# ohio Rolice Pension Fire Fund

# COMPREHENSIVE ANNUAL FINANCIAL REPORT

For the Year Ended December 31, 2000

### OHIO POLICE AND FIRE

### **PENSION FUND**

# COMPREHENSIVE ANNUAL FINANCIAL REPORT

FOR THE YEAR ENDED DECEMBER 31, 2000

PREPARED THROUGH THE COMBINED EFFORTS OF

THE OP&F STAFF

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

# TABLE OF CONTENTS

INTRODUCTORY SECTION:	Page
Board of Trustees Administrative Staff and Professional Consultants GFOA Certificate of Achievement Letter of Transmittal	2 3 4 5
FINANCIAL SECTION:	
Financial Statements:	
Independent Auditor's Report Combining Statement of Plan Net Assets Combining Statement of Changes in Plan Net Assets Notes to Combining Financial Statements	11 12 14 16
Required Supplementary Information: 1. Schedule of Funding Progress 2. Schedule of Employer Contributions 3. Notes to Required Supplementary Schedules	22 22 22
Additional Information: 1. Administrative Expenses Schedule 2. Investment Expenses Schedule	23 24
INVESTMENT SECTION:	
<ol> <li>Investment Report</li> <li>Investment Portfolio Summary</li> <li>Schedule of Investment Results</li> <li>Investment Consultants and Money Managers</li> <li>Schedule of Fee and Commission Payments to Brokers</li> <li>Investment Policy and Guidelines</li> </ol>	26 32 34 35 36 37
ACTUARIAL SECTION:	
<ol> <li>Report of Actuary</li> <li>Summary of Actuarial Assumptions and Methods</li> <li>Active Member Valuation Data</li> <li>Retirants and Beneficiaries Added to and Removed from Rolls</li> <li>Short-Term Solvency Test</li> <li>Plan Summary</li> </ol>	48 51 54 54 55
STATISTICAL SECTION:	
<ol> <li>Revenues by Source</li> <li>Expenses by Type</li> <li>Benefit Expenses by Type</li> <li>Retired Membership by Type of Benefits</li> <li>Average Monthly Benefit Payments</li> <li>Number of Employer Units</li> <li>Death Benefit Fund</li> </ol>	60 60 61 61 62 63

# **BOARD OF TRUSTEES**

### **ELECTED MEMBERS:**



Robert M. Beck Chairman Cleveland Police Department Term expires June 3, 2001



**David K. Harker**Dayton Fire Department
Term expires June 6, 2004



Kenneth Gehring Chairman Elect Toledo Fire Department Term expires June 2, 2002



Thomas Bennett
Dayton Police Department
Term expires June 1, 2003



William Gallagher Cleveland Police Department (Retired) Term expires June 1, 2003



Patrick J. Patton
Vice Chairman
Cleveland Fire Department
(Retired)
Term expires June 1, 2003

### STATUTORY MEMBERS:



Richard T. Balazs
Director of Finance
City of Euclid
Term expires June 3, 2001



**Betty Montgomery** Attorney General



Jim Petro
Auditor of State

# **ADMINISTRATIVE STAFF**



William Estabrook Executive Director



James Martin Chief Financial Officer



Theodore G. Hall
Chief Investment Officer



**Kay Penn**Director of Member Services



Michael Heys
Director of Human Resources



Michael Sawczyn
Chief Information Officer



Diane M. Lease General Counsel



**Debbie D. Young**Director of Benefit Services

# PROFESSIONAL CONSULTANTS

Actuaries:

Watson Wyatt Worldwide

Legal Counsel:

Attorney General Betty Montgomery

Independent Accountants:

Deloitte & Touche LLP

**Investment Consultants and Managers:** 

See page 35

# Certificate of Achievement for Excellence in Financial Reporting

Presented to

# Ohio Police & Fire Pension Fund

For its Comprehensive Annual Financial Report for the Fiscal Year Ended December 31, 1999

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.

STALL

CONTRACTOR

COMMANDA

CORPORATION

STALL

COMPONENT

COMPON

anne Spray Kinney President

Executive Director

## LETTER OF TRANSMITTAL

# ohio Police Pension Fire rund

April 13, 2001

Dear Chairman and Members of the Board of Trustees:

We are pleased to submit to you the Comprehensive Annual Financial Report (CAFR) of the Ohio Police and Fire Pension Fund (OP&F) for the year ended December 31, 2000. This CAFR was prepared to aid interested parties in assessing OP&F's status at December 31, 2000, and its results for the year then ended.

The report is divided into five sections:

- (1) The Introductory Section contains this Letter of Transmittal, along with the identification of the administrative organization of OP&F, and the Certification of Achievement for Excellence in Financial Reporting;
- (2) The Financial Section includes the Independent Auditors' Report and the financial statements of the system;
- (3) The Investment Section contains the investment report, portfolio summary, and the investment policy and guidelines;
- (4) The Actuarial Section includes significant actuarial data pertaining to OP&F and the certification letter of Watson-Wyatt and results of their annual actuarial valuation; and
- (5) The Statistical Section includes historical data reporting progress of OP&F.

### **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). Additional information on OP&F's significant accounting policies are contained in Note 1 of the Notes to the Combining Financial Statements in the Financial Section.

Management is responsible for establishing and maintaining an internal control structure designed to ensure that the assets of OP&F are protected from loss, theft or misuse and to ensure that adequate accounting data is compiled to allow for the preparation of combining 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

OP&F is a cost sharing multiple employer public employee retirement system and 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 Ianuary 1, 1967. On that date the local pension funds transferred their assets and liabilities to OP&F. Assets transferred to OP&F totaled approximately \$75 million, while OP&F's actuary computed the liabilities accrued up to 1966 at approximately \$490 million.

lion. The remaining unfunded accrued liabilities totaled nearly \$53 million as of December 31, 2000 and are being paid by employers over a 67-year period, which began in 1969.

OP&F 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.

Membership in OP&F 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 OP&F 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. The table below is a tabulation of current participating employers at December 31, 2000.

### **Participating Employers**

	<b>Police</b>	Fire
Municipalities	258	213
Townships		105
Villages	332	32
Total	590	350

### Major Initiatives and Accomplishments

OP&F installed a new investment accounting software package during 2000. This new system will allow OP&F to more efficiently monitor our investment portfolio. The system allows for direct feeds from our custodians, interfaces to our new accounting system, and strengthens internal controls.

OP&F underwent a detailed Records Study, which included an examination by outside consultants of our handling of all of corporate and member records. Legal and operational issues were examined, as well as the adoption of a new records retention schedule. The study also focused on future space requirements, implementing new education programs, and examined the necessity for adequate protection of vital records. Many of the study's recommendations will be implemented in the near future.

Services to the families of our members were increased as we launched our Helping Our Survivors in Transition (HOST) program. This program assists families of members who have died. The goal is to help survivors complete all necessary information timely without a break in coverage.

Employers were active in paying off their debt to OP&F in 2000. An early payoff program allows an employer to pay-off their pre-1967 liability at a discounted rate. This OP&F receivable has decreased from over \$129 million at the end of 1999 to approximately \$53 million at the end of 2000. This program officially ends May 15, 2001.

### **Financial Overview**

OP&F 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. Additions to net assets totaled \$301,220,508 in 2000. The employee and employer contribution rates during 2000 remained unchanged from the prior year at 10% for employees, 19.5% for police and 24% for fire.

Additions to Plan Net Assets		2000		1999
(in thousands)	Amount	Percent	Amount	Percent
Net Investment Income	\$(165,141)	n/a	\$1,101,764	72%
Contributions	458,627		424,088	28
Interest on Local Funds Receivable	3,200		6,249	0
Other	4,535		3,781	0
Total	\$301,221	n/a	\$1,535,882	100%

Investment income (loss) fluctuated greatly due to the overall decline in global equity markets in 2000. See the investment section for further discussion.

<b>Deductions to Plan Net Assets</b>	8	2000		1999
(in thousands)	Amount	Percent	Amount	Percent
Benefits	\$573,783	92%	\$542,654	93%
Administrative Expenses	13,225	2	11,549	2
Discount on Early Payoff of Receivables	22,322	4	12,471	3
Refund of Employee Contributions	11,070	2	11,389	2
Other	713	0	887	0
Total	\$621,113	100%	\$578,950	100%

### **Funding Practices and Actuarial Overview**

Funds are derived from the excess of additions over deductions and are accumulated by OP&F in order to meet current and future benefit obligations to retirees and beneficiaries. Due to unrealized losses in the investment portfolio, OP&F experienced a net loss in 2000, reducing net assets by approximately \$320 million.

### **Investment Policy**

OP&F invests all available funds in order to maximize both current income yield and long-term appreciation.

The primary objective of OP&F's investment policy is to assure that OP&F 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 OP&F's assets with the least exposure to risk. OP&F's total rate of return on its investment portfolio decreased significantly due to the declining stock market, with a return of -1.1% in 2000, as compared to 13.82% in 1999.

Details of portfolio composition, rates of return, analysis of significant economic conditions, and additional information concerning OP&F's investment policy are provided in the Investment Section.

### **Material Plan Amendments**

There were no material plan amendments in 2000.

### Independent Audit

Deloitte & Touche LLP, independent certified public accountants, audited the financial statements of OP&F for the year ended December 31, 2000, and their opinion thereon is included in the Financial Section.

### Notes to the Combining Financial Statements

The notes to the combining financial statements, which follow the combining 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 OP&F for its Comprehensive Annual Financial Report for the fiscal year ended December 31, 1999. 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 accounting principles generally accepted in the United States of America 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 to determine its eligibility for another certificate.

### Acknowledgments

The preparation of this report reflects the combined efforts of OP&F'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.

The cooperation of OP&F's employers is also very important to our success and is greatly appreciated.

Respectfully submitted,

William Estabrook Executive Director Statust Jones E. Martin

Chief Financial Officer

# FINANCIAL SECTION

Independent Auditor's Report

Combining Statement of Plan Net Assets

Combining Statement of Changes in Plan Net Assets

Notes to the Combining Financial Statements

### Required Supplementary Information:

- 1. Schedule of Funding Progress
- 2. Schedule of Employer Contributions
- 3. Notes to Required Supplemental Schedules

### Additional Information:

- 1. Administrative Expenses
- 2. Investment Expenses

# INDEPENDENT AUDITORS REPORT

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

Tel: (614) 221-1000 Fax: (614) 229-4647 www.us.deloitte.com

Deloitte & Touche

### INDEPENDENT AUDITORS' REPORT

To the Board of Trustees of Ohio Police and Fire Pension Fund:

We have audited the accompanying combining statements of plan net assets of Ohio Police and Fire Pension Fund (OP&F), formerly the Police and Fireman's Disability and Pension Fund of Ohio, as of December 31, 2000 and 1999 and the related combining statements of changes in plan net assets for the years then ended. These combining financial statements are the responsibility of OP&F management. Our responsibility is to express an opinion on these combining financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in Government Auditing Standards issued by the Comptroller General of the United States. Those standards require that we plan and perform the audits 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 combining financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall combining financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the combining financial statements referred to above present fairly, in all material respects, the plan net assets of OP&F as of December 31, 2000 and 1999, and the changes in plan net assets for the years then ended in conformity with accounting principles generally accepted in the United States of America.

Our audits were performed for the purpose of forming an opinion on the basic combining financial statements of OP&F 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 OP&F, is presented for the purpose of additional analysis and is not a required part of the basic combining financial statements of OP&F. Such additional information has been subjected to the auditing procedures applied in our audit of the basic combining financial statements for the year ended December 31, 2000 and 1999 and, in our opinion, is fairly stated in all material respects when considered in relation to the basic 2000 and 1999 combining financial statements taken as a whole.

In accordance with Government Auditing Standards, we have also issued our report dated April 13, 2001, on our consideration of OP&F internal control structure and on its compliance with laws and regulations. That report is an integral part of an audit performed in accordance with Government Auditing Standards and should be read in conjunction with this report in considering the results of our audits.

Deloitte Touche Tohmatsu The statistical data on pages 60 - 63 is presented for the purpose of additional analysis and is not a required part of the basic combining financial statements of OP&F. Such additional information has not been subjected to the auditing procedures applied in our audit of the basic combining financial statements and, accordingly, we express no opinion on it.

Deloute 1 Touch Cyp

April 13, 2001

# OHIO POLICE AND FIRE PENSION FUND COMBINING STATEMENT OF PLAN NET ASSETS

as of December 31, 2000 and 1999

	Pensions	Postemployment Healthcare	Death Benefit Fund	2000 Total
Assets				
Cash and Short-term Investments	\$332,900,088	\$ 9,908,901	\$12,311,771	\$ 355,120,760
Receivables:				
Employers' Contributions	58,810,946	30,015,073		88,826,019
Employees' Contributions	12,956,931	and the state of the state of		12,956,931
Accrued Investment Income	30,485,438	907,411		31,392,849
Investment Sales Proceeds	43,538,983	1,295,955		44,834,938
Local Funds Receivable	53,036,223			53,036,223
Total Receivables	198,828,521	32,218,439		231,046,960
Investment, at fair value:				
Bonds	1,192,238,103	35,487,431		1,227,725,534
Mortgage & Asset Backed Securities	863,439,177	25,700,603		889,139,780
Stocks	3,778,862,617	112,479,316		3,891,341,933
Real Estate	782,993,863	23,306,117		806,299,980
Commercial Mortgage Funds	123,786,253	3,684,546		127,470,799
Venture Capital	75,985,505	2,261,738		78,247,243
International Securities	1,627,154,843	48,432,897		1,675,587,740
Mortgage Note Receivables	12,347,473	367,527		12,715,
Total Investments	8,456,807,834	251,720,175		8,708,528,
Collateral on Loaned Securities	1,119,335,970	33,317,471		1,152,653,441
Fixed Assets:				
Building, Furniture and Equipment	23,151,929	689,126		23,841,055
Accumulated Depreciation	(3,677,090)	(109,450)		(3,786,540)
Total Fixed Assets	19,474,839	579,676		20,054,515
Prepaid Expenses and Other	1,096,145	32,627	-	1,128,772
TOTAL ASSETS	10,128,443,397	327,777,289	12,311,771	10,468,532,457
Liabilities:				
Medical Benefits Payable		12,668,441		12,668,441
Investment Commitments Payable	157,984,330	4,702,465		162,686,795
Accrued Administrative Expenses	5,822,496	173,310		5,995,806
Liabilities for Death Benefit Fund Benefits		g paga aanata na maanaa	12,311,771	12,311,771
Other Liabilities	6,141,217	182,796		6,324,013
Obligations Under Securities Lending	1,119,335,970	33,317,471		1,152,653,441
TOTAL LIABILITIES  Net assets held in trust for pension and	1,289,284,013	51,044,483	12,311,711	1,352,640,267
postemployment healthcare benefits	\$8,839,159,384	\$276,732,806	1919	\$9,115,892,190

(A schedule of funding progress is presented on page 22)

See Notes to Combining Financial Statements

	Pensions	Postemployment Healthcare	Benefit Fund	1999 Total
	\$ 155,634,569	\$ 4,736,868	\$11,199,684	\$ 171,571,121
	58,204,104	28,219,946		86,424,050
	10,950,718	-		10,950,718
	36,928,583	1,123,952		38,052,535
	8,826,975	268,656		9,095,631
	129,738,252	Secretary Processing		129,738,252
	244,648,632	29,612,554	_	274,261,186
	1,417,590,836	43,145,559		1,460,736,395
	1,335,721,110	40,653,786		1,376,374,896
	3,735,887,929	113,704,864		3,849,592,793
	707,084,603	21,520,710		728,605,313
	111,317,772	3,388,049		114,705,821
	52,115,543	1,586,180		53,701,723
	1,497,526,385	45,578,464		1,543,104,849
·	12,324,882	375,118		12,700,000
	8,869,569,060	269,952,730		9,139,521,790
	812,167,721	24,719,002		836,886,723
	22,830,962	694,879		23,525,841
	(3,277,367)	(99,749)		(3,377,116)
	19,553,595	595,130		20,148,725
	111,484	3,393		114,877
	10,101,685,061	329,619,677	11,199,684	10,442,504,422
		10 585 500		10 555 500
	101 005 515	12,575,793		12,575,793
I.	131,297,515	3,996,149		135,293,664
	5,018,666	152,747	11 100 604	5,171,413
	5 427 572	165 102	11,199,684	11,199,684
	5,427,573	165,193		5,592,766
	812,167,721 953,911,475	24,719,002 41,608,884	11 100 694	836,886,723 1,006,720,043
	733,711,4/3	41,000,004	11,199,684	1,000,720,043
	\$9,147,773,586	\$288,010,793	<u> </u>	\$9,435,784,379

# OHIO POLICE AND FIRE PENSION FUND COMBINING STATEMENT OF CHANGES IN PLAN NET ASSETS

as of December 31, 2000 and 1999

	Pensions	Postemployment Healthcare	2000 Total
Additions:			4
Contributions:			
Members'	\$ 144,967,340		\$ 144,967,340
Employers'	203,684,242	101,205,133	304,889,375
State of Ohio - Subsidies	3,112,366	101,203,133	3,112,366
Medical Benefits		5,657,431	5,657,431
Total Contributions	351,763,948	106,862,564	458,626,512
nvestment Income:			
Net Appreciation of Fair			
Value of Investments	(409,658,278)	(7,916,914)	(417,575,192)
Bond Interest	166,721,062	3,221,993	169,943,055
Dividends	21,717,008	419,695	22,136,703
Real Estate Operating Income, net	62,229,416	1,202,624	63,432,040
Foreign Securities	6,414,467	123,964	6,538,431
Other	3,908,922	75,542	3,984,464
Less Investment Expenses	(15,606,722)	(301,610)	(15,908,332)
Net Investment Income	(164,274,125)	$\frac{(301,010)}{(3,174,705)}$	(167,448,831)
From Securities Lending Activities:	(20 3,27 3,220)	(3,174,703)	(107,440,031)
Securities Lending Income	61,173,642	1,182,221	62,355,863
Securities Lending Expense:	,-,-,-,-	1,102,221	02,333,603
Borrower Rebates	(58,010,844)	(1,121,097)	(59,131,941)
Management Fees	(898,574)	(17,366)	(915,940)
Total Securities Lending Expense	(58,909,418)	$\frac{(17,366)}{(1,138,463)}$	(60,047,881)
Net Income from Securities	(20,505,110)	(1,130,403)	(00,047,881)
Lending	2,264,224	43,758	2,307,982
Interest on Local Funds Receivable	3,199,936	45,756	3,199,936
Other Income	4,534,909		4,534,909
TOTAL ADDITIONS	197,488,892	103,731,617	301,220,508
Deductions:			
Benefits:			
Retirement	301,252,668		301,252,668
Disability	115,063,199		115,063,199
Health Care		111,817,485	111,817,485
Survivor	45,650,351		45,650,351
Contribution Refunds	11,069,721		11,069,721
Discount on Early Payoff of Receivable	22,321,629		22,321,629
Administrative Expenses	10,032,391	3,192,119	13,224,510
Other Expenses	713,134		713,134
TOTAL DEDUCTIONS	506,103,093	115,009,604	621,112,697
et Increase (Decrease)	(308,614,201)	(11,277,987)	(319,892,189)
et assets held in trust for pension and			( / / /
postemployment healthcare benefits:			
alance, Beginning of year	\$9,147,773,586	288,010,793	9,435,784,379
alance, End of year	\$8,839,159,385	\$276,732,806	\$9,115,892,190
ee Notes to Combining Financial Statements			

Pensions	Postemployment Healthcare	1999 Total
\$ 135,814,320		\$135,814,320
188,364,861	91,109,660	279,474,521
3,281,554	71,107,000	3,281,554
3,201,334	5,518,098	5,518,098
227 460 725	96,627,758	424,088,493
327,460,735	70,027,736	121,000,100
925 700 249	17,391,279	843,100,527
825,709,248	4,080,436	197,812,481
193,732,045		24,838,092
24,325,737	512,355	
40,479,996	852,601	41,332,597
5,996,068	126,291	6,122,359
149,347	3,146	152,493
(13,159,366)	(277,166)	(13,436,532
1,077,233,075	22,688,942	1,099,922,017
34,045,949	717,085	34,763,034
(31,447,487)	(662,355)	(32,109,842
(794,810)	(16,741)	(811,551
(32,242,297)	(679,096)	(32,921,393
1,803,652	37,989	1,841,641
6,248,891		6,248,891
3,781,224		3,781,224
1,416,527,577	119,354,689	1,535,882,266
		202 047 244
282,847,246		282,847,246
107,409,570	100 500 501	107,409,570
	100,522,731	100,522,731
51,874,382		51,874,382
11,389,439		11,389,439
12,470,563	paga ggp-tainean da aannaa	12,470,563
8,731,593	2,817,126	11,548,719
887,352		887,352
475,610,145	103,339,857	578,950,002
940,917,432	16,014,832	956,932,264
9 206 956 154	271 005 061	\$8,478,852,115
8,206,856,154	271,995,961 \$288,010,793	\$9,435,784,379
\$9,147,773,586	Φ200,010,793	φ <del>2,433,704,3</del> 73

# NOTES TO COMBINING FINANCIAL STATEMENTS

YEAR ENDED DECEMBER 31, 2000 and 1999

# 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The following are the significant accounting policies followed by the Ohio Police and Fire Pension Fund (OP&F), formerly known as the Police & Firemen's Disability and Pension Fund of Ohio.

Basis of Accounting — OP&F's combining financial statements have been prepared using the accrual basis of accounting. Revenues are recognized when earned and measurable, and expenses are recorded when a liability is incurred.

Investments - Investment purchases and sales are recorded on a trade date basis. Dividend income is recognized on the ex-dividend date, while interest and rental income is recognized when earned.

Investments are reported at fair value. Short-term investments are valued at cost, which approximates fair value. Securities traded on a national or international exchange are valued at the last reported sales price at current exchange rates. Mortgages are valued on the basis of future principal payments discounted at prevailing interest rates for similar instruments. The fair value of real estate is based on independent appraisals and internal valuations. Investments that do not have an established market are reported at estimated fair value. Venture capital limited partnership interest is based on values established by valuation committees.

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

OP&F has no individual investment that exceeds 5% of net assets available for benefits

Federal Income Tax Status – OP&F was determined to be exempt from Federal income taxes under Section 501(a) of the Internal Revenue Code.

Property and Equipment - Property and equipment are reconstant 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

Contributions and Benefits - Member and employer contributions are recorded in the period the related member salaries are earned. Benefits and refunds are recognized when due and payable in accordance with the terms of the plan.

### 2. DESCRIPTION OF THE SYSTEM

Organization - The Ohio Police and Fire Pension Fund (OP&F) 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 individual local police and firemen's relief and pension funds into one statewide plan. OP&F is administered by a nine member Board of Trustees consisting of four active members, two retired members, two ex-officio members (the State Auditor and Attorney General) and a municipal finance officer appointed by the Governor. OP&F administers pension, disability and health care benefits to qualified participants, and survivor, death and health care benefits to qualificate spouses, children and dependent parents.

OP&F 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.

Plan Membership - The Ohio Police and Fire Pension Fund is a statewide retirement plan established by Chapter 742 of the Ohio Revised code (ORC).

Employer and employee membership data as of January 1, 2000 and 1999, date of the most recent actuarial valuation, follows:

		2000			1999	
<b>Employee Members</b>	Police	Fire	Total	Police	Fire	Total
Patirees and beneficiaries ently receiving benefits rerminated employees entitled to benefits but not yet receiving	12,467	9,807	22,274	12,089	9,548	21,637
them	78	37	115	73	24	97
Current employees:						
Vested	5,085	4,108	9.193	5.134	4,117	9,251
Nonvested	10,690	7,759	18,449	10,399	7,483	17,882
	15,775	11,867	27,642	15,533	11,600	27,133
Total Members	28,320	21,711	50,031	27,695	21,172	48,867
Employer Members						
Municipalities	258	213		270	213	
Townships	0	105		0	107	
Villages	332	32		351	33	
	590	350		<u>621</u>	353	

Benefits - Plan benefits are established under Chapter 742 of the ORC. 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 3ed 72% of the member's average and annual earnings for 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, OP&F also provides disability, survivor and death 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. A death benefit of \$1,000 is payable to the surviving spouse or estate of each deceased retired member.

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 dependent's benefit will be terminated at the dependent's attainment of age 18 (or 22 if attending school). The spouse's benefit is a lifetime benefit. 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 ince 100% of death benefit payments.

Healthcare Benefits - OP&F provides comprehensive health care benefits to eligible benefit recipients and their eligible dependents. These medical benefits are not guaranteed and are subject to change at any time upon action of the Board of Trustees. Coverage includes hospitalization, physician's fees, prescription drugs and reimbursement of Medicare Part B premiums. Most benefit recipients pay a portion of the health care cost through a monthly contribution.

Under Ohio law, medical costs paid from the funds of the plan are included in the employer contribution rates, which are currently 19.5% and 24% of salaries for police and fire employers respectively. The Board of Trustees allocates employer contributions equal to 7.25% of salaries to the Health Care Stabilization Fund within the Pension Reserve Fund.

Refunds - Upon termination of employment, members may withdraw accumulated contributions to OP&F. Acceptance of a refund cancels the member's rights and benefits in OP&F. Employer contributions to OP&F are not refundable.

### 3. CONTRIBUTIONS AND RESERVES

Contributions - 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 are as follows:

Rates established by the ORC at December 31, 2000 and 1999:

	Police	Fire
	(% of active me	ember payroll)
Employer	19.50	24.00
Member	10.00	10.00
Total statutory rate	29.50	34.00

7.25% and 7.0% of the 19.5% and 24% employer rates were allocated to the Health Care Stabilization Fund in 2000 and 1999, respectively.

House Bill No. 721 required the January 1, 1997 and future actuarial valuations be based on the entry age normal actuarial cost method. Senate Bill 82 established the length of the amortization period for unfunded pension liability as the primary measure of OP&F's financial status, with a period of 30 years or less being considered satisfactory. This 30-year target is to be attained by the year 2007, and maintained thereafter. As of January 1, 2000 the amortization period the under current statutory rates is 26.78 years.

Contributions as a percentage of active member payroll required and made for 2000 and 1999 represented 29.50% for police and 34.00% for fire fighters. Employer and member contributions were approximately \$155,690,779 and \$81,637,293, respectively, for police and \$149,198,596 and \$63,330,047, respectively, for fire fighters for the year ended December 31, 2000. Employer and member contributions were approximately \$144,367,354 and \$77,550,317 respectively, for police and \$135,107,167 and \$58,264,003, respectively, for fire fighters for the year ended December 31, 1999.

In accordance with the ORC, the State of Ohio is required to contribute additional amounts to finance the cost of certain State-legislated benefit improvements. The total amount contributed by the State was \$3,112,366 and \$3,281,554 for the year ended December 31, 2000 and 1999, respectively.

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 OP&F 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, 2000 and 1999, respectively, includes \$387,235 and \$524,520 due from local governments which had previously underpaid their semiannual payment and from local governments that joined OP&F subsequent to 1967 according to a 20-year payment plan.

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

Year ending December 31,	
2001	2,984,118
2002	2,971,15
2003	2,969,412
2004	2,995,063
2005	2,984,738
Thereafter	85,589,606
Total projected payments	100,494,093
Less interest portion	47,457,870
Balance at December 31, 2000	\$53,036,223

Effective in 1998, OP&F began awarding discounts to Employers who paid off their local funds receivable early. As this was a reduction of principal, the discount was recorded as a deduction on the statement of changes in net assets. The discount totaled \$22,321,629 and \$12,470,563 for the year ended December 31, 2000 and December 31, 1999, respectively.

Reserves - As required by the ORC, the following funds have been established for the reserves held for current and future benefits:

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.

The Policemen and Firemen Employers' Contribution Fundare 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.

The Policemen's and Firemen's Pension Reserve Funds are the funds from which all retirement, disability, health care and survivor benefits are paid. Included in these Funds is the Health Care Stabilization Fund from which payments for health care benefits are made. Amounts are transferred into the Pension Reserve Funds from the Contribution Funds and the Guarantee Fund.

The Guarantee Fund records all investment earnings of OP&F. 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.

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

Net assets available for benefits for the various funds were as follows:

James Lands and Control of the Contr	2000	1999
mbers' Contribution Funds	\$1,152,319,831	\$1,071,906,631
employers' Contribution Funds	3,301,158,359	3,968,942,748
Pension Reserve Funds	4,662,414,000	4,394,935,000
	\$9,115,892,190	\$9,435,784,379

### 4. CASH AND INVESTMENTS

Cash Deposits - The carrying amount of OP&F's cash deposits at December 31, 2000 was \$60,289,125 and the depository balance was \$61,835,953. Of the depository balance, \$2,761,421 was insured by the Federal Depository Insurance Corporation (category 1 as defined by the Governmental Accounting Standards Board.) The remaining depository balance of \$39,474,620 was uninsured and uncollateralized and were held in the name of OP&F's pledging financial institution, as required by the Ohio Revised Code (Category 3).

The carrying amount of OP&F's cash deposits at December 31, 1999 was \$39,939,030 and the depository balance was \$41,052,120. Of the depository balance, \$2,239,148 was covered by federal depository insurance and \$4,588,649 was covered by collateral held in the name of OP&F's legally-designated custodian, the Treasurer of the State of Ohio (Category 1 as defined by the Governmental Accounting Standards Board). The remaining depository balance of \$34,224,323 was uninsured and

collateralized and were held in the name of OP&F's pledging ancial institution, as required by the Ohio Revised Code (Category 3).

Investments - Section 742.11 of the Ohio Revised Code grants the Board of Trustees full power to invest the assets of OP&F. This statute requires that investments be made with care, skill, prudence and diligence under the circumstances then prevailing that a prudent and informed person would use.

Statement No. 3 of the Governmental Accounting Standards Board requires OP&F to categorize its investments to give an indication of the level of collateral risk assumed by OP&F. Category 1 includes investments that are insured or registered or for which the securities are held by OP&F or its agent in OP&F's name. Category 2 includes uninsured and unregistered investments for which the securities are held by the counterparty's trust department or agent in OP&F's name. Category 3 includes uninsured and unregistered investments for which the securities are held by the counterparty, or its trust department or agent, but not in OP&F's name.

All investments subject to categorization met the criteria of Category 1 at December 31, 2000 and 1999 and are held in the name of OP&F or its nominee by the Treasurer of State of Ohio as cus-dian. Investments in domestic pooled common stocks, real ese, mortgage notes receivable, commercial mortgage funds and venture capital, by their nature, are not required to be categorized.

A summary of short-term securities and investments at fair value is as follows:

Category	2000	1999
Commercial paper	\$ 294,831,635	131,632,092
U.S. government bonds	692,179,344	779,260,777
Corporate bonds and		
obligations	514,246,178	586,847,004
Mortgage & asset backed		
obligations	889,139,780	1,376,374,896
Foreign & Canadian bonds	21,300,012	94,628,614
Domestic stocks	2,366,585,789	2,278,049,769
Domestic pooled stocks	1,524,756,144	1,571,543,024
International securities	1,675,587,740	1,543,104,849
Real estate	806,299,980	728,605,313
Mortgage notes receivable	12,715,000	12,700,000
Commercial mortgage funds	127,470,799	114,705,821
Venture capital	78,247,243	53,701,723
11297	\$9,003,359,644	\$9,271,153,882

Securities Lending - OP&F participates in a domestic security lending program administered by a custodial agent whereby certain securities are loaned to an independent broker/dealers (borrower) in exchange for collateral equal to no less than 102% of the market value of the loaned securities. The interest rate reset frequency of the assets is equal to the interest rate reset frequency of the loans. Consequently, there is no exposure to OP&F for interest rate mismatching of cash collateral investments with loan positions, OP&F has minimized its exposure to credit risk due to borrower default by having the custodial agent bank determine daily that required collateral meets 102% of the market value of securities on loan. At year end, OP&F has no credit risk exposure to borrowers because the amounts of OP&F owes the borrowers exceed the amounts the borrowers owe OP&F. OP&F has not experienced any losses due to credit or market risk on security lending activity since implementation of the program. OP&F does have the ability to pledge or sell collateral securities absent a borrower default. Securities loaned to brokers/dealers totaled \$1,116,168,557 and \$821,167,669 at December 31, 2000 and 1999, respectively, and the associated collateral at that date was \$1,152,653,441 and \$836,886,723. Security lending net income totaled \$2,307,982 and \$1,841,641 for the year ended December 31, 2000 and 1999, respectively. OP&F lends US Treasuries, US Agencies, Corporate Bonds and Equities. All collateral is in the form of cash.

Derivatives — OP&F 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. OP&F

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 OP&F's overall total rate of return.

OP&F also has invested in one commingled EAFE (Europe, Australia, Far East) and one commingled S&P 500 index fund. 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. OP&F's indirect exposure represented less than 1% of the total portfolio market value at year-end. OP&F has not violated any legal, regulatory, or contractual provisions by such participation and there is no undue credit, market or legal risk.

### 5. MORTGAGE NOTES PAYABLE

In 1999, OP&F entered a joint venture with ConAm and Delta Airlines. OP&F owns 45.5%, Delta Airlines owns 45.5% and ConAm owns 9%. OP&F's 45.5% ownership was \$53,644,500 at December 31, 1999, of which \$34,868,921 was financed by a mortgage note bearing interest at 5.51%.

In 1998, OP&F entered into a \$5,000,000 mortgage loan payable, secured by a deed of trust, in connection with the purchase of St. Andrews Apartments. The loan bears interest at 6.5%. Also in 1998, a \$16,152,000 mortgage loan payable, secured by a deed of trust, was assumed with the purchase of the St. Andrews Apartments. The loan bears interest at 7.91%.

In 1997, OP&F assumed three mortgage notes payable of \$13,500,000, \$14,264,000 and \$10,331,384. These loans are secured by real properties and bear per annum interest of 7.16%, 7.90% and 7.69% respectively. A mortgage loan in the amount of \$15,395,000 assumed in 1995 and secured by a deed of trust for the Vista Ridge building bears interest of 7.8% per annum.

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

Year ending December ?	31,
2001	14,947,810
2002	11,151,828
2003	1,512,406
2004	44,652,439
2005	14,044,241
Thereafter	42,600,592
Total payments	\$128,909,316

### 6. DEFERRED COMPENSATION

Employees of OP&F may elect to participate in the Ohio Public Employees Deferred Compensation Program (the Program), a deferred compensation plan under Internal Revenue Code section 457. Under the Program, employees may defer a portion of their pay until a later date, usually after retirement. The deferred pay and any income earned thereon is not subject to federal and state income taxes until actually received by the employee. As of De-

cember 31, 2000, funds from OP&F Employees on deposit with the Program had a market value of \$1,689,795 (\$1,637,204 at December 31, 1999).

The Program, effective September 1, 1998 amended the Ohio Public Employees Deferred Compensation Adoption Agreemento include the following:

"The Eligible Employer acknowledges and agrees that all amounts deferred under the Plan and all insurance contracts or other investments or other property purchased with such amounts shall be held by the Board in Trust on behalf of the Eligible Employer for the exclusive benefit of eligible employees and their beneficiaries. All assets, whenever contributed to the Plan, are assigned to the Trust established by the board."

This amendment was enacted pursuant to the Small Business Act of 1996. Assets in the trust, previously reported as assets owned by OP&F with a corresponding liability, subsequent to September 1, 1998, are no longer owned by OP&F.

OP&F has, therefore, adopted GASB Statement No. 32, Accounting and Financial Reporting for Internal Revenue Code, Section 457 Deferred Compensation Plans and has removed these assets from OP&F's financial statements.

### 7. DEFINED BENEFIT PENSION PLAN

OP&F 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 or by calling (614) 466-2085 or 1-800-222-7377.

Plan members are required to contribute 8.5% of their annual covered salary, while employers are required to contribute 13.55%. For the year 2000 PERS gave employers a temporary rollback rate of 10.65%. OP&F's contributions to PERS for the years ending December 31, 2000, 1999 and 1998 were \$694,552, \$821,732 and \$616,336, respectively, equal to the required contributions for each year.

### 8. OTHER POSTEMPLOYMENT BENEFITS

In addition to the pension benefits described in note 7, PERS provides postretirement health care coverage to age and service retirants with 10 or more years of qualifying Ohio service credit. Health care coverage for disability recipients and primary survivor recipients is available. The health care coverage provided by PERS is considered an Other Postemployement Benefit (OPEB)

as described in GASB Statement No. 12. At December 31, 2000, the plan had approximately 401,300 active participants.

the funding of post retirement health care. The PERS Retirement Board enacted a temporary employer contribution rate rollback of 20% for calendar year 2000. The rollback resulted in an employer rate of 10.65% of covered payroll, of which 4.3% was the portion used to fund health care for the year. For the year ended December 31, 2000, approximately \$280,500 of employer contributions OP&F made to PERS was the portion used to fund health care.

The Ohio Revised Code provides statutory authority requiring public employers to fund postretirement health care thorugh their contributions to PERS.

The actuarial value of PERS' net assets available for OPEB at December 31, 1999 were \$10,805.5 million. The actuarially accrued liability and the unfunded actuarial accrued liability, based on the actuarial cost method used, were \$12,473.6 million and \$1,668.1 million respectively.

The actuarial present value of accrued postemployment benefits was determined based on the entry age normal method of funding. Significant actuarial assumptions based on PERS's latest Actuarial Review performed as of December 31, 1999 and are as follows: an investment rate of return of 7.75%, investments valued at market value, adjusted annually to reflect 25% of unreal-d market appreciation or depreciation on investment assets, no change in the number of active employees, base pay rate increases of 4.75% and annual pay increases over and above the

4.75% base increase ranging from .54% to 5.1%, and health care costs assume an increase of 4.75% annually.

### 9. COMMITMENTS AND CONTINGENCIES

OP&F is a defendant in a number of lawsuits pertaining to matters that are incidental to performing routine business functions. OP&F management is of the opinion that ultimate settlement of such claims will not result in a material, adverse effect on OP&F's financial position as of December 31, 2000.

OP&F is committed to make additional capital contributions of \$191,611,540 towards purchases of additional real estate.

### 10. STATE OF OHIO DEATH BENEFIT FUND

Pursuant to Section 742.63 of the Ohio Revised Code, the Board of Trustee of the Ohio Police and Fire Pension 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 OP&F each State fiscal year (July 1-June 30) and are paid monthly by OP&F to eligible recipients. The unused balance at June 30 is returned to the State. The Death Benefit Fund is considered to be an agency fund administered by the Ohio Police and Fire Pension Fund, and accordingly its assets of \$12,311,771 and \$11,199,684, and the related liability for unpaid benefits are included in the accompanying Combining Statement of Plan Net Assets as of December 31, 2000 and 1999, respectively.

# REQUIRED SUPPLEMENTARY INFORMATION

### 1. SCHEDULE OF FUNDING PROGRESS

As of January 1 (Data for earlier periods is not available because a different funding method was used.)

Valuation Year	Valuation Assets	Actuarial Accrued Liabilities (AAL)	Unfunded Actuarial Accrued Liabilities (UAAL)	Ratio of Assets to AAL	Active Member Payroll	UAAL as % of Active Member Payroll
1997	\$ 5,554,114,000	\$ 7,024,555,000	\$ 1,470,441,000	79.1%	\$ 1,119,922,000	131.3%
1998	6,231,419,000	7,697,677,000	1,466,258,000	81.0%	1,190,878,000	123.1%
1999	7,306,814,000	8,452,622,000	1,145,808,000	86.44%	1,249,114,000	91.73%
2000	7,988,578,000	8,995,564,000	1,006,986,000	88.81%	1,338,514,000	75.23%

The amounts reported in this schedule do not include assets or liabilities for postemployment healthcare benefits.

# 2. SCHEDULE OF CONTRIBUTIONS FROM EMPLOYERS AND OTHER CONTRIBUTING ENTITIES

	Actuarially	
Year Ended	Required	Percentage
December 31	Contributions	Contributed
1995	159,669,716	100%
1996	168,505,254	100%
1997	76,567,663	100%
1998	185,548,447	100%
1999	191,646,415	100%
2000	206,796,608	100%

Contributions include funding from the State of Ohio to finance the cost of certain benefit improvements. Amounts do not include contributions for postemployment healthcare benefits.

### 3. NOTES TO THE REQUIRED SUPPLEMENTARY SCHEDULES

The information presented in the required supplemental schedules was determined as part of the actuarial valuation at the date indicated. Additional information as of the latest actuarial valuation follows:

Valuation date
Actuarial cost method
Amortization method
Remaining amortization period
Asset valuation method
Actuarial assumptions:
Investment rate of return
Projected salary increases
Cost-of-living adjustments

January 1, 2000
Entry Age Normal
Level percent of payroll, open
26.78 years
4-year smoothed market

8.25% 5.0-7.0% 3.0%

# SCHEDULE OF ADMINISTRATIVE EXPENSES\*

For The Year Ended December 31, 2000 and 1999

C3	2000	1999
Personal Services:		
Salaries and Wages	\$ 7,058,539	6,154,747
Retirement Contributions	694,552	821,762
Employee Benefits	1,309,823	944,314
Total Personal Services	9,062,914	7,920,823
Supplies:		or 1876s (300 M/da
Office Supplies	182,019	162,342
Printing and Publications	228,939	196,031
Dues and Subscriptions	73,331	67,304
Total Supplies	484,289	425,677
Professional Services:		
Auditing	104,445	126,672
Actuarial	214,900	226,965
Medical	648,064	542,634
Legal	438,379	152,337
Investment	12,708,898	10,882,013
Treasurer of State Charges	12,406	10,979
Employee Training	511,614	481,047
Temporary Employees	337,871	272,135
Other Professional Services	2,249,253	1,357,397
<b>Total Professional Services</b>	17,225,830	14,052,179
Communications:		
Telephone	126,166	118,239
Postage	287,936	270,760
Transportation and Travel	127,051	119,832
<b>Total Communications Services</b>	541,153	508,831
Miscellaneous:		> 80 9 <b>9</b>
Equipment and Maintenance	680,994	979,208
Retirement Study Council	49,965	38,895
Insurance - Administrative	99,585	114,739
Depreciation Expenses	988,112	944,899
Total Miscellaneous	1,818,656	2,077,741
TOTAL ADMINISTRATIVE EXPENSES	\$29,132,842	<u>\$24,985,251</u>
Includes investment related administrative expenses	*	

# SCHEDULE OF INVESTMENT EXPENSES\*

For the Year Ended December 31, 2000 and 1999

	2000	1999
Investment Manager Fees Custodial Fees Other Professional Services Other Direct Investment Department Expenses Allocation of Other Administrative Expenses	\$ 11,932,565 776,333 787,671 1,343,500 1,068,263	\$ 10,009,109 872,905 651,313 1,089,678 813,527
	\$15,908,332	\$13,436,532

<sup>\*</sup>A portion of the non-Investment Department administrative expenses of OP&F is allocated to Investment Expense based on the ratio of OP&F's investment staff to total Fund staff.

# INVESTMENT SECTION

- 1. Investment Report
- 2. Investment Portfolio Summary
- 3. Schedule of Investment Results
- 4. Investment Consultants and Money Managers
- 5. Schedule of Brokers' Fees
- 6. Investment Policy and Guidelines

# 1. INVESTMENT REPORT

### Prepared by a combined effort of the Investment Department

### INTRODUCTION

The investment authority of OP&F is specified in Section 742 of the Ohio Revised Code. Importantly, the Code requires that the Board and other fiduciaries discharge their duties solely in the interest of the participants and beneficiaries, for the exclusive purpose of providing benefits to participants and their beneficiaries and defraying reasonable expenses of administering OP&F. Within the guidelines of the Code, OP&F has developed an internal Investment Policy that provides for appropriate diversification of assets, and an acceptable expected return on investments after consideration of investment risks. Performance returns are prepared by Wilshire Associates in accordance with the Association for Investment Management and Research (AIMR) standards.

### SIGNIFICANT DEVELOPMENTS IN 2000

The majority of our efforts last year were directed toward completing an asset/liability study and implementing its recommendations. The study was focused on finding a way to allow OP&F to meet statutory funding targets, to help defray growing health care costs and to determine what adjustments, if any, should be made to our existing portfolio structure in terms of approved asset classes and target weightings. As expected, the major recommendation of the study was for OP&F to move to a more aggressive, equity oriented asset mix in order to target a higher expected return of 8.75%. More specifically, the study suggested we shift a significant amount of assets out of core fixed income, reinvest them in public and private equity and make our first investments in high yield bonds. Investment staff members also devoted a great deal of time to bringing on-line a new investment accounting software package. Following are these and a number of other investment issues with which OP&F dealt last year:

- Completed an asset/liability study. Both long-term and interim asset allocation targets were determined as a result of this study.
- Installed and began to utilize Princeton Financial's PAM investment accounting package. In conjunction with this, we
  hired an Investment Operations Officer to oversee the system and our investment operations group.
- Completed a high yield manager search and hired MacKay Shields, Shenkman Capital Management, and W.R. Huff
  Asset Management for this mandate. Funding began in October and will continue through the second quarter of 2001.
- Drafted a Private Equity Investment Policy and began its implementation to achieve our new allocation target for this
  asset class.
- Terminated a small cap value manager and transitioned these assets to other equity managers.
- Reopened our 1998 large cap growth manager search and hired Alliance Capital Management and Oak Associates.
- Terminated an external fixed income manager, transferred management to our internal fixed income team and methodically transitioned these assets to other asset classes.
- Completed our search for a small/mid cap core equity manager and hired Harris Investment Management.
- Completed our transition of the quantitative compliance monitoring function from an external provider to internal staff.
- · Completed evaluations of all managers in all asset classes according to policy.
- Reviewed OP&F's overall insurance needs and may consolidate all investment property coverage in-house.
- Drafted new advisory agreements for all separate account real estate advisors.
- Enhanced our internal policies and procedures for the real estate area.
- Implemented real estate analysis software to help our real estate group review potential acquisitions and property appraisals.
- Began working with the Treasurer of State to design a new custody model to create a more efficient custodial operation.
- Reviewed and retained our general investment consultant and our real estate consultant, thereby allowing us to cancel searches in these two areas.
- Enhanced internal monitoring procedures for portfolio pricing and securities lending.

### ECONOMIC ENVIRONMENT

The Federal Reserve's series of six interest-rate hikes spanning from June 1999 to May 2000 had the desired effect on the US economy starting in the second half of 2000. Following a 4.8% growth rate in the first quarter and heady 5.6% growth in the nd quarter, real GDP slowed to a 2.2% rate in the third and only a 1.1% growth rate in the fourth quarter. For all of last year, real GDP grew 5.0% after gaining 4.2% in 1999 and 4.4% in 1998. The US economy weakened due to a more cautious consumer, a slowdown in capital spending and the inevitable business inventory adjustments. Higher energy prices, increasing layoff announcements, the negative wealth effect of falling stock prices, unusually cold weather and the uncertainty of a protracted presidential election created a difficult environment for consumer spending. In fact, retail sales in last year's fourth quarter experienced their largest decline since the fourth quarter of 1990. Also, in the wake of disappointing corporate sales and profits, businesses have slowed their purchases of information technology and other capital goods. The combined weakness of these two economic drivers resulted in inventory imbalances, which continue to be worked off by slowing production. The unemployment rate ended the year at 4.0% down from 4.1% a year earlier. However, the pace of job growth, while healthy, declined as the economy added 1.9 million workers to its payrolls compared with 2.8 million in 1999 and 3.0 million in 1998. By year-end, not only were businesses announcing layoffs, they were cutting back on their employees' work time as shown by the average weekly hours worked statistic, which fell to its lowest level since April 1991, when the economy was coming out of its last recession. Increased global demand for energy and low oil inventories pushed oil prices to 10-year highs during the year. This certainly aided a pick up in inflation, as the CPI rose at a 3.4% rate for the entire year, compared with 2.7% in 1999 and 1.6% in 1998. Still, the Fed did not seem worried about inflation. Instead, as the year drew to a close, members of the Federal Open Market Committee were concerned about the slowing economy but were not yet convinced they needed to act.

It took only a few days for that uncertainty to change, as on January 3, the Fed unexpectedly lowered the federal funds rate by a full 50 basis points to 6%. The direction and magnitude of the move were of less surprise than was its timing, coming between scheduled FOMC meetings. New economic data confirmed the weakness in the manufacturing sector as auto sales and production took a hit. Business investment slowed, corporate sales and earnings continued to falter, layoff announcements increased and holiday sales reports were disappointing. The Fed acted again at their late January meeting, dropping funds rate another 50 basis points. The stock market responded strongly to the Fed's actions in January, but the major adices have since suffered a further setback. Slowing economic growth, higher levels of unemployment and falling stocks led to further declines in consumer confidence. This important psychological measure has fallen to its lowest level since mid-1996. The Fed is expected to counter this weakness by continuing to lower rates, but most likely will wait until their March meeting to make their next move.

### TOTAL FUND

Our investment portfolio fell in value by roughly \$268 million during 2000. The story of our portfolio value last year can be gleaned by watching the path of the equity markets. Indeed, we were aided throughout the year by the steady up trend in the bond market, but not enough to overcome the problem periods for US and international equities. Along with the stock market, we rallied to our high point of the year in March, sold off slightly into mid-year and then experienced a nice bounce in August that took us back near our high. From there, it was a nasty spiral down through November before a solid December performance by our US and international equities and our investment grade and high yield bonds helped boost our total portfolio value to \$9.0 billion at year-end. Our total portfolio return of -1.1% for the year exceeded our Old Policy Benchmark return of -3.2% and far surpassed the -6.2% return of our New Policy Benchmark. This was due largely to the out performance of our active managers in domestic equity and fixed income. This past year's results brought our three-year annualized return to 8.6%, narrowing our underperformance versus our Old Policy Benchmark to only 58 basis points. Likewise, our five-year annualized return of 11.3% now exceeds our five-year policy return by ten basis points. The year 2000 was a dramatic one for equity investments and demonstrated the value to OP&F of having a diversified asset and manager mix. While OP&F suffered significant losses in public equities, we reaped the benefits of positive returns in fixed income, real estate and private equity. In addition, diversification of managers and investment styles within our domestic equity structure allowed OP&F to escape major losses in this asset class as our value managers finally recovered from a rolonged period of poor absolute and relative performance.

### **EQUITIES**

Following five straight years of over 20% returns, US equities rallied to even greater heights in the first quarter. However, by early March, stock prices started moving lower and after several failed rally attempts, plunged in the fourth quarter amid slowing economic growth, earnings warnings and disappointments, rising energy prices, uncertainty about the presidential election and a significant shift in investor sentiment. In addition, as late as last May, the Federal Reserve was still raising short-term interest rates. All of these negative factors, combined with a market that was priced for perfection, were a recipfor disaster. For the year, the S&P 500 returned -9.1%, its worst year since 1977. Most of the major damage was confined to the market leaders of the previous year, large cap growth stocks in technology and telecommunications. The early part of 2000 witnessed the continuation of a speculative bubble, particularly in the dot.com sector of the market. However, bubbles eventually burst, as did this one. Many issues that had become household names fell by over 90% and in some cases closed their doors completely. The Nasdaq Index, which is heavily weighted with these stocks, was down 38.8%, the biggest yearly decline since its inception in 1971. Coincident with the fall of growth stocks was the resurgence in value stocks, which were generally higher for the year. Smaller capitalization stocks, as measured by the Russell 2000 Index, outperformed their larger brethren as they returned -3.0%. As with the larger cap stocks, value stocks also provided a positive influence for the Russell 2000. Reflecting these market dynamics, our domestic equity composite return of -3.0% significantly outperformed our benchmark, the Wilshire 5000, which returned -10.9% for the year. Our active value managers enhanced our performance as both our large cap and small cap value managers significantly beat their policy returns as well as their peer groups. This relatively good result brought the three and five year annualized returns of our equity composite to roughly 60 and 50 basis points below the Wilshire 5000, significant improvements over prior years' comparisons. As we entered 2001, caution remained the order of the day. The Fed's dramatic lowering of interest rates gives investors a source of optimism for the year ahead. However, declining earnings expectations will likely continue to plague the market through at least the middle of 2001, if not the entire year. In addition, there is some concern that, while stocks are more reasonably valued today, valuations are still high by historical standards. These factors likely mean that the US stock market will remain highly volatile in the months ahead.

During 2000, in an effort to improve the performance of our overall equity portfolio, the Board terminated one of our small/mid cap value managers. In addition, the Board reviewed the active large cap growth segment of our domestic equity portfolio and reopened our 1998 large cap growth manager search. Subsequently, two additional large cap growth manager were hired and were funded via a transition trade of the terminated small/mid cap value manager portfolio. As a result of the increased target allocation to domestic equities and an analysis of our manager structure, the Board decided to add funds to our existing large cap equity managers and to hire a small/mid cap core equity manager. In our efforts to improve the performance of our actively managed equity assets, late last year the Board terminated a small/mid cap growth manager. This manager's assets will be reallocated to the small/ mid cap core manager hired late last year and a second small/mid cap manager to be hired in early 2001.

For international equity markets, 2000 was also a difficult year, as returns lagged those of the US equity market. Factors that affected the US market also impacted overseas markets. For the year, the MSCI EAFE Index, representing non-US developed country markets, declined 14.2%, while the MSCI Emerging Markets Free Index fell 30.6%, one of its worst years ever. A strong US dollar depressed even further the modestly negative local market results for Europe and the weaker still results in the Pacific Rim. Notably, the euro, which debuted in 1999, reached an all-time low against the dollar during the third quarter of 2000. As a group, our active and passive non-U.S. developed markets managers had a return of –18.6%, significantly below that of the EAFE Index. This sub par performance decreased our annualized return advantage over the EAFE Index to 210 basis points over the past three years and 300 basis points over the past five years. Worries over the impact of slowing economic growth in the developed markets contributed to the emerging markets decline. Uncertainties brought on by political turmoil in Taiwan and Korea, higher oil prices and the slowdown in global technology spending helped send emerging market stocks into a tailspin. While combined our two emerging markets managers slightly beat the index with a return of –29.4%, they both lagged their individual return targets.

As a result of the increase in our target allocation to developed non-US. equities from 10% to 17%, we gave additional funds to our existing managers. Also, while we did decrease our target allocation to emerging markets from 5% to 3%, we have not yet withdrawn funds from either of our managers.

### FIXED INCOME

2000 was an excellent year for the fixed income market. The Lehman Aggregate Index posted a return of 11.63%. The benchmark 30 year Treasury bond bounced back with a phenomenal return of 19.88% for the year. Our internal fixed income portfolio outperformed their benchmark by a significant margin, generating a return of 12.99%. Bond yields declined by over one percentage point as the economy slowed dramatically in the second half of the year. The strong economic growth during the first half of the year led the Federal Reserve to continue the monetary tightening that it had started in 1999. By mid-May, the Fed had raised short-term interest rates a total of 175 basis points. This tightening finally slowed the economy. By the fourth quarter, real GDP growth had fallen to only 1.1% and bonds rallied strongly in anticipation of the Federal Reserve lowering interest rates to rejuvenate the economy.

Because it takes several months for higher rates to have their full effect on the economy, the economy should continue to slow well into 2001 even as the Federal Reserve has begun to lower rates early this year. The Fed's tightening weakened the stock market and has increased the relative cost of corporate borrowing. This made it more expensive for corporations to raise money, and resulted in a reduction of capital spending, a major driver of economic growth in recent years. Lower stock prices also hurt consumer balance sheets, and contributed to lower consumer confidence and spending. As mentioned before, the Fed began to lower short-term interest rates early in 2001. By the end of the year, signs of a stronger economy should finally start to emerge and rates will begin rise modestly after falling for most of the year. This anticipated scenario should produce returns for the fixed income portfolio in the 6% - 9% range.

Due to personnel and organizational issues involving our external fixed income manager, the Board terminated their management agreement. The assets in that account were turned over to the internal fixed income team early last year. Our internal team methodically liquidated this portfolio as part of our reallocation out of fixed income and into equities according to our new asset allocation policy.

### HIGH YIELD

a result of our asset/liability study, the Investment Committee recommended to the Board a 5% strategic allocation to agh yield securities. With quality spreads at levels not seen since the 1998 Russian debt crisis, the high yield market appeared to offer opportunities for significant capital gains as well as a high level of current income. After conducting a manager search, we hired three managers. As luck would have it, we did not begin funding these managers until the fourth quarter, thus avoiding much of the downside this asset class experienced last year. With half of these managers' fundings completed during the fourth quarter, we expect to complete their fundings over the first half of this year.

### REAL ESTATE

Basic real estate fundamentals remained favorable in 2000, which can be characterized as a period of extended equilibrium. The property markets were remarkably stable and the real estate capital markets generally offered good liquidity. Occupancy in most property markets remained high, coupled with sustained rent levels and steady leasing activity. 2000 provided stronger performance than expected, driven for most of the year by a strong economy and the insatiable space needs of technology related tenants for office and R&D products. As one economist stated, 2000 was a year in which real estate did what investment strategists have long told investors it would do: bring stability, diversification and solid current income to a multi-asset portfolio.

In 2000, OP&F acquired three properties with a combined market value of \$128.4 million and sold four properties for a combined sale price of \$79.8 million. We also made a commitment of \$85 million to four opportunistic commingled funds. OP&F's real estate portfolio generated a 12.4% gross return in 2000, broken down into 8.7% income and 3.5% appreciation. The total real estate portfolio's return exceeded that of NCREIF by 40 basis points in 2000. It should be noted that these numbers represent the actual calendar year return. The real estate returns presented in the Schedule of Investment Results are lagged by one quarter due to report timing and were used in the calculation of our total investment portfolio return for 2000.

Our portfolio is well diversified both geographically and by property type. OP&F has established a core portfolio of institutional grade properties that are expected to provide risk-adjusted returns consistent with or above industry average. Our

posture going forward is that of guarded optimism. Some softening in the market is expected, causing rising vacancies and a more moderate rent growth. Therefore, OP&F's approach in 2001 is to be extremely selective. Although we will consider value added investments that will generate superior risk-adjusted returns, our thrust will be to invest primarily in well-leased, top quality assets in major markets that will provide stability to our portfolio regardless of the economic climate.

### PRIVATE EQUITY

For the year ending September 2000 (venture returns are lagged by one quarter), our small allocation to venture capital provided a return of 61.7% versus its benchmark (Wilshire 5000 +5%) return of 22.6%. However, this return is a tale of two tapes. All of this return was attributed to the fourth quarter of 1999 and the first quarter of 2000. During this period, venture returns skyrocketed due to the performance of the Nasdaq Composite Index and a buoyant IPO market. However, since the collapse of the Nasdaq in April, venture returns have been squeezed by a slowdown in the initial public offerings of venturebacked companies. We don't expect to witness these types of lofty returns going forward, but we still expect the returns to offer a premium above that of the public markets.

To say OP&F has been active in its private equity program would be an understatement. As a result of our asset allocation study, we raised our target allocation to private equity from 1% to 3% in order to help OP&F achieve its new higher targeted rate of return. In order to implement our new allocation target, we adopted a Private Equity Investment Policy to establish strategic objectives and policies for our private equity portfolio. We expanded our investment horizon beyond Ohio based venture capital managers to global private equity partnerships including venture capital, buyout and mezzanine managers. In addition, the policy provided for us to use fund of funds as our primary investment vehicle rather than individual partnerships. The inclusion of non-Ohio based managers and the use of fund of funds is crucial in helping OP&F achieve its targeted investment return because it will provide us with access to top tier private equity partnerships on a global scale.

During the year, OP&F made nine new commitments to private equity: \$10 million to Blue Chip Capital Fund IV, \$10 million to Linsalata Capital Partners IV, \$10 million to Morgenthaler Venture Partners VI, \$10 million to Primus Capital Fund V, \$20 million to The Peppertree Fund, \$35 million to Abbott Capital Private Equity Fund III, \$35 million to Tucker Anthony Private Equity Fund III, \$35 million to Wilshire Private Markets Fund IV, and \$50 million to Horsley Bridge VII. This brought our total capital committed since the inception of our private equity program in 1982 to \$304 million, of which \$201.4 still has yet to be called. We have received \$76.6 million in distributions since the inception of the program.

Looking ahead, we will continue to work towards our 3% targeted allocation by reviewing and monitoring our existing relationships for further investment and looking at a limited number of new managers.

### 2001 DEVELOPMENTS

As mentioned above, the Board, Investment Committee and staff were very active in 2000. While it is still early in the year, one can see summarized below that we are off to a good start in our efforts to evaluate and implement ways to provide prudent and competitive returns for our membership.

- Terminated a small/mid cap growth equity manager with the intention of transitioning the assets in the second quarter.
- Reopened last year's small/mid cap core equity search to three of the finalists not hired at that time. We hired Fidelity Management Trust Co. and are currently negotiating their investment management agreement and investment guidelines.
- Evaluated all international developed markets and emerging markets managers according to policy.
- Began planning for the upcoming changes to the MSCI index and how to implement the resulting changes necessary in our EAFE index portfolio.
- Adopted the 2001 Real Estate Strategic Plan and the 2001 Real Estate Investment Plan.
- Launched a search for an active core fixed income manager to complement our internal management approach.
- Initiated an internal review program of our securities lending counterparties to supplement the review provided by our lending agent.

We have always stated our intention to earn at least an 8.25% return over time, our actuarial assumption rate. As mentioned earlier, we are now targeting an 8.75% return to meet statutory funding requirements and to lessen the impact of rising health costs. We will explore new investment ideas and hope to improve the efficiency of and reduce the costs of our operations. As we look ahead, we intend to tackle a number of issues related to these goals.

- Complete the implementation of the results of our asset/liability study.
- Establish an effective rebalancing methodology.
- Continue efforts to establish an overall risk management program, performed independently of the investment managers, which will facilitate the timely identification of real or potential risks to OP&F and ensure that appropriate investment
- Explore ways to maximize the return on Fund assets such as securities lending on non-US assets, equity manager cash equitization and the use of derivatives for asset allocation shifts and manager transitions.
- Continue to review risk systems as they become available to the market. Our 2000 initiative to purchase such a system was not executed, as we were unable to find an affordable system with multiple asset class capabilities.
- Complete reviews of all managers according to policy.
- Reallocate and transition the assets of a terminated small/mid cap growth manager.
- Solidify the operations team and incorporate more cross training to provide us with a greater depth of skills and more flexibility to direct resources where needed.
- Implement the 2001 Real Estate Investment Plan, which calls for a large number of sales with proceeds to be reinvested in stable properties.
- Finalize new, more comprehensive agreements with our separate account real estate advisors.
- Complete formal real estate dispositions procedures and a disposition checklist.
- Work with the Treasurer of State, Firstar and State Street to implement a new custody model.

# 2. INVESTMENT PORTFOLIO SUMMARY DECEMBER 31, 2000

Туре	% of Fair Value	Fair Value
Commercial paper U.S. government bonds Corporate bonds and obligations Mortgage & asset backed obligations Foreign & Canadian bonds Domestic stocks Domestic pooled stocks International securities Real Estate Mortgage notes receivable Commercial mortgage funds Venture capital	3.27% 7.69% 5.71% 9.87% 0.24% 26.29% 16.93% 18.61% 8.96% 0.14% 1.42% 0.87%	\$ 294,831,635 692,179,344 514,246,178 889,139,780 21,300,012 2,366,585,789 1,524,756,144 1,675,587,740 806,299,980 12,715,000 127,470,799 78,247,243
	100.00%	\$9,003,359,644

# TEN LARGEST COMMON STOCKS (BY MARKET VALUE)

	Shares	Market Value
Bristol Myers Squibb Co	549,200	40,606,475
Citigroup Inc.	784,115	40,038,890
Pfizer Inc.	776,697	35,728,062
SBC Communications	570,467	27,239818
Cisco Systems	704,419	26,944,027
General Electric	545,000	26,125,938
Medtronic Inc.	429,415	25,925,931
Exelon Corporation	347,100	24,369,891
Verizon Communications	449,476	22,529,985
Cigna Corp.	170,200	22,517,460

# TEN LARGEST BONDS AND OBLIGATIONS (BY MARKET VALUE)

Par Value	Market Value	
84,235,000	131,613,894	
101,960,000	111,602,388	
137,975,000	85,659,226	
50,000,000	49,374,000	
35,815,000	47,109,318	
47,325,000	40,485,591	
35,695,144	34,548,259	
48,037,000	32,612,800	
60,630,000	31,574,285	
36,530,000	30,367,389	
	84,235,000 101,960,000 137,975,000 50,000,000 35,815,000 47,325,000 35,695,144 48,037,000 60,630,000	

# TEN LARGEST REAL ESTATE HOLDINGS (BY MARKET VALUE)

	Market Value
Park Central	84,000,000
Tower Place 200	51,500,000
The Pointe at Park Center	49,500,000
Indianapolis Office Building	48,000,000
St. Andrews Apts	47,700,000
Vista Ridge Village	44,900,000
Belmont/Carlton Apartments	44,100,000
Tempe Commerce Park	40,850,000
49 Stevenson Office Bldg	36,000,000
Bernards 78	35,850,000

<sup>\*</sup>A complete listing of the portfolio's holdings can be obtained by contacting the Ohio Police & Fire Pension Fund at 614-228-2975.

# 3. SCHEDULE OF INVESTMENT RESULTS

For Year ended December 31, 2000

	Annualized Rates of Return		
	<u>1-Year</u>	3-Year	5-Year
U.S. Equity			
OP&F	-2.96%	10.24%	16.19%
Wilshire 5000	-10.87%	10.78%	16.69%
Int'l Equity			
OP&F	-18.49%	11.51%	10.14%
MSCI EAFE	-14.16%	9.35%	7.13%
Emerging Markets			
Emerging Markets			
OP&F	-29.40%	N/A	N/A
MSCI EMF Indes	-30.60%	N/A	N/A
Fixed Income		* 2	
			100 SHAWATT 194
OP&F	12.79%	6.81%	6.76%
Lehman Aggregate	11.63%	6.36%	6.46%
Real Estate (one quarter in arrears)			
OP&F	9.30%	13.63%	13.52%
Wilshire Real Estate Fund	8.10%	11.58%	11.67%
NCREIF	1.70%	13.70%	12.30%
Venture Capital (one quarter in arrears)			
OP&F	61.65%	31.06%	36.28%
Wilshire 5000 + 5%	22.56%	20.52%	25.40%
Total Portfolio			
OP&F	-1.10%	8.60%	11.30%
* Policy Index	-3.16%	9.18%	11.20%

<sup>\*</sup> Policy Benchmark - 41% of Wilshire 5000, 35% of Lehman Aggregate, 10% of MSCI EAFE Index, 8% of Wilshire Real Estate Fund, 5% EAFE Emerging Markets Free, 1% Wilshire 5000 + 5%

# 4. INVESTMENT CONSULTANTS AND MONEY MANAGERS

**Investment Consultants** 

Wilshire Associates

The Townsend Group

**Investment Managers - Venture Capital** 

Abbott Capital Management, LLC

Alpha Capital Partners Ltd.

Blue Chip Venture Partners, LP

**Brantley Venture Partners** 

Chemicals & Materials Enterprise Associates

Horseley Bridge Partners, LLC

Linsalata Capital Partners

MV Economic Development, Ltd.

Morgenthaler Venture Partners

Northcoast Fund, L.P.

Northwest Ohio Venture Fund General

Peppertree Partners, LLC

Primus Venture Partners

Tucker Anthony Private Equity Capital, LLC

Wilshire Private Markets, LLC

Investment Managers - International Equity

Capital Guardian Trust Company

Capital International Inc.

Lombard Odier International Portfolio Mngt, Ltd.

Scudder Trust Company

SSB Citi Asset Management Group

Investment Managers - US Equity

Alliance Capital Management, LP

American Express Asset Management Group, Inc.

Boston Partners Asset Management, L.P.

Fleet Investment Advisors, Inc.

Key Asset Management

Nicholas-Applegate Capital Management

Oak Associates Ltd.

State Street Global Advisors

Investment Managers - Real Estate

**AEW Capital Management** 

CB Richard Ellis

Conning Asset Management

DLJ Real Estate Capital Partners, Inc.

Lend Lease Real Estate Investments, Inc.

Lowe Enterprises

Lubert-Adler Management Co., LLC

Paine Webber Real Estate

The RREEF Funds

TA Associates Realty

Walton Street Capital LLC

Westbrook Partners, LLC

Investment Managers - Fixed Income

Mackay Shields, Inc.

Shenkman Capital Management, Inc.

W.R. Huff Asset Management Co., LLC

# 5. SCHEDULE OF BROKERS' FEES TOTAL 2000 TRADING

For the Year Ending December 31, 2000

Broker Name	Fees Paid	Units Traded	Average Cost Per Unit
DEUTSCHE BANK SECURITIES	\$1,896,578	15,271,000	\$.1242
BOSTON INSTITUTIONAL SERVICES	586,147	11,212,000	.0523
MORGAN STANLEY	453,346	16,652,000	.0272
MERRILL LYNCH	430,038	11,220,000	.0383
LEHMAN BROTHERS	341,289	11,767,000	.0290
SALOMON SMITH BARNEY	293,247	5,869,000	.0500
HSBC	242,606	5,519,000	.0440
CAPITAL INSTITUTIONAL SERVICES	188,946	3,430,000	.0551
PRUDENTIAL SECURITIES	176,047	3,144,000	.0560
PAINE WEBBER	175,716	3,231,000	.0544
UBS SECURITIES	151,207	5,348,000	.0283
GOLDMAN SACHS	148,353	3,398,000	.0437
SANFORD C. BERNSTEIN	146,079	3,162,000	.0462
BROCKHOUSE COOPER INC.	138,385	11,832,000	.0117
INSTINET	132,763	3,136,000	.0423
CREDIT SUISSE FIRST BOSTON	126,372	3,310,000	.0382
J. P. MORGAN	121,645	1,980,000	.0614
ROBERT BAIRD	95,108	1,704,000	.0558
BEAR STEARNS CORP.	92,526	1,740,000	.0532
DONALDSON LUFKIN & JENRETTE	85,084	1,960,000	.0434
WARBURG SECURITIES	. 76,694	2,031,000	.0378
LYNCH JONES	74,558	1,350,000	.0552
ABN AMRO	69,659	3,709,000	.0188
CIBC WORLD MARKETS CORP.	63,039	1,313,000	.0480
INVESTMENT TECHNOLOGY GROUP	56,386	1,694,000	.0333
WEEDEN	54,532	927,000	.0588
FIRST BOSTON CORP.	45,513	806,000	.0565
LEGG MASON	37,517	694,000	.0541
FACTSET DATA SYSTEMS	36,526	712,000	.0513
BRIDGE CO. – CLEARING	33,015	660,000	.0500
BANCAMERICA	30,959	596,000	.0519
IBJ INTL	29,784	934,000	.0319
FIRST UNION CAPITAL	28,256	483,000	.0585
ROBERT FLEMING	25,422	362,000	.0702
ROBERTSON & STEPHENS & CO.	24,744	462,000	.0536
FRANCIS MAGLIO	24,492	817,000	.0300
GLAZER, C.L.	23,120	462,000	.0500
THOMAS WEISEL PARTNERS, LTD	22,555	377,000	.0598
PIPER JAFFRAY	22,140	369,000	.0600
SG COWEN SECURITIES CORP	21,610	380,000	.0569
JEFFERIES &CO., INC.	20,589	435,000	.0473
Brokers' fees less than \$20,000 each	751,274	33,420,000	.0225
TOTALS:	\$7,593,866	177,878,000	\$0.0427

### 6. INVESTMENT POLICY AND GUIDELINES

#### I. INTRODUCTION

'he purpose of this Statement of Investment Policy and Guidelines is to define the framework for investing the assets of The Ohio Police & Fire Pension Fund (OP&F). This Statement is intended to provide general principles for establishing the goals of OP&F, 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 OP&F 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 OP&F 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 Tode: "The Board and other Fiduciaries shall discharge their dutes with respect to OP&F 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 person 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 OP&F'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 OP&F (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 OP&F'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 semi-annual basis.

#### **B.** Investment Committee Responsibilities

Review, on a continuing basis, the current Investment Policies of OP&F and recommend changes to the Board, as appropriate.

•Review the annual investment plan prepared by the staff. As

- conditions warrant, revise the annual investment plan as the year progresses.
- Monitor the monthly investment activity for compliance with Board policies and adherence by investment managers to strategy and direction.
- •Review the overall performance to determine whether it meets the benchmarks established by the Board and report its findings to the whole Board.
- •Review suggested changes or additions to the functions and operations regarding the Investment operations of similar institutional investors and report to the whole Board.
- •Report its activities and recommendations to the full Board following each committee meeting.

#### C. Staff Responsibilities

- •Manage OP&F 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 ensure compliance with 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 objectives 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.

#### D. 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

#### E. Investment Managers' Responsibilities

- •Manage OP&F 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 and the specific guidelines established for the manager.
- •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 OP&F 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 and private 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 OP&F.

The procedure for determining the allocation will consider the relevant characteristics of the liabilities and potential assets of OP&F. 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 OP&F 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, 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 (%)
Domestic Equity	46	±5
International Equity	17	±2
Domestic Fixed Incom	m 18	± 2
High Yield	5	±2
Real Estate	8	±2
<b>Emerging Markets</b>	3	±2
Private Equity	3	±2
Cash Equivalents	0	+ 0.5
	0	
Total	100%	

The study has shown that this is a favorable asset mix for 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 staff and investment manager(s) to rebalance from the over-allocated class to the under-allocated class.

#### 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 April 2000. 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).

OP&F shall also strive to 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.

OP&F shall attempt to achieve these return goals without unnecessary risk to principal. The risk/return characteristics of OP&F 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 three or more 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, OP&F will invest assets through the use of qualified investment 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 to 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 Investment Committee. The Investment Manager Search Policy is included later in this Policy as Section XI.

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

#### 1. Domestic Equity

Investment Objectives

- •Total return of the managed equity portfolio should exceed the return of the Wilshire 5000 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 and should exceed their benchmark return as specified in each manager's guidelines.

#### 1. Large Capitalization Specialist Managers

The Board of Trustees has determined that diversification of the equity asset base into large capitalization companies will offer the opportunity for enhanced returns, while lessening overall risk through increased diversification.

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 US stocks with exceptions when approved by the Board of Trustees and as delineated in the managers' guidelines.
- •The main focus of investing will be on companies with market capitalizations included in commonly accepted large capitalization indices.
- •No single holding shall account for more than 6% of the entire portfolio at market, or 5% of the outstanding common stock of any one corporation, unless otherwise approved by the Board of
- •Specialist managers shall be subject to all other investment provisions listed under Sec. 742.11 that are not specifically mentioned above.
- Trading shall be left to the discretion of the investment manager with the exception that OP&F may direct a reasonable amount of commissions to help defray Fund expenses.
- •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.

#### 2. Small/Mid Capitalization Specialist Managers

The Board of Trustees has determined that diversification of the equity asset base into small capitalization and mid-range capitalization companies will offer the opportunity for enhanced returns, while lessening overall risk through increased diversification. 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

capitalizations included in commonly accepted small to mid capitalization indices.

#### **B.** International

OP&F 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 and active developed markets and active emerging markets. 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 developed markets allocation. This is an index fund portfolio intended to provide diversification to OP&F's U.S. investments through holdings in non-U.S. equities and is to be constructed so as to match the return of the Morgan Stanley Capital International Europe, Australia, Far East Index. Non-U.S. equity securities in EAFE countries are authorized. The manager will have the MSCI-EAFE Index as a benchmark.

#### Active International Equity Investment

The active component has a target allocation of two-thirds of the International developed markets allocation and will be divided among at least three managers. These will be discretionary portfolios intended to provide diversification to OP&F's U.S. investments as well as OP&F'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.

#### Investment Objectives

- •Total return of the active equity portfolios should exceed the return of the MSCI EAFE 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 over a three-year period on an annualized basis and should exceed their benchmark return as specified in each manager's guidelines.

#### Emerging Markets

The emerging markets allocation will be implemented as a distinct mandate with a separate allocation. The allocation will be divided between at least two active managers. In order to minimize the administrative and transaction costs of emerging market

investing, commingled investment vehicles will be utilized. Sector and security selection, portfolio structure, and timing of purchases and sales are delegated to the Manager subject to policies established by the commingled funds.

#### Investment Objectives

- •Total return of the active equity portfolios should exceed the return of the MSCI Emerging Markets Free 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 over a three-year period on an annualized basis and should exceed their benchmark return as specified in each manager's guidelines.

#### C. Fixed Income

It shall be the responsibility of the Investment Staff to give careful consideration to the needs of the system in its recommendation for bond investments, emphasizing relative value, quality and, to a lesser extent, liquidity. The Board may also retain external investment managers for this purpose.

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 -20% from that of the benchmark, unless otherwise approved by the Board of Trustees.

In order to qualify for inclusion in the fixed income portfolio, securities shall be rated "BBB-" 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 on a dollar duration basis, with the exception of United States Government or Agency securities.

Investments in high risk derivatives are prohibited. Low risk mortgage derivatives are permitted.

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

#### Investment Objectives

- •Total return of the active fixed income portfolios should exceed the return of the Lehman Aggregate 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 over a three-year period on an annualized basis and should exceed their benchmark return as specified in each manager's guidelines.

#### D. High Yield Bonds

The Board of Trustees has determined that the inclusion of high yield bonds into the portfolio will enhance the overall return of the portfolio while lowering risk through increased diversification. The Board will utilize active management in this asset class to minimize the probability of exposure to securities in default.

The following objectives and guidelines shall apply:

- •The primary investment in the portfolio will be fixed income securities issued by US corporations with a minimum credit rating of CCC or equivalent. Investments are not allowed in emerging market debt or non-US dollar denominated bonds.
- •No more than 10% of the entire portfolio at market shall be invested in securities of a single issue or issuer, unless otherwise approved by the Board of Trustees.
- •The portfolio will be diversified by economic sector; however, the diversification restrictions will be tailored for each investment manager consistent with the manager's stated investment approach.
- •Investments in Rule 144A securities are allowed while investments in non-Rule 144A private placements are limited to 5% of the entire portfolio at market.

#### Investment Objectives

- •Total return of the high yield portfolio should exceed the return of the CS First Boston Domestic Plus High Yield 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 over a three-year period on an annualized basis and should exceed their benchmark return as specified in each manager's guidelines.

#### E. Real Estate

OP&F has adopted Strategic and Investment Plans that provide for the completion of OP&F's allocation to real estate.

The role of real estate in OP&F's portfolio is to provide an inflation hedge and a return that negatively correlates with stock and bond returns, thereby reducing the volatility and risk of the total portfolio. Also, real estate must provide a total return that is competitive on a risk-adjusted basis with stocks and bonds. OP&F is primarily interested in investing in core properties (i.e., operating, substantially leased, well located, institutional quality in the traditional property types which include office, apartment, retail and industrial). They generally offer relatively high and more predictable current income returns. OP&F will, however, consider investments in non-core properties to capture superior risk-adjusted returns caused by imbalances in the real estate and capital markets. To access these opportunities, OP&F will make investments in institutional properties, which may present a higher level of risk including leasing, renovation, development, re-positioning, distressed assets, international and a degree of business or operating risk (e.g., hotels, senior housing, etc.). The investment strategy typically is to cure the identified deficiency, increase cash flow and capture the premium through a short term hold. OP&F's preferred investment vehicle is a separate account because it affords OP&F the highest degree of control over its investments. OP&F also prefers to own 100% of each core property investment. Commingled fund investments will be made to allow OP&F to invest in higher return, higher risk assets and in extraordinarily large properties. OP&F employs a number of risk management strategies to minimize portfolio return volatility. These strategies include diversification by property type, by geographic location, by size of individual investments and by advisors. Leverage will be utilized only if acceptable debt service

coverage, loan to value ratios and other protection can be provided. The maximum debt to equity ratio is 1:1 and 2:1 for and individual asset.

#### westment Objectives

The performance objective for real estate is to produce a total return, prior to investment advisor fees equal to the NCREIF Property Index plus 100 basis points measured over rolling three-year periods.

#### F. Commercial Mortgages

The Board of Trustees has determined that inclusion of Commercial Mortgage Investments secured by real estate may, depending on market circumstances, enhance the risk/return characteristics of OP&F. Therefore, the allocation to this asset class shall be targeted at 0% of OP&F's total investable assets, but will allow for up to a 2% allocation, which shall be included within the Fixed Income allocation.

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.

#### Investment Objectives

The benchmark return for the commercial mortgage portfolio, onsistent 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 OP&F's "Commercial Mortgage Strategic and Investment Plan" are incorporated herein by reference.

#### G. Private Equity Investments

The private equity class of investments is designed to provide an attractive risk adjusted rate of return to benefit OP&F. By its very nature, it possesses a long-term investment horizon, illiquidity and a high degree of risk.

To assist in diversifying the risks of this asset class, OP&F shall invest only in eligible private equity partnerships or funds and shall avoid individual direct company investments.

For these reasons, this asset class is limited to 3% of the overall Fund and expected returns should exceed those of other asset classes.

#### Investment Objectives

OP&F seeks a long-term target return of 5% greater than the Wilshire 5000 Index net of fees.

#### 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

OP&F'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 Sr. Investment Officer and the Chief Investment Officer, or their designees, and by designated outside money managers.

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

#### 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 quarterly by the agent to the Investment Committee detailing investment instruments utilized and the appropriate breakdown of revenues.

## IX. INVESTMENT MONITORING AND EVALUATION POLICY

The purpose of the OP&F Investment Manager Monitoring and Evaluation Policy is to establish the process and discipline for managing the investment manager relationship. The policy states the process, responsibilities and important factors for consideration in the monitoring and evaluation process.

The successful monitoring and evaluation of managers depends on synthesizing a multi-faceted array of investment factors, including historical data and forward looking characteristics that are often linked. The process must also examine the investment manager's business capabilities and ability to attract and retain investment and support professionals. The Policy seeks to examine all material information about OP&F's investment managers that may materially impact the relationship and investment objectives of the Board.

OP&F will consider, but not be limited, to the following factors in monitoring and evaluating its investment managers:

- Stability and experience of firm in the investment product:
  - Stability of the firm, as measured by the quality of the organizational structure of the firm; the existence of, or potential for, significant developments in the firm; and the expected financial stability of the firm.
  - Experience of the firm in providing investment management services to similar institutional investors, as measured by the firm's history of providing such services.
  - Ownership of the firm, as measured by the depth and structure of the incentive programs and the ownership type for key investment professionals in the subject product.
  - 4. Firm commitment to improvement as measured by whether or not there is a clear business plan/strategy, reinvestment in the firm with an overall commitment for enhancements/improvements.
  - 5. Adverse organizational issues, as measured by the existence of litigation or other investigations; and the existence of financial problems.
- Quality, stability, depth and experience of investment professionals;
  - Experience of portfolio manager(s) in providing similar services to similar institutional investors, as measured by the length of time the portfolio manager(s) has served as a portfolio manager to such investors; demonstrated expertise in providing such services to other such investors.
  - Stability of the firm's professional base, as measured by personnel turnover.
  - Depth of personnel, as measured by the firm's account/ portfolio manager and account/investment management personnel ratios; and back-up procedures for providing services to OP&F in the absence of the portfolio manager(s).

#### C. Client service and relationships;

- Assets under management, as measured by the amount in the subject product as well as the experience of managing other similar asset class products.
- The similarity of a firm's clients to OP&F, as measured by the amount of institutional tax-exempt assets under management and the size of the individual accounts currently under management.
- 3. Stability of the firm's client base, as measured by the number of accounts gained or lost.
- Procedures for client contact, timely reporting, compliance monitoring, reconciliation process with OP&F's custodian and responsiveness to reporting data and formatting requirements.

#### D. Investment philosophy and process;

- Defined philosophy and process implementation, as measured by whether the philosophy is effectively communicated and what the process is and why it works. It should be identified as to whether the process is based on sound research and whether or not they are focusing on temporary or permanent inefficiencies in the market.
- 2. Portfolio construction process, as measured by whether or not the manager is benchmark orienter such that there are distinct portfolio objectives and on-going monitoring relative to these objectives. It should be identified as to whether the process contains risk controls, and if so, are they part of a disciplined process and who is performing the monitoring.
- Research, as measured by whether there are appropriate resources given the product style, whether the
  research performed is qualitative or quantitative, and
  whether or not there are separate research departments
  by product type or one fully integrated research staff.
- Sources of information, as measured by whether the data used in the process is collected and/or assimilated by outside organizations or generated internally and how the information is processed and interpreted.

#### E. Investment performance and risk control;

1. The investment manager's alpha for active managers and tracking error for passive managers relative to the target benchmark. Active managers will also be expected to rank in the top half of managers with similar objectives over a 3 to 5 year period, if available. Additional focus will be placed on return/risk

ratios and information ratios which incorporate both absolute and manager specific risk.

#### F. Investment fees;

 Investment management fees shall be competitive and of an appropriate structure for the product type and assets under management.

#### MONITORING RESPONSIBILITIES

It is important for the roles of the participants in the implementation of this Policy be clear and delineated. The following is intended as a guide to reflect the overall framework for the participants in the process. Participant responsibilities may vary from time to time.

Board - Responsible for the overall management of OP&F and investment manager relationship. Staff and consultant will provide the Board with periodic updates on the investment structure, overall investment manager performance and compliance with guidelines.

Investment Committee - Responsible for the overall management of OP&F's investment program. This shall include ongoing review of the asset allocation plan, investment structure, investment performance and other related issues. The Committee shall be responsible for recommending investment policies and procedures and shall assign investment managers to a monitoring category (except that only the Board may assign categories 4 and P4, terminabn).

Staff - Responsible for the day-to-day management of this Policy and the investment manager relationship, including investment reporting and investment guideline compliance. Staff will report all material manager issues to the consultant for review and to the Board for its consideration.

Investment Consultant - Responsible for assisting the staff and Board in establishing strategic investment policy and strategy. The consultant will monitor the consistency of investment manager mandates with the investment objectives, investment manager guidelines and will prepare quarterly performance measurement reports. The consultant will report all material investment manager issues to the staff and Board.

Investment Manager - Responsible for managing the investment portfolio within the objectives and guidelines established by the Board. The investment manager is responsible for self-monitoring of the portfolio and notifying the staff when there are any deviations from the guidelines and when modifications to the guidelines may be appropriate. The investment manager is responsible for the quality and timeliness of its reporting, including the reconciliation of its portfolio with OP&F's custodian.

#### REQUENCY OF MONITORING

The investment manager's performance, risk and portfolio characteristics will be monitored on a monthly/quarterly basis, or more

frequently, and will be evaluated relative to the Board approved investment manager guidelines and objectives.

#### MANAGER MONITORING CONCLUSIONS

The Board seeks long term and successful relationships with its investment managers. The monitoring process is intended to ensure the success of the relationship. All investment managers will be assigned, as noted above, to one of the following categories, which will be reviewed by the Investment Committee at least annually:

- 1. Retain the investment manager with no material changes in the relationship;
- 2. Retain the investment manager with issues of a non-material nature to be noted and monitored on a regular basis;
- Retain the investment manager and place on probation with specific material issues identified and a plan and time period developed to resolve issue; and
- Terminate the investment manager relationship and redeploy the assets.

Where potentially material and adverse issues arise in OP&F's current investment manager relationships, the Investment Committee will review the issues and may re-assign the manager to another category in the case of 1-3 rating. The assignment of a 4 rating must be approved by the Board.

Once a manager has been downgraded, they may not be upgraded for at least 6 months. During this time period the reasons for the rating downgrade will be evaluated thoroughly by the staff and the manager's progress on their corrective action plans will be followed. Although managers will be prohibited from obtaining a rating upgrade within 6 months of a rating downgrade, a manager may be further downgraded or recommended for termination at any time.

In conjunction with the annual manager evaluation conducted by the staff and the Investment Committee, the following review schedule will be followed for managers rated either a '2' or '3':

- '2' The staff and the Investment Committee will review manager performance and the issues which resulted in the rating downgrade at least every 6 months until the rating has been upgraded to a '1'. Further downgrading to a '3' will result in the review schedule noted below:
- '3' Due to the severity of this rating, quarterly reviews will be conducted of managers rated a '3'.

When deemed necessary by the staff or Investment Committee, managers will be requested to attend these reviews.

In the case of investment managers or general partners who act as managers of private, essentially non-marketable, investment vehicles such as private equity and commingled real estate investment funds, all investment managers will be assigned, as noted above, to one of the following categories which will be reviewed by the Investment Committee at least annually:

- P1. The investment manager may be considered for future assignments.
- P2. The investment manager has specific material issues which need to be resolved before the manager may be considered for future assignments.
- P3. The investment manager may not be considered for future assignments.
- P4. Removal of the investment manager or sale of our interest should be actively pursued and acted upon if in the best interest of OP&F.

Where potentially material and adverse issues arise in OP&F's current investment manager relationships, the Investment Committee will review the issues and may re-assign the manager to another category in the case of a P1-P3 rating. The assignment of a P4 rating must be approved by the Board.

#### TERMINATION OF AN INVESTMENT MANAGER

The Board will review the adverse material issues and circumstances prior to terminating an investment manager. The major issues to consider will include:

- Longer term prospects of the investment manager in correcting the issue;
- · Potential changes in the relationship;
- · The cost of termination;
- · Replacement alternatives; and
- · How the investment manager's assets will be redeployed.

#### MANAGER DUE DILIGENCE VISITS

The staff will meet with those investment managers whose performance falls below the 70<sup>th</sup> percentile relative to their peers for all of the following: current quarter; year-to-date; and trailing one year time periods. The staff will also meet with investment managers for non-performance issues that are material to the relationship, including but not limited to: firm or investment product stability, key professional turnover, client service and investment reporting.

#### 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 OP&F's Board at least annually, unless notified otherwise.

#### XI. INVESTMENT MANAGER SEARCH POLICY

The selection of investment managers will be conducted only under a Request for Proposal (RFP) process that will consider the following issues:

A. The investment strategy for the manager search will be considered within the strategic asset allocation plan, investment structure and other applicable investment policies and procedures approved by the Board.

- B. The RFP minimum criteria will be consistent with the search investment strategy and will be established by the Investment Committee, with the assistance of staff and the investment consultant. The selection criteria may include such items as:
  - Stability and experience of firm in the investment product;
    - a. Stability of the firm, as measured by the quality of the organizational structure of the firm; the existence of, or potential for, significant developments in the firm; and the expected financial stability of the firm
    - Experience of the firm in providing investment management services to similar institutional investors, as measured by the firm's history of providing such services.
    - c. Ownership of the firm, as measured by the depth and structure of the incentive programs and the ownership type for key investment professionals in the subject product.
    - d. Firm commitment to improvement as measured by whether or not there is a clear business plan/strategy, reinvestment in the firm with an overall commitment for enhancements/improvements.
    - e. Adverse organizational issues, as measured by the existence of litigation or other investigations; and the existence of financial problems.
  - Quality, stability, depth and experience of investment professionals;
    - a. Experience of portfolio manager(s) in providing similar services to similar institutional investors, as measured by the length of time the portfolio manager(s) has served as a portfolio manager to such investors; demonstrated expertise in providing such services to other such investors.
    - b. Stability of the firm's professional base, as measured by personnel turnover.
    - c. Depth of personnel, as measured by the firm's account/portfolio manager and account/investment management personnel ratios; and back-up procedures for providing services to OP&F in the absence of the portfolio manager(s).
  - 3. Client service and relationships;
    - Assets under management, as measured by the amount in the subject product as well as the experience of managing other similar asset class products.
    - b. The similarity of a firm's clients to OP&F, as measured by the amount of institutional tax-exempt assets under management and the size of the individual accounts currently under management.
    - c. Stability of the firm's client base, as measured by the number of accounts gained or lost.
    - d. Procedures for client contact, timely reporting, compliance monitoring, reconciliation process with OP&F's custodian and responsiveness to reporting data and formatting requirements.

- Investment philosophy and process;
  - a. Defined philosophy and process implementation, as measured by whether the philosophy is effectively communicated and what the process is and why it works. It should be identified as to whether the process is based on sound research and whether or not they are focusing on temporary or permanent inefficiencies in the market.
  - b. Portfolio construction process, as measured by whether or not the manager is benchmark oriented such that there are distinct portfolio objectives and on-going monitoring relative to these objectives. It should be identified as to whether the process contains risk controls, and if so, are they part of a disciplined process and who is performing the monitoring.
  - c. Research, as measured by whether there are appropriate resources given the product style, whether the research performed is qualitative or quantitative, and whether or not there are separate research departments by product type or one fully integrated research staff.
  - d. Sources of information, as measured by whether the data used in the process is collected and/or assimilated by outside organizations or generated internally and how the information is processed and interpreted.
- Investment performance and risk control;
  - a. The investment manager's alpha for active managers and tracking error for passive managers relative to the target benchmark. Active managers will also be expected to rank in the top half of managers with similar objectives over a 3 to 5 year period, if available. Additional focus will be placed on return/risk ratios and information ratios which incorporate both absolute and manager specific risk.
- 6. Investment fees;
  - a. The total cost of performing investment advisory services as measured by the Fee Proposal based on a total account size. The managers in the search will be evaluated relative to each other as well as to a representative peer universe.
- C. The search may be on a closed or open manager universe basis. Closed universe searches shall be used only in circumstances where an expedited process is required to avoid material harm to OP&F or where there is approval by a super majority of the Board (7 or more) to reconsider the finalists of a prior search concluded within the preceding two years. The retention of a manager in a closed uni-

- verse search shall be subject to a due diligence review by the Investment Committee, staff and consultant. When reopening a prior search, due diligence shall be performed on those managers constituting the finalists of the original search.
- D. RFPs will be sent to managers identified as likely to meet the stated qualifications and to those requesting the RFP in an open universe search. An advertisement will be placed in an investment industry or national business publication in open universe searches. In closed universe searches, the Investment Committee shall approve all potential candidates with the assistance of the staff and consultant.
- E. Staff, with the assistance of the Board's investment consultant, will review all timely submitted RFPs to ensure that all search criteria have been met.
- F. Staff, with the assistance of the Board's investment consultant, will evaluate all RFPs having met established criteria and produce a written report summarizing the findings and manager rankings to the Investment Committee. The staff and consultant may produce separate reports to the Investment Committee where there may be material differences in findings or manager rankings.
- G. The Investment Committee will consider the staff and consultant report as well as other material information when determining the list of managers for finalist interviews.
- H. The staff and/or investment consultant may conduct a due diligence visit with the finalists prior to the finalist interviews.
- The Investment Committee will interview and evaluate the finalists with the assistance of staff and the investment consultant.
- J. Only the Investment Committee has authority to recommend managers to the Board for final consideration. The recommendations may also include information on the amount and timing of funding, investment guidelines and fees.
- K. The Board will approve or fail to approve the manager recommendations of the Investment Committee. The Board may approve, fail to approve or modify the amount and/or timing of funding, investment guidelines and fees of the approved managers.

#### XII 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.

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# **ACTUARIAL SECTION**

- 1. Report of Actuary
- 2. Summary of Actuarial Assumptions and Methods
- 3. Active Member Valuation Data
- 4. Retirants and Beneficiaries Added to and Removed from Rolls
- 5. Short-Term Solvency Test
- 6. Plan Summary

### 1. REPORT OF ACTUARY



February 28, 2001

Watson Wyatt & Company

Suite 1900 1001 Lakeside Avenue Cleveland, OH 44114-1172

Telephone 216 937 4000 Fax 216 937 4101

Board of Trustees Ohio Police and Fire Pension Fund 140 East Town Street Columbus, Ohio 43215

Members of the Board:

This is our actuarial certification letter with respect to the January 1, 2000 actuarial valuation report of the Ohio Police and Fire Pension Fund ("Fund"). Certain information in the 2000 report and prior reports has been used to prepare Schedules in the 2000 Comprehensive Annual Financial Report. Specifically:

- 1. Actuarial Section Schedule 2: is essentially Table 7 from the 2000 actuarial report.
- Actuarial Section Schedule 3: number of actives, average salary, salary increase trend information was taken from 2000 and prior actuarial reports.
- Actuarial Section Schedule 4: information for 1995 and after was taken from the 1995 and later actuarial reports.

In order to assist the Board in its financial objective of ensuring the long-term solvency of the Fund, Watson Wyatt Worldwide, as Actuary, prepares an actuarial valuation of the Fund on an annual basis. The actuarial valuation develops the normal cost and unfunded actuarial accrued liability under the Entry Age Normal actuarial cost method. The period required to amortize the unfunded actuarial accrued liability, via a level percentage of expected future annual Member payroll, is determined assuming a constant active Member population and a 4% annual payroll growth. A separate report comments on the expected period of time over which the Health Care Stabilization Fund (HCSF) will retain a positive balance assuming employer contribution allocations to the HCSF increase from 7.25% in 2000 to 8.0% in 2003.

The 2000 valuation develops an amortization period of 26.78 years. The 26.78 compares to 47.26 years developed in the 1999 actuarial valuation. The decrease is due primarily to asset performance in 1999. The 2000 HCSF Report shows that the HCSF is expected to be maintained through the year 2014 under the new member premium schedule and the 1998 baseline trend rate assumptions, plus 1%. Also, actual 1999 health care costs were used in the analysis.

Board of Trustees February 28, 2001 Page 2



Section 742.16 of the Revised Code, as amended by Senate Bill No. 82, requires the Board of Trustees to establish as one financial goal of the Fund that the annual actuarial valuation shall produce an amortization period of not more than 30 years, beginning in 2007 and pursuant to a plan established by the Board.

Section J of the 2000 valuation report discusses the adequacy of the current statutory contribution rates in light of the requirements of Senate Bill 82. Therein we conclude that if the Fund is able to earn approximately an 8.5% average rate of return over the next 30 years, and net health care costs to the Fund are effectively managed, then the Senate Bill 82 funding requirements should be met. The results of this valuation and the April 10, 1998 Forecast Study, as modified to include the improved spousal benefits of House Bill 194 and House Bill 275, have been used to prepare a plan under which the Board will meet the funding objectives of Senate Bill 82.

The actuarial valuations are based upon census data and audited financial information submitted by the Fund. Watson Wyatt Worldwide reviews 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 and interim studies. In general, the decrement assumptions used for the 2000 valuation are based on Fund experience during the period beginning in 1992 and ending in 1996. The interest rate and salary scale assumptions reflect both recent Fund rates of return and salary increases and expected returns and salary increases over the next 30 years. These assumptions, along with actuarial cost and asset valuation methods, meet the parameters presented in Government Accounting Standards Board Statement No. 25.

For most asset classes the actuarial value of assets used in the valuation is the cost value as presented in the audited Financial Statements. 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 actuarial value of assets is reduced by (1) the member contributions which have yet to be refunded to members who terminated with less than 15 years of service, (2) certain Fund liabilities and (3) the reported value of the Health Care Stabilization Fund.

Board of Trustees February 28, 2001 Page 3



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

Under current law the Ohio Retirement Study Council is to annually review the actuarial report and make recommendations to the General Assembly concerning proper financing of the Fund. The policy of annual reporting, 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

Fellow - Society of Actuaries

Member - American Academy of Actuaries

Peter N. Dorsey

Associate - Society of Actuaries

Peter n Dorsey

Member - American Academy of Actuaries

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# 2. SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS

#### A. INTEREST

A rate of 8 1/4% per annum, compounded annually. Adopted by the Board of Trustees in 1989.

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

- 1. Before Retirement:
- a) Mortality:

Mortality is based on the 1994 Group Annuity Mortality Reserving Table with a five-year set-back in age. The following rates at selected ages are illustrative:

	Rate of Mortality		
Age	Police	Fire	
25	.000507	.000507	
30	.000661	.000661	
35	.000801	.000801	
40	.000851	.000851	
45	.001072	.001072	
50	.001578	.001578	
55	.002579	.002579	

#### ) Termination:

The rates of termination are based upon the results of the 1992-1996 Quinquennial Evaluation. The following rates at selected ages are illustrative:

	Rate of Termination		
Age	Police	Fire	
25	.032100	.010674	
30	.022530	.008650	
35	.018580	.007568	
40	.013325	.005845	
45	.009219	.004235	
50	.009688	.006715	

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 results of the 1992-1996 Quinquennial Evaluation. A 5% load has been applied to 'te 1992-1996 experience rates due to the volatility in this decreaent. The following rates at selected ages are illustrative:

	Rate of Disability		
Age	Police	Fire	
25	.000280	.000017	
30	.001709	.000837	
35	.005926	.002592	
40	.011606	.005899	
45	.019363	.014365	
50	.027948	.031516	
55	.036083	.042174	

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	20%	20%
On duty partial	76	76
Off duty ordinary	4	4

#### 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.

	<b>Promotional Increase</b>	<b>Total Increase</b>
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 1990 through 1993 and the results of the 1992-1996 Quinquennial Evaluation. These rates are applicable after the member has satisfied the conditions for retirement.

Poli	ice	Fir	e
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:

For active members expected to go on service retirement, the post-retirement mortality rates equal the 1994 Group Annuity

Mortality Reserving Table with two-year set-forward in age. The following probabilities at selected ages are illustrative:

Age	Probability of Mortality
50	003213
55	.005581
60	.010147
65	.018034
70	.028481
75	.045171
80	.075532
85	.115671
90	.182281
95	.268815

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

For active members expected to go on disability retirement, the post-retirement mortality rates are based on the results of the 1992-1996 Quinquennial Evaluation. The rates are based on the 1994 Group Annuity Mortality Reserving Table with a two years set forward in age and with loads for disability. The following probabilities at selected ages are illustrative:

Age	Probability of Mortality
35	.008391
40	.008752
45	.009399
50	.010713
55	.013081
60	.020147
65	.028034
70	.048481
75	.070171
80	.100532
85	.140671
90	.207281
95	.268815

## C. PROBABILITIES OF MORTALITY AMONG PENSIONERS

#### 1. Nondisabled Pensioners:

The mortality among all nondisabled retirants is equal to the 1994 Group Annuity Mortality Reserving Table rates with a two-year set-forward in age. The following probabilities at selected ages are illustrative:

Age	Probability of Mortality
50	.003213
55	.005581
60	.010147
65	.018034
70	.028481
75	.045171
80	.075532
85	.115671
90	.182281
95	.268815

#### 2. Disabled Pensioners:

The mortality among all disabled retirants is equal to the 1994 Group Annuity Mortality Reserving Table with a two-year setforward in age and with loads for disability. The following probabilities at selected ages are illustrative:

Probability of Mortality
.008391
.008752
.009399
.010713
.013081
.020147
.028034
.048481
.070171
.100532
.140671
.207281
.268815

#### 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 with a six year setback in age. The following probabilities at selected ages are illustrative:

Age	Probability of Mortality
35	.000871
40	.001193
45	.001722
50	.002932
55	.005410
60	.008910
65	.013397
70	.020560
75	.033488
80	.054712
85	.091172
90	.144016
95	.207993

#### 2. Probability of Remarriage Among Surviving Spouses:

The valuation no longer uses a remarriage assumption. HB 648 moved the remarriage penalty for surviving spouses.

#### 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 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

Fund expenses are divided into investment expenses and administive expenses. The valuation interest rate is considered to be net of all investment expenses and net of administrative expenses up to 0.05% of market value assets. Excess administrative expenses (above 0.05% of market value) are loaded onto the Normal Cost. The Fund provides estimated valuation year expenses.

#### G. STATE SUBSIDY CREDIT

The subsidy received from the State of Ohio during the valuation year is an offset to the Normal Cost.

#### H. ACTUARIAL COST METHOD

The Entry Age Normal Cost Method has been used. This is a method under which the actuarial present value of the projected benefits of each participant included in the actuarial valuation is allocated on a level basis over the service of the individual be-

tween entry age and assumed decrement age. That portion of the actuarial present value allocated to a valuation year is called the normal cost. That portion of the actuarial present value not provided for at a valuation date by the future normal costs is called the actuarial liability.

The amortization period is determined as an open (rolling) period. For this calculation, total payroll is assumed to grow at 4.00% per annum.

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.

#### I. 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 on stocks 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.

Future payments on the employer accrued liability (local funds receivable) are discounted at the valuation rate to determine the present value at the valuation date. This value is added to valuation assets.

# 3. ACTIVE MEMBER VALUATION DATA

1995 TO 2000

Actuarial Valuation as of Jan. 1	- 1	ber of loyers		of Active nbers	AND DESCRIPTION OF THE PERSON	e Annual lary		tage of Annual ncreases	Annual Payroll (Millions)
	Police	Fire	Police	Fire	Police	Fire	Police	Fire	
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
1997	582	316	14,851	10,972	42,049	42,509	2.5%	2.4%	1,119.9
1998	616	354	15,247	11,316	43,561	44,077	3.6%	3.7%	1,190.9
1999	621	653	15,533	11,600	44,892	45,052	3.1%	2.2%	1,249.1
2000	590	350	15,775	11,867	47,241	47,416	5.2%	5.2%	1,338.5

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

1995 to 2000

Year at Jan. 1	Pol	ice	Fi	re		mbers at End
	Additions	Removals	Additions	Removals	Police	Fire
1995	677	379	464	301	10,747	8,775
1996	821	391	580	366	11,177	8,989
. 1997	760	400	666	358	11,537	9,297
1998	610	418	431	444	11,729	9,284
1999	878	445	636	348	12,162	9,572
2000	783	400	599	327	12,545	9,844

### 5. SHORT-TERM SOLVENCY TEST

hort-term solvency test is one means of checking a system's rogress 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 circum-

stances). 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. Because the Fund changed its actuarial cost method from the aggregate method to the entry age normal method effective January 1, 1997, comparable solvency test data is not available for years prior to that date.

#### Accrued Liabilities (\$ Amounts in Thousands)

Valuation	(1) Active Member	(2) Retirants and	(3) Active Members (Employer Financed	Valuation	Liabil	ities Co	vered
Year	Contributions	Beneficiaries	Portion)	Assets	(1)	(2)	(3)
1997	\$498,283	\$1,964,911	\$1,520,487	\$3,065,410	100%	100%	40%
1997	\$380,192	\$1,537,474	\$1,123,208	\$2,488,704	100%	100%	51%
1998	\$524,911	\$2,214,921	\$1,634,939	\$3,431,556	100%	100%	42%
1998	\$405,865	\$1,683,441	\$1,233,600	\$2,799,863	100%	100%	58%
1999	\$548,372	\$2,509,175	\$1,751,789	\$4,014,416	100%	100%	51%
1999	\$423,342	\$1,885,760	\$1,334,184	\$3,292,398	100%	100%	69%
2000	\$603,980	\$2,674,691	\$1,840,992	\$4,373,261	100%	100%	57%
2000	\$467,926	\$1,987,723	\$1,420,252	\$3,615,317	100%	100%	79%
	Year  1997 1997 1998 1998 1999 1999 2000	Valuation Year         Active Member Contributions           1997         \$498,283           1997         \$380,192           1998         \$524,911           1998         \$405,865           1999         \$548,372           1999         \$423,342           2000         \$603,980	Valuation Year         Active Member Contributions         Retirants and Beneficiaries           1997         \$498,283         \$1,964,911           1997         \$380,192         \$1,537,474           1998         \$524,911         \$2,214,921           1998         \$405,865         \$1,683,441           1999         \$548,372         \$2,509,175           1999         \$423,342         \$1,885,760           2000         \$603,980         \$2,674,691	Valuation Year         Active Member Contributions         Retirants and Beneficiaries         Active Members (Employer Financed Portion)           1997         \$498,283         \$1,964,911         \$1,520,487           1997         \$380,192         \$1,537,474         \$1,123,208           1998         \$524,911         \$2,214,921         \$1,634,939           1998         \$405,865         \$1,683,441         \$1,233,600           1999         \$548,372         \$2,509,175         \$1,751,789           1999         \$423,342         \$1,885,760         \$1,334,184           2000         \$603,980         \$2,674,691         \$1,840,992	Valuation Year         Active Member Contributions         Retirants and Beneficiaries         Active Members (Employer Financed Portion)         Valuation Assets           1997         \$498,283         \$1,964,911         \$1,520,487         \$3,065,410           1997         \$380,192         \$1,537,474         \$1,123,208         \$2,488,704           1998         \$524,911         \$2,214,921         \$1,634,939         \$3,431,556           1998         \$405,865         \$1,683,441         \$1,233,600         \$2,799,863           1999         \$548,372         \$2,509,175         \$1,751,789         \$4,014,416           1999         \$423,342         \$1,885,760         \$1,334,184         \$3,292,398           2000         \$603,980         \$2,674,691         \$1,840,992         \$4,373,261	Valuation Year         Active Member Contributions         Retirants and Beneficiaries         Active Members (Employer Financed Portion)         Valuation Assets         Valuation by Rej (I)           1997         \$498,283         \$1,964,911         \$1,520,487         \$3,065,410         100%           1997         \$380,192         \$1,537,474         \$1,123,208         \$2,488,704         100%           1998         \$524,911         \$2,214,921         \$1,634,939         \$3,431,556         100%           1998         \$405,865         \$1,683,441         \$1,233,600         \$2,799,863         100%           1999         \$548,372         \$2,509,175         \$1,751,789         \$4,014,416         100%           1999         \$423,342         \$1,885,760         \$1,334,184         \$3,292,398         100%           2000         \$603,980         \$2,674,691         \$1,840,992         \$4,373,261         100%	Valuation Year         Active Member Contributions         Retirants and Reneficiaries         Active Members (Employer Financed Portion)         Valuation Assets         Liabilities Composed Portion           1997         \$498,283         \$1,964,911         \$1,520,487         \$3,065,410         100%         100%           1997         \$380,192         \$1,537,474         \$1,123,208         \$2,488,704         100%         100%           1998         \$524,911         \$2,214,921         \$1,634,939         \$3,431,556         100%         100%           1998         \$405,865         \$1,683,441         \$1,233,600         \$2,799,863         100%         100%           1999         \$548,372         \$2,509,175         \$1,751,789         \$4,014,416         100%         100%           1999         \$423,342         \$1,885,760         \$1,334,184         \$3,292,398         100%         100%           2000         \$603,980         \$2,674,691         \$1,840,992         \$4,373,261         100%         100%

### 6. PLAN SUMMARY

#### **PURPOSE**

The Ohio Police and Fire Pension Fund (OP&F) was established by the Ohio General Assembly to provide disability benefits and pensions to members of OP&F and their surviving spouses, children, and dependent parents.

#### ADMINISTRATION

The administration, control, and management of OP&F are vested in the Ohio Police and Fire 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 police and one fire position being a retired member or surviving spouse. 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 OP&F. The executive director oversees the daily activity of the staff.

#### **MEMBERSHIP**

Membership in OP&F is mandatory under Ohio law for all full-time police officers employed by Ohio municipalities. Full-time fire fighters employed by townships, municipalities, joint fire districts or other political subdivisions must become members of OP&F if satisfactory completion of a fire fighter training course approved under former Section 3303.07, Section 4765.55 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 OP&F 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 aveage 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.
- 2. 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.
- 3. Age Commuted
- (a) Eligibility: Age 62 and 15 years of service
- (b) Benefit: The same formula applies as for the normal service pension.

#### **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 unless an OP&F physician certifies the disability is ongoing and further evaluation would not be cost effective.

- 1. Permanent and Total Disability (On-Duty)
- (a) Eligibility: No age or service requirement.
- (b) Benefit: An annual benefit equal to 72% of the average annual salary!.
- 2. Partial Disability (On-Duty)
- (a) Eligibility: No age or service requirement.
- (b) Benefit: An annual benefit 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 benefit is equal to the accrued normal service pension.
- 3. Non-service Incurred Disability (Off-Duty)
- (a) Eligibility: Any age and five years of service.
- (b) Benefit: An annual benefit is the percent awarded by the Board and may not exceed 60% of the average annual salary!. Service credit over 25 years cannot be used in calculating an off duty disability award.

#### C. Rights upon separation from service

#### 1. Deferred Pension

a member meets the service credit requirement for any service irement 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. Employer contributions are not refundable

#### D. Flat Survivor Benefits

1. Eligibility: Upon death of any member of OP&F, active or retired.

#### 2. Benefit:

- (a) Surviving Spouse's Benefit—An annual amount set by law.
  (b) Surviving Child—An annual amount equal to \$1,800, 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 \$2,400 is payable to one dependent ent or \$1,200 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 OP&F, a lump sum payment of one thousand dollars (\$1,000) is paid to the member's surviving spouse, or the estate if there is no surviving spouse.

#### F. Annuities

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

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 uity calculated under the assumption that the decedent had red 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 consents to 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 consent of the member's spouse.

#### 4. Life Annuity Certain and Continuous

The minimum guarantee is 5 years and the maximum is 20 years. 100% of the members reduced pension continue to the beneficiary for the guarantee period selected

#### 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 OP&F. 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, OP&F 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 increases equal to the increase in the Consumer Price Index, to a maximum of a 3% increase per year. 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 24, 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 \$22,500 per year in 1997. 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 OP&F 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.

<sup>&</sup>lt;sup>1</sup> Average annual salary means one-third of the total salary during the three years of highest earnings.

# STATISTICAL SECTION

- 1. Revenues by Source
- 2. Expenses by Type
- 3. Benefit Expenses by Type
- 4. Retired Membership by Type of Benefits
- 5. Average Monthly Benefit Payments
- 6. Number of Employer Units
- 7. Death Benefit Fund

# 1. REVENUES BY SOURCE

Year	Member Contributions and Purchases	Employer Contributions	Employer Contributions as a percentage of Covered Payroll	Investment and Securities Lending Income*	Other Revenues	Total
1995	109,000,755	223,206,380	20.5%	405,458,383	19,058,843	756,724,361
1996	115,314,953	236,214,576	20.5%	457,910,608	19,930,072	829,370,209
1997	121,104,430	248,145,383	20.5%	1,118,944,933	19,408,804	1,507,603,550
1998	128,673,433	261,618,507	20.3%	913,733,524	19,282,940	1,323,308,404
1999	135,814,320	279,474,521	20.3%	1,101,763,658	18,829,767	1,535,882,266
2000	144,967,340	304,889,375	21.0%	(165,140,849)	16,504,642	1,301,220,508

Effective January 1, 1997, net investment income includes the net appreciation in fair value of investments, which can create significant fluctuations. Also, effective January 1, 1997, investment income is net of direct investment administrative expenses.

### 2. EXPENSES BY TYPE

Year	Benefit Payments	Administrative Expenses**	Refund of Employee Contributions	Discount on Early Payoff	Other Expenses	Total
1995	395,058,132	14,066,160	5,553,638		559,422	415,237,352
1996	420,382,559	17,778,992	5,602,382		312,441	444,076,374
1997	449,956,880	8,245,224	5,655,445		381,672	464,239,222
1998	482,070,798	10,899,807	5,685,196	8,864,703	591,938	508,112,442
1999	542,653,929	11,548,719	11,389,439	12,470,563	887,352	578,950,002
2000	573,783,703	13,224,510	11,069,721	22,321,629	713,134	621,112,697

<sup>\*\*</sup> Beginning in 1997, administrative expenses are net of direct investment expenses

## 3. BENEFIT EXPENSES BY TYPE

Year	Retirement	Disability	Survivor	Health Care	Total Benefits
1995	207,355,087	86,763,675	30,768,653	70,170,717	395,058,132
1996	225,448,375	91,638,835	31,621,014	71,674,335	420,382,559
1997	244,008,942	97,064,363	32,423,743	76,459,832	449,956,880
1998	263,238,748	101,409,248	33,494,497	83,928,305	482,070,798
1999	282,847,246	107,409,570	51,874,382	100,522,731	542,653,929
2000	301,252,668	115,063,199	45,650,351	111,817,485	573,783,703

# 4. RETIRED MEMBERSHIP BY TYPE OF BENEFITS

	Ser	vice	Disal	bility	Surv	vivors	Total
Year	Police	Firemen	Police	Firemen	Police	Firemen	Beneficiaries
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
1997	5,602	4,858	2,739	1,861	2,898	2,306	20,264
1998	5,571	4,926	2,749	1,869	3,104	2,391	20,610
1999	5,968	5,004	2,841	1,945	3,162	2,472	21,392
2000	6,204	5,125	2,947	2,021	3,211	2,451	21,959

# 5. AVERAGE MONTHLY BENEFIT PAYMENTS

FOR MEMBERS PLACED ON RETIREMENT ROLLS

#### SERVICE RETIREMENT

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Year	Normal	Service Commuted	Age Commuted	Age/ Service
1995	2,447	664	0	627
1996	2,508	614	0	1,314
1997	2,624	564	1,311	0
1998	2,780	835	0	2,091
1999	2,828	653	0	1,300
2000	2,783	732	0	1,232
2000	2,783	732	0	- 10°******

#### DISABILITY RETIREMENT

Year	Permanent and Total	P&T Presumptive	Partial	Partial Presumptive	Off Duty
1995	1,929	2,589	1,830	2,043	1,534
1996	2,549	2,467	1,974	2,143	1,442
1997	2,454	2,633	1,853	2,129	1,220
1998	2,321	2,968	1,953	2,134	1,330
1999	2,388	2,559	2,194	2,361	1,629
2000	2,380	2,061	2,380	2,258	999

# 6. NUMBER OF EMPLOYER UNITS

Calendar	Municipalities		Townships		Villages	
Year	Police	Fire	Police	Fire	Police	Fire
1995	244	193	0	78	315	28
1996	242	195	0	85	332	30
1997	242	195	0	88	340	33
1998	269	214	0	107	347	33
1999	270	213	0	107	351	33
2000	258	213	0	105	332	32

### 7. DEATH BENEFIT FUND

state of Ohio Death Benefit Fund (DBF). 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 OP&F each State fiscal year (July 1-June 30) and are paid monthly by OP&F to eligible recipients. The unused balance at June 30 is returned to the State. The assets and liabilities of the DBF are included in OP&F's combining statement of plan net assets as of December 31, 2000 as an agency fund. The following is a schedule of DBF financial activity for the State fiscal year ending June 30, 2000:

Balance January 1, 2000	\$11,199,684
Less: Survivor Benefits Paid January 1 to June 30, 2000	(8,597,048)
Balance returned to State of Ohio	\$ 2,602,636
State Funding Received July 2000	\$21,280,000
Less: Survivor Benefits Paid July 1 - December 31, 2000	(8,968,229)
Balance December 31, 2000	\$12,311,771

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