-term investments may be made in commercial paper which shall, at the time of purchase be rated within the two highest classifications established by two standard rating services. Treasury obligations, certificates of deposits, banker's acceptances, or repurchase agreements may be purchased with the responsibility resting on the Investment Staff regarding the selection of the specific type of investment at any given point in time. These obligations shall mature within 270 days of the date of purchase.

### VII. PROXY VOTING

The Fund's board of Trustees believes that common stock proxies are valuable and should be voted in the long term interests and objectives of the Plan set forth herein. Each manager, staff or individual that exercises a proxy vote shall keep detailed records of said voting of proxies and related actions and will comply with all regulatory obligations related thereto and the policies set forth in the Board's "Proxy Voting Policy Statement."

Common stock proxies may be executed by the Executive Director, the Chief Operating Officer, the Chief Investment Officer or outside money managers.

The internal staff shall provide a semi-annual summary report of proxy voting actions to the Board of Trustees.

### VIII. SECURITIES LENDING

The investment objective for the securities lending program is to generate incremental income within a high quality investment program that safeguards the return of principal, maintains adequate daily liquidity, ensures diversification and tightly controls exposure to fluctuating interest rates.

The program may be operated by a bank trustee or a third party lending agent. Marking to market shall be performed daily and a minimum of 102% collateral shall be diligently maintained.

Securities lending reports shall be provided periodically by the agent to the Board detailing investment instruments utilized and the appropriate breakdown of revenues.

## IX. INVESTMENT MONITORING

The Board shall review at least semi-annually the performance of the Fund as a whole, each of the components of asset allocation and the individual managers. The Fund as a whole shall be evaluated relative to the strategic long term objectives defined under "asset allocation."

Each Qualified Pension Asset Manager's performance shall be evaluated relative to an appropriate market index and a relevant peer group of managers as indicated below. They are expected to rank above median versus their respective peer groups over a minimum three year period and equal or exceed their respective market index.

### Benchmark Comparisons

	<u>Index</u>	<u>Peer Groups</u>
Large Cap Managers	S&P 500	Growth Value
Small/Mid-Cap Managers	<i>Blend</i> - { S&P 400 Mid Cap { Russell 2000	Small Cap/ Mid Cap
International	MSCI-EAFE MSCI-Europe MSCI-Pacific Basin Custom Index	Non-U.S. Regional-Europe Regional-Pacific Basin
Domestic Fixed Income	Lehman Aggregate	All F/I
Real Estate	NCREIF	Real Estate

The performance of the investment managers will be monitored on an ongoing basis and it is the Board's discretion to take corrective action by replacing a manager if they deem it appropriate at any time. Performance factors which may lead to terminating a manager relationship

include:

- Managers that consistently perform below the median (50th percentile) of their peer group over a trailing three year period.
- Managers that have not demonstrated added value, as measured by Alpha, (Measure of a manager's contribution to performance due to security selection) for a three year period.

Major organizational changes also warrant immediate review of the manager, including:

- Change in professionals
- Significant account losses
- Significant growth of new business
- Change in ownership

## X. COMMUNICATIONS

Each manager will provide hard copy reports at least quarterly, including performance measurement, asset inventories, transaction summaries, market commentary or anything else deemed significant at the time of reporting.

Each manager is expected to meet with the Fund's Board at least annually, unless notified otherwise.

## XI. REVIEW PROCEDURES

In addition to the regular performance reviews, the Board in conjunction with its consultant will review this policy statement at least once a year to determine if revisions are warranted.

It is not expected that investment policy will change frequently, in particular short term changes in the financial markets should generally not require an adjustment in the investment policy.