# The Comprehensive Annual Financial Report

For the Years Ended December 31, 2003 & 2002



This report was prepared under the direction of the OPERS Finance Division

277 East Town Street, Columbus, Ohio 43215-4642



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

We have reviewed the Independent Auditor's Report of the Ohio Public Employees Retirement System, Franklin County, prepared by KPMG LLP, for the audit period January 1, 2003 to December 31, 2003. Based upon this review, we have accepted these reports in lieu of the audit required by Section 117.11, Revised Code. The Auditor of State did not audit the accompanying financial statements and, accordingly, we are unable to express, and do not express an opinion on them.

Our review was made in reference to the applicable sections of legislative criteria, as reflected by the Ohio Constitution, and the Revised Code, policies, procedures and guidelines of the Auditor of State, regulations and grant requirements. The Ohio Public Employees Retirement System is responsible for compliance with these laws and regulations.

Betty Montgomeny

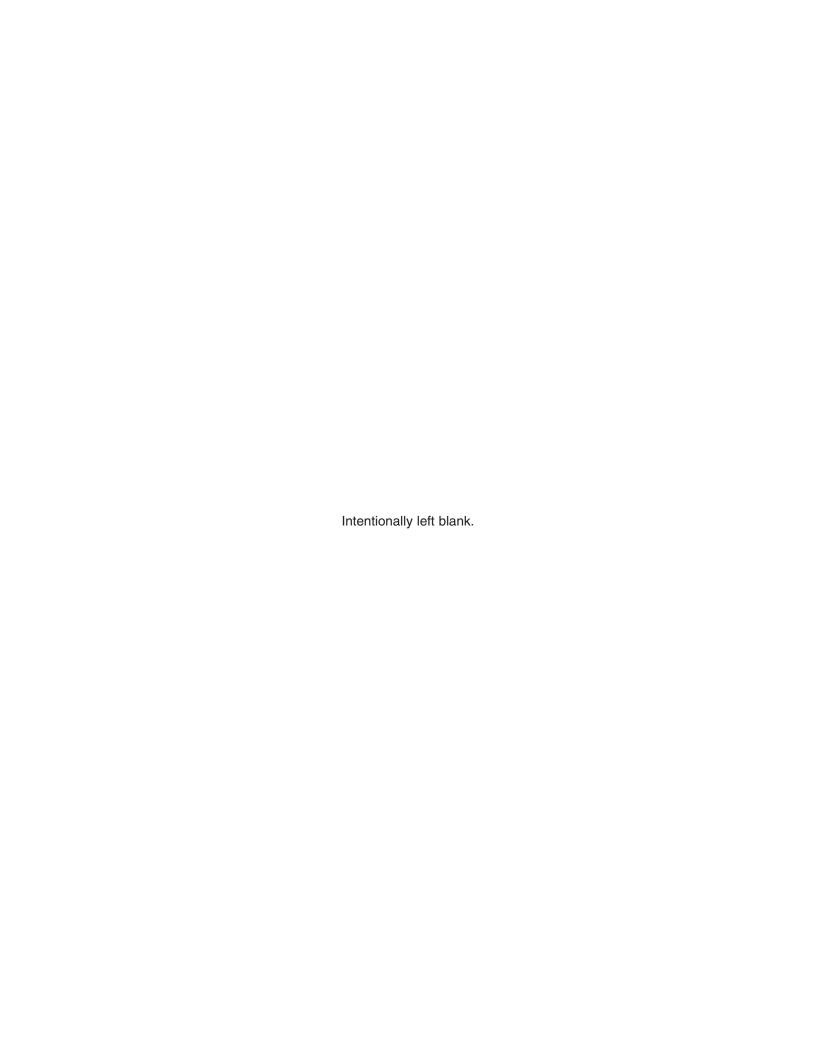
BETTY MONTGOMERY Auditor of State

May 24, 2004



# Contents

Introductory Section		
The OPERS Retirement Board		
Organizational Structure		
Letter of Transmittal		
Certification of Achievement Award in Financial Reporting		
Public Pension Principles Achievement Award		
Distinguished Budget Presentation Award		19
Financial Section		
Independent Auditor's Report		
Management's Discussion and Analysis		23
Financial Statements		
Combining Statements of Fiduciary Net Assets		
Combining Statements of Changes in Fiduciary Net Assets		
Notes to Combining Financial Statements		34
Required Supplementary Information		
Schedule of Funding Progress		
Schedule of Employer Contributions		
Notes to Required Supplementary Schedules		50
Additional Information Administrative Expenses		E ?
Schedule of Investment Expenses		
Schedule of Payments to Consultants		
•		J-
Investment Section		_
Investment Report		
Investment Summary		
Facts at a Glance — Total Portfolio		
Schedule of Investment Results		
List of Largest Assets Held		
Schedule of U.S. Stock Brokerage Commissions Paid		
Asset Class Reviews		
Investment Policy Summary		
•		•
Actuarial Section  Report of the Actuary		00
Summary of Assumptions		
Actuarial Valuation Data		
Schedule of Retirees and Beneficiaries Added To and Removed From Rolls .		
Short-Term Solvency Test		
Analysis of Financial Experience		
Actual vs. Recommended Contribution Rates		
Statistical Section		
Employer Contribution Rates		a-
Revenues by Source		
Expenses by Type		
Schedule of Benefit Recipients by Benefit Type		
Schedule of Average Benefit Payments		
Number of Benefit Recipients by Category		
Number of New Benefit Recipients and Refund Payments		
Disbursement by Category		
Member Count		
Member Contribution Rates	1	04
Number of Employer Units	1	05
Plan Statement	1	106



# Introductory Section







## The OPERS Retirement Board

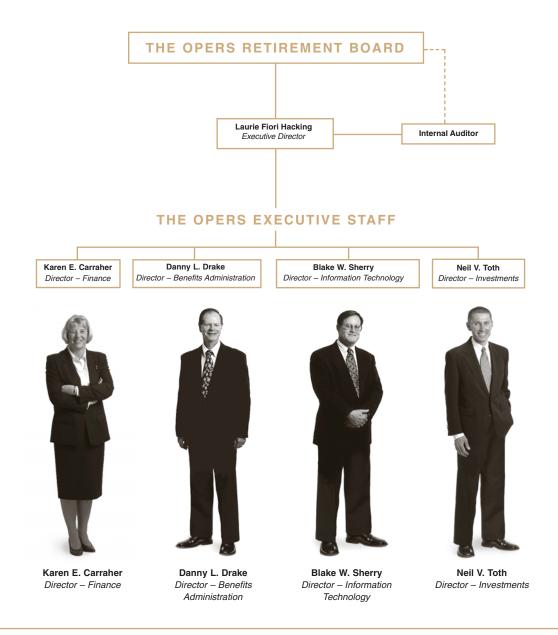
(front row, left to right) Barbara J. Thomas, representing county employees; Ken Thomas, representing municipal employees; Cinthia Sledz, representing miscellaneous employees; Ronald C. Alexander (Vice-Chair), representing state employees; Sharon M. Downs, representing retirees

(back row, left to right) Charlie Adkins (Chair), representing non-teaching college and university employees; C. Scott Johnson, Director of the Department of Administrative Services; Jim Tilling, representing the Auditor of State and O'Neal Saunders, representing the Attorney General.

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

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

# Organizational Structure



## **Advisors**

Actuary— Gabriel, Roeder, Smith & Company Detroit, Michigan Investment Policy Advisors To The Retirement Board— EnnisKnupp + Associates Chicago, Illinois

## **Auditors**

KPMG, LLP Columbus, Ohio (Under Contract With The Auditor Of State)



## **Ohio Public Employees Retirement System**

277 East Town Street Columbus, Ohio 43215-4642 1-800-222-PERS (7377) www.opers.org

April 26, 2004

Dear Mr. Chair and Members of the Retirement Board:

It is our privilege to submit to you the Comprehensive Annual Financial Report (Annual Report) for the Ohio Public Employees Retirement System (OPERS or System) for the fiscal year ending December 31, 2003. As in the past, responsibility for both the accuracy of the data, as well as the completeness and fairness of the presentation, rests with OPERS management. We believe this report reflects our adherence to the Board's directives—specifically, that OPERS management maintains the highest standards of prudent stewardship of OPERS' assets and delivers dedicated service to our members and our retirees.

#### **Historical Overview**

OPERS was established January 1, 1935 to make available a secure means to provide retirement for employees of the state of Ohio. From 1935 to the present, the System has, overall, experienced strong growth which has enabled us to provide benefit and service enhancements for members and retirees. In 1938, the System expanded to include employees of counties, municipalities, health departments and park and conservancy districts. Membership was made optional for elected officials in 1941. Survivor benefits became part of the OPERS benefit structure in 1951. Although not mandated, health-care benefits were provided for retirees in the 1970s. In 1982, a Law Enforcement Division was established. The System attained full-funding status in the late 1990s and maintained that status for three years. Legislation enacted in 2000 enhanced benefits for active members and retirees and allowed for two new plans (the Member-Directed and the Combined Plans) to be established. These plans were announced in 2002 and implemented in 2003. Also in 2003, the Voluntary Employees Beneficiary Association (VEBA) was established providing members with a medical savings account option.

#### **Our Mission**

Our mandate is for OPERS to provide retirement, disability and survivor benefit protection for thousands of public employees throughout the state; our tradition has been to meet that mandate. Employees, and their employers, pay into the System during the employee's working years. OPERS, in turn, pays benefits to these members throughout their retirement, and to qualified beneficiaries upon a member's or retiree's death.

Currently, OPERS serves more than 650,000 members and provides more than 140,000 retirees and surviving beneficiaries with monthly benefits. In addition, the System currently

works with more than 3,200 different public employers. OPERS managed a net asset base of more than \$59 billion as of December 31, 2003.

For additional information on benefits available, see the Plan Statement section of this document on page 106.

### **Membership**

Participating employers are divided, for actuarial purposes, into state, local government and law enforcement divisions. A complete description of the OPERS membership is contained in the Plan Statement section of this document, beginning on page 106.

## **Annual Report Organization**

This Annual Report is divided into six sections: (1) an Introductory Section, which contains the administrative organization, our Letter of Transmittal, the Certificate of Achievement for Excellence in Financial Reporting, the Public Pension Coordinating Council Achievement Award, and the Distinguished Budget Presentation Award; (2) a Financial Section, which contains the report of the Independent Auditors, Management's Discussion and Analysis, the financial statements of the System and certain required supplementary information; (3) an Investment Section, which contains a report on investment activity, investment policies, investment results, and various investment schedules; (4) an Actuarial Section, which contains an Actuary's Certification Letter and the results of the annual actuarial valuation; (5) a Statistical Section, which includes significant data pertaining to the System and (6) the System's Plan Statement.

#### 2003 Year in Review

OPERS was established and exists solely for the purpose of providing retirement, disability, and survivor benefits to Ohio's public employees. This purpose continues to be our central focus, as demonstrated by the accomplishments and initiatives of 2003.

#### **Accomplishments**

Many of the accomplishments of 2003 centered on implementing previously enacted legislation. OPERS implemented two new pension plans, the Member-Directed (Defined Contribution) Plan and the Combined Plan, as mandated by legislation enacted in 2000. Under each of these retirement plans, members have the opportunity to direct the investment of their OPERS contributions, allowing them to build assets for retirement. The new plans are available to new members hired on or after January 1, 2003. Members with less than five years of service credit as of year-end 2002 had 180 days to elect membership.

Previously, OPERS has offered only a traditional defined benefit plan (the Traditional Plan). Under this plan, participating members receive a set pension amount based on a preestablished formula. The newly established Member-Directed Plan provides for the employer and employee contributions to be deposited into a member's individual OPERS account. The funds are invested based on the member's direction and selection of investment instruments. The member's retirement benefit is based on the contributions and accumulated earnings/losses. The other newly established plan, the Combined Plan, is a hybrid defined benefit/defined contribution plan. The member's benefit is determined by a reduced formula

from the Traditional Plan, but incorporates the investment earnings/losses on the employee portion of the contribution that is subject to the member's investment direction.

As with any monumental task, implementing the two plans required the coordinated efforts of virtually every division within OPERS. To support the new plans, OPERS transitioned to a new record keeper for fund accounting services, requiring the collaborative efforts of the Accounting, Finance, Investment and Information Technology divisions. The Benefits, Communications and Information Technology divisions worked to establish eligibility requirements for the programs and developed the communication plan for members. Management within every area of OPERS made talent available for this effort to ensure its timely implementation.

It's clear the intensive, collaborative efforts of staff to effectively announce the plans to members and integrate the plans into OPERS' systems were highly successful. As of year-end, approximately 7,900 members chose one of the new plan offerings. By the end of the fourth quarter, net assets for the new plans had grown to \$41,354,902.

In conjunction with the Member-Directed Plan, OPERS established a Voluntary Employees Beneficiary Association (VEBA) to provide a funding mechanism for health care for members of the Member-Directed Plan. While participation in the VEBA is currently limited to participants in the Member-Directed Plan, OPERS is pursuing legislation which would permit participants in all three retirement plans to voluntarily contribute to the VEBA to help fund health care during retirement.

A Partial Lump-Sum Option Plan (PLOP) for benefit payments was rolled out in 2003—well ahead of the mandated delivery date of July 1, 2004. PLOP allows age-and-service retirees to choose to take part of their retirement benefit in a lump sum at the beginning of retirement. If a member chooses to take a lump-sum option, the amount of the monthly pension benefit paid to the member would be actuarially reduced so no additional costs to the System are incurred. The amount payable under the PLOP is limited to a minimum of six months and a maximum of 36 months worth of the original unreduced monthly pension benefit and is capped at no more than 50% of the retirement benefit amount. The Partial Lump-Sum Option Plan provides additional choices to OPERS members without adding actuarial costs to the System.

Also in 2003, again because of previously enacted legislation, OPERS established a Qualified Excess Benefit Arrangement (QEBA) for OPERS members whose monthly retirement benefit would otherwise have been limited by Internal Revenue Code section 415. QEBA allows eligible retirees to receive the full monthly benefit amount earned.

## **Other Major Initiatives**

At the ongoing direction of and with input from the Board, OPERS management establishes strategic plans annually to ensure all organizational activities are cost effective and customerservice oriented. In preparation for the anticipated "retiree population explosion," many of the initiatives of 2003 centered on positively positioning OPERS to be able to continue to exceed customer service standards, even though the number of members and retirees is growing exponentially. These initiatives, combined with a continued focus on operational efficiency

through increased information technology enhancements, will allow the System to service the increased number of members and retirees without increasing the staff correspondingly.

In 2002, in an effort to provide ongoing superior customer service, OPERS established two systems that are accessible at any time so that member questions can be answered at the member's convenience. In 2003, both systems showed strong—and growing—usage by members and retirees. The Internet-based member benefit system allows members access to account information whenever they choose to sign on. Interestingly, this service averages approximately 3,000 visits each month. OPERS also has implemented a telephone interactive voice response (IVR) system to give members and retirees additional access to routine information (such as account information) and to enable them to request routine forms whenever they choose. As of year-end 2003, the IVR system processed more than 11,000 routine requests. During 2003, OPERS improved the functionality of both systems through both hardware and operational changes and implemented the second phase involving call tracking and customer relationship management.

The OPERS call center for members and retirees continued to experience strong growth in 2003. During the past year, the member call center handled some 469,044 calls. OPERS also has an employer-dedicated call center staffed with Customer Service Representatives (CSRs) trained in contribution reporting policies, membership issues, employer billing, employer requirements for member disability and retirement processing. As of year-end 2003, the employer-dedicated call center handled more than 25,000 calls.

The OPERS construction project, planned throughout 1998 and started in 1999, was completed in 2003. This project has allowed OPERS to move all employees under one roof, resulting in the elimination of the ongoing expense, inconvenience and inefficiency of placing employees in costly leased space.

The completed construction also allows OPERS to offer, in house, a wider variety of educational seminars to keep members, retirees and employers informed about OPERS policies, programs and benefits. Although OPERS has a strong tradition of providing informational seminars for employers and members; and, of course, seminars for those members nearing retirement, in 2003 OPERS added Retiree Seminars. These seminars focus on events that occur after a member has retired such as beneficiary changes, changes in status and health-care benefits changes. In 2003, more than 1,400 retirees and guests attended 12 educational seminars.

During 2003, OPERS reduced its previously approved \$91.0 million operating budget by \$3.7 million. This mid-year reduction occurred as a result of an organization-wide effort to reduce expenses and improve operating efficiencies in response to the economic climate and fiscal constraints. OPERS always strives to make fiscally responsible expenditures.

## **The Future of Health-Care Benefits**

The largest initiative in 2003 was the Health-Care Preservation Project, specifically how to continue to provide adequate and affordable health care now and into the future. While providing pension benefits has always been OPERS' primary responsibility, OPERS has also made it a priority to provide substantial health-care benefits as well. While neither guaranteed

nor mandated by statute, the OPERS Board and staff recognize the importance of postretirement health-care coverage for members and benefit recipients.

Health-care expense has increased significantly in the past year, not just for OPERS, but nationally. OPERS' health-care costs have almost doubled in the past four years from approximately \$500 million to more than \$900 million. The year 2003 showed no relief in the upward trend of health-care costs with an increase of 17.0% posted. There is no dedicated funding source for health care since the employer and employee contributions are intended to provide funding for the pension benefits. The statute does allow OPERS to use some of the employer contributions to fund health care, but only the residual amount after pension funding obligations are met. Obviously, the increasing demands for the funding of pension benefits and the increasing cost of health care have combined to create funding challenges. OPERS remains committed to providing both access to and funding for subsidized health care, all the while maintaining the System's financial integrity.

Currently, OPERS has one of the most soundly funded health-care systems in the state—a status achieved due to advance planning and strict adherence to established guidelines. As of December 31, 2003, OPERS had \$10.8 billion of net assets in its health-care fund. Largely due to this solid foundation of funding, OPERS has weathered the last few years of market downturns better than other systems. However, OPERS recognizes the need to make fundamental changes in the health-care plan in order to preserve its funding for future retirees. OPERS believes that phased-in, incremental changes as well as member education will preserve the health of the program.

Accordingly, in 2003, OPERS began a project to study the health-care program including a comprehensive review of its funding and benefit structures. This project included participation by representatives of employer, member and retiree constituent groups. The purpose of the study was to ensure that all opportunities to preserve health-care funds—while maintaining our ability to offer health-care benefits—could be identified.

As a result of this collaborative effort, the Health Care Preservation Plan (HCPP) was proposed and is currently being reviewed by the Retirement Board. The HCPP is intended to provide an organized and systematic approach for ongoing evaluation of OPERS' health-care program and its solvency, as well as identification of desirable changes to ensure a lasting program. A proactive approach to refining the OPERS health-care program will help ensure its long-term solvency. Whatever final changes to the health-care program are implemented, OPERS remains committed to ensuring the changes are implemented gradually, over time, so that the impact on members and retirees is incremental. This topic will remain a top priority throughout 2004.

### **Legislative Changes**

At the state level, there were a number of pension bills introduced but no significant pension legislation was enacted in 2003. At the federal level, OPERS will be positively impacted by the enactment of the Prescription Drug and Medicare Modernization Act of 2003. OPERS tracked the development of this legislation from its inception and worked closely with the Ohio Congressional delegation and other public plans to make clear that public plan sponsors are eligible to participate in the new program.

Although far from perfect, this landmark legislation represents an important and positive first step forward in addressing sorely needed prescription drug coverage for seniors. Beginning in 2006, OPERS will be able to use the new federal program to offset some of our prescription drug costs. Early estimates indicate an annual potential savings of approximately \$50 million, which will help extend the solvency period of our Health-Care Trust Fund.

## **Future Legislative Initiatives and Advocacy Efforts**

At both the federal and state levels, OPERS will continue to pursue a number of important legislative initiatives. Over the past year, the OPERS Board has approved going forward with a number of changes in state law that would have a positive impact on the funding status of the System. These include changing the due date for transmittal of employer contributions, which will result in employer contributions being available for investment by OPERS in a more timely fashion, and increasing the minimum earnable salary necessary to earn full-time service credit. Other legislative changes under consideration would establish new requirements for the coordination of health-care benefits, changes in the interest paid on the OPERS additional annuity program, and authority to establish a retiree medical savings account program for active members to voluntarily contribute to by payroll deduction.

At the federal level, OPERS will continue to take a more active role in the shaping of national policies and legislation aimed at controlling rapidly escalating health-care costs. In addition to its continued participation in the National Coalition on Health Care, which is a broad-based alliance of private and public organizations whose goal is to achieve better and more affordable health care for all Americans, OPERS is also increasing its efforts to work with other public pension plans and organizations to make sure that health-care policy decisions are made in the best interests of our retirees and the System.

Toward this goal, OPERS has agreed to participate in a new benchmarking service being developed by Cost Effectiveness Measurement, Inc. (CEM), which is a global information company that provides service and cost benchmarks and identifies best practices among retirement systems and investment operations around the world. By participating in the health-care benchmarking service, OPERS will gain insight into best health-care practices, learn how other systems are financing rising health-care costs, and be able to compare our plan design and performance measures against other systems. OPERS is also putting corporate governance efforts towards the stabilization of prescription drug prices through our participation in a coalition comprised of pension system officials, corporate governance and finance experts.

#### **Internal Controls**

The management of OPERS is responsible for and has implemented systems of internal accounting controls. These controls are designed to provide reasonable assurances for the safeguarding of assets and the reliability of financial records. We believe that the internal accounting controls currently in place are adequate to meet the purpose for which they were intended. We also believe the financial statements, supporting schedules and statistical tables to be fairly presented in all material respects.

## **Accounting System and Reports**

The accrual basis of accounting is used in recording financial transactions. Expenses are recorded when the liability is incurred, and revenues are recorded in the accounting period in which they are earned and become measurable. Interest earned is accrued on a monthly basis. Accounts receivable at year-end, in addition to accrued interest receivable, reflect accrued member and employer charges and investment proceeds due on sales that have not yet settled. Investments are recorded at fair value. Capital assets are listed at cost less accumulated depreciation. Under our cash management program, receipts are immediately deposited and are recorded as undistributed deposits until such time as they are allocated to member contributions, employer receivables, employer contributions, and investment income.

We encourage all readers of this annual report to review Management's Discussion and Analysis commencing on page 23 for further insight relating to the financial statements and financial condition of OPERS.

#### **Additions to Plan Net Assets**

The collection of employer and employee contributions, as well as income from investments, provides the reserves needed to finance retirement benefits. Contributions, investment, and other income for fiscal year 2003 totaled \$14,518,671,062.

	2003	2002	Increase (Decrease) Amount	Increase (Decrease) Percentage
Employer Contributions	\$ 1,626,778,671	\$ 1,683,021,503	\$ (56,242,832)	(3.3%)
Members Contributions	1,023,394,823	1,094,343,553	(70,948,730)	(6.5%)
Net Investment Income (Loss)	11,868,086,475	(5,684,965,700)	17,553,052,175	308.8%
Misc. Income	411,093	623,421	(212,328)	(34.1%)
Total	\$14,518,671,062	\$(2,906,977,223)	\$17,425,648,285	599.4%

Employer and members contributions decreased by \$56,242,832 or 3.3% and \$70,948,730 or 6.5%, respectively from 2002 to 2003. The decrease in member contributions is explained because the 2002 contributions were inflated due to a change in accounting practice wherein enhanced estimating procedures for year-end accruals were implemented. Employer contributions decreased in 2003 largely due to a decrease of approximately \$100 million in employer purchased early retirement buyouts. Both member and employer contributions for the year ended December 31, 2003 include year-end accruals based upon estimates derived from historical payment patterns. Contribution rates remained unchanged during 2003. Investment income net of related administrative expenses and fees increased significantly in 2003 due to the improvement in the financial markets; that increase is more fully explained in the Investment Section beginning on page 55. Other income consisting of securities litigation settlements and other various small miscellaneous items also decreased from 2002 to 2003.

#### **Deductions to Plan Net Assets**

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

	2003	2002	Increase (Decrease) Amount	Increase (Decrease) Percentage
Benefits	\$3,144,246,755	\$2,836,137,068	\$308,109,687	10.9%
Administrative Expenses	69,836,790	56,267,175	13,569,615	24.1%
Refunds	193,209,598	187,051,815	6,157,783	3.3%
Total	\$3,407,293,143	\$3,079,456,058	\$327,837,085	10.6%

Deductions for fiscal year 2003 totaled \$3,407,293,143, an increase of 10.6% over fiscal year 2002 expenses. The majority of the increase is due to an increase in the number of benefit recipients and associated benefit payouts. The increase in refund dollars paid out is directly attributable to a larger number of members withdrawing their contributions. The number of members taking refunds increased by more than 4,800 from 2002 to 2003. The increase in administrative expenses is largely attributable to increased payroll costs, the costs associated with implementing the newly created Member-Directed and Combined Plans and the artificially low building expenses in 2002 while many of the building components were under warranties. Administrative Expenses are detailed in the Financial Section on pages 53 and 54.

## **Funding and Reserves**

Funds, derived from the excess of additions over deductions, are accumulated by the System in order to meet current and future benefit obligations to retirees and beneficiaries. The higher the level of funding, the larger the accumulation of assets, hence, the greater the investment income potential. Continuous improvement in the funding of the System is sought through the accumulation of adequate reserves, higher investment earnings and effective cost containment programs. The latest actuarial valuation, dated December 31, 2002, indicates that the actuarial value of liabilities exceeds the actuarial value of assets by \$7.2 billion. This actuarial valuation reflects the poor financial market performance and corresponding investment losses experienced in the last three years. As a result, the System's actuarial liabilities are 86% funded. The unfunded actuarial accrued liability will be funded or amortized over 29 years, which is within the required 30-year limit. Prior to the recent multi-year bear market, the System enjoyed a 100% funded status in the December 31, 2001 actuarial valuation. See Management's Discussion and Analysis starting on page 23 for a more in-depth discussion of OPERS' funded status.

#### **Investments**

The System's investments are governed by Section 145.11 of the Ohio Revised Code (ORC). This section of the ORC requires a "prudent person" standard be applied to all investment decisions. The prudent person standard establishes a standard for all fiduciaries, which includes anyone who has authority over the fund's investments. Under the prudent person standard, fiduciaries are to "discharge their duties solely in the interest of the fund participants and beneficiaries and with the degree of diligence, care and skill which prudent persons would ordinarily exercise under similar circumstances in a like position." The OPERS Board determines the asset allocation strategy for the System's investments. That asset allocation strategy requires a prudent diversification of investments within the fund enabling OPERS to reduce overall risk while targeting an adequate rate of return for the fund over the long-term.

For the year ended December 31, 2003, total return on investments was 25.33%, the second highest single-year return since 1985. OPERS ended the year with net assets of approximately \$59.1 billion, an increase of \$11.1 billion over the 2002 year-end net assets of \$48.0 billion. The annualized rates of return over the past three- and five-year periods was 2.20% and 3.51%, respectively. Please see the Investment Section starting on page 55 for a more comprehensive discussion of OPERS' investment program.

#### **Awards**

The events of the past year in both the public and private sectors have clearly demonstrated the importance of adhering to the highest possible fiscal standards. OPERS was honored to have been recognized for its achievements by the following distinguished organizations.

#### **Certificate of Achievement**

In 2003, and for the 20th consecutive year, the Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Ohio Public Employees Retirement System for its Annual Report for the fiscal year ended December 31, 2002. In order to be awarded a Certificate of Achievement, a government unit must publish an easily readable and efficiently organized Annual Report, whose contents meet or exceed program standards. Such reports must satisfy both generally accepted accounting principles and applicable legal requirements. A Certificate of Achievement is valid only for one year. We believe our current report continues to conform to the Certificate of Achievement Program requirements. The 2003 Annual Report will be submitted to the GFOA.

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

OPERS was awarded the Public Pension Coordinating Council's Public Pension Principles 2003 Achievement Award. This award is presented bi-annually and recognizes the achievement of high professional standards in the areas of benefits, actuarial valuations, financial reporting, investments and disclosures to members.

### **Distinguished Budget Presentation Award**

OPERS was recognized with GFOA's Distinguished Budget Presentation Award for the first time in 2003. The award recognizes significant achievement in creating a budget that meets the highest principles of governmental budgeting. The budget must meet nationally recognized guidelines assessing the budget as a policy document, a financial plan, an operations guide and a communications vehicle.

#### **Professional Services**

Professional services are provided to the Ohio Public Employees Retirement System by consultants appointed by the Board to aid in efficient and effective management of the System. Actuarial services are provided by Gabriel, Roeder, Smith & Company; Detroit, Michigan. The investment advisor to the Board is EnnisKnupp + Associates; Chicago, Illinois. The financial records of the System were audited by KPMG, LLP, Certified Public Accountants, Columbus, Ohio, under contract with the Auditor of the state of Ohio. OPERS also retains the services of independent consultants for the defined contribution plans. In addition, both the Real Estate and Private Equity Portfolios within the Investment Division have retained the services of consultants.

## **Acknowledgments**

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

The purpose of this report is to provide complete and reliable information as a basis for making management decisions, as a means for determining compliance with the legal provisions, and as a means for determining responsible stewardship over the assets held in trust for the members of this System. We sincerely hope we have accomplished those goals.

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

Respectfully submitted,

LAURIE FIORI HACKING

Laurie Tion Hacking

Executive Director

KAREN E. CARRAHER, CPA

Kaun E. Canaker

Director - Finance



KAREN E. CARRAHER, CPA
Director - Finance

## Fiduciary Responsibilities

The Board and executive management of OPERS are fiduciaries of the pension trust fund. Fiduciaries are charged with the responsibility of assuring that the assets of OPERS are used exclusively for the benefit of plan participants and their beneficiaries.

### LAURIE FIORI HACKING

Executive Director

## Request for Information

This financial report is designed to provide the Retirement Board, our membership, taxpayers, investment managers, and creditors with an overview of OPERS' finances and accountability for the money received. Questions concerning any of the information provided in this report or requests for additional financial information should be addressed to:

Karen E. Carraher Director – Finance Ohio Public Employees Retirement System 277 East Town Street Columbus, Ohio 43215-4642

## Certificate of Achievement in Financial Reporting

# Certificate of Achievement for Excellence in Financial Reporting

Presented to

# Public Employees Retirement System of Ohio

For its Comprehensive Annual
Financial Report
for the Fiscal Year Ended
December 31, 2002

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.

MILE OFFICE OFFICE OF THE CONTROL OF

President

**Executive Director** 

## Public Pension Principles Achievement Award



## **Public Pension Coordinating Council**

# Public Pension Standards 2003 Award

Presented to

## **Ohio Public Employees Retirement System**

In recognition of meeting professional standards for plan design and administration as set forth in the Public Pension Standards.

Presented by the Public Pension Coordinating Council, a confederation of

National Association of State Retirement Administrators (NASRA)

National Conference on Public Employee Retirement Systems (NCPERS)

National Council on Teacher Retirement (NCTR)

Alan H. Winkle Program Administrator

alan Helinkle

# Distinguished Budget Presentation Award



# **Financial Section**





## Independent Auditor's Report



KPMG LLP Suite 500 191 West Nationwide Boulevard Columbus, OH 43215-2568 Telephone 614 249 2300 Fax 614 249 2348

#### Independent Auditors' Report

The Retirement Board
The Ohio Public Employees Retirement System:

We have audited the accompanying combining statement of fiduciary net assets of the Ohio Public Employees Retirement System (OPERS) as of December 31, 2003, and the related combining statement of changes in fiduciary net assets for the year then ended. These financial statements are the responsibility of OPERS' management. Our responsibility is to express an opinion on these financial statements based on our audit. The accompanying combining financial statements of the Ohio Public Employees Retirement System, as of December 31, 2002, were audited by other auditors whose report thereon dated April 4, 2003, expressed an unqualified opinion on those statements.

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

In our opinion, the 2003 combining financial statements referred to above present fairly, in all material respects, the financial position of OPERS as of December 31, 2003, and the changes in its fiduciary net assets for the year then ended in conformity with accounting principles generally accepted in the United States of America.

The management's discussion and analysis on pages 23 through 29 and the schedules of funding progress and employer contributions and related notes on pages 49 through 52 are not a required part of the combining financial statements, but are supplementary information required by accounting principles generally accepted in the United States of America. We have applied certain limited procedures, which consisted principally of inquiries of management regarding the methods of measurement and presentation of the required supplementary information. However, we did not audit the information and express no opinion on it.

In accordance with Government Auditing Standards, we have also issued a report dated April 16, 2004, on our consideration of OPERS' internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts and grants. 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 audit.

Our audit for the year ended December 31, 2003 was conducted for the purpose of forming an opinion on the combining financial statements taken as a whole. The supplementary information included on pages 53 and 54 for the year ended December 31, 2003 is presented for the purpose of additional analysis and is not a required part of the combining financial statements. Such information has been subjected to the auditing procedures applied in the audit of the combining financial statements, and, in our opinion, is fairly stated in all material respects in relation to the combining financial statements taken as a whole for the year ended December 31, 2003.



#### KEARG

The report of the other auditors referred to above, dated April 4, 2003, stated that the supplementary information on pages 53 and 54 for the year ended December 31, 2002 was subjected to auditing procedures applied in their audit of the 2002 combining financial statements and, in their opinion, was fairly stated in all material respects in relation to the combining financial statements for the year ended December 31, 2002, taken as a whole.

The introductory section on pages 3 through 19, the investments section on pages 55 through 87, the actuarial section on pages 88 through 95, and the statistical section on pages 96 through 105 have not been subjected to the auditing procedures applied in the audit of the combining financial statements and, accordingly, we express no opinion on them.

KPMG LEP

April 16, 2004

# Management's Discussion and Analysis

As management of the Ohio Public Employees Retirement System (OPERS or System), we offer this overview of the financial activities of OPERS for the year ended December 31, 2003. This narrative is intended to supplement the System's financial statements, and we encourage readers to consider the information presented here in conjunction with these statements, which begin on page 30.

## Overview of the Financial Statements

The following discussion and analysis are intended to serve as an introduction to OPERS' financial statements. The basic financial statements include:

- 1) Statement of Fiduciary Net Assets
- Statement of Changes in Fiduciary Net Assets
- 3) Notes to the Financial Statements

As mandated, this Comprehensive Annual Financial Report (Annual Report) also contains the following schedules, referred to as Required Supplementary Information:

- 1) Schedule of Funding Progress
- 2) Schedule of Employer Contributions
- 3) Notes to the Required Supplementary Information

Expenses associated with administering the System are presented immediately following the Notes to the Required Supplementary Information in the following schedules:

- 1) Administrative Expenses
- 2) Schedule of Investment Expenses
- 3) Schedule of Payments to Consultants

The financial statements contained in this Annual Report disclose financial data for each of the various legal plans described below:

 The Traditional Plan—a defined benefit plan in which a member's retirement

- benefits are calculated on a formula that considers years of service and final average salary.
- The Combined Plan—a defined benefit plan with elements of a defined contribution plan. Under the Combined Plan, members earn a formula benefit similar to the Traditional Plan (although reduced from the Traditional Plan benefit level) that is funded by employer contributions and associated investment earnings. Additionally, members earn a defined contribution benefit that is equal in amount to member contributions to the plan and investment earnings on those contributions.
- The Member-Directed Plan—a defined contribution plan in which members self-direct the investment of both member and employer contributions.
   The benefit under this plan is equal to the sum of member and vested employer contributions, plus investment earnings on those contributions.
   Employer contributions and associated investment earnings vest over a 5-year period at a rate of 20% per year.
- Post-employment Health-Care Plan—a legal plan established under section 401(h) of the Internal Revenue Code. This plan holds the portions of employer contributions made to the Traditional and Combined Plans that are set aside for funding retiree health care.
- Voluntary Employees' Beneficiary
   Association (VEBA)—a Retiree Medical
   Account (RMA) established to hold the
   portion of employer contributions made
   to the Member-Directed Plan that is set
   aside for funding retiree health care.
   OPERS is pursuing legislative changes
   that would permit members of all three
   plans (Traditional Plan, Combined Plan
   and Member-Directed Plan) to make
   voluntary contributions to the VEBA.

The basic combining financial statements are described below:

- The Statement of Fiduciary Net Assets is a point-in-time snapshot of account balances at fiscal year-end. It reports the assets available for future payments to retirees, and any current liabilities that are owed as of the statement date. The resulting Net Asset Value (Assets – Liabilities = Net Assets) represents the value of assets held in trust for pension and post-employment health-care benefits.
- The Statement of Changes in Fiduciary Net Assets displays the effect of pension fund transactions that occurred during the fiscal year, where Additions Deductions = Net Increase (or Decrease) in Net Assets. This Net Increase (or Decrease) in Net Assets reflects the change in the net asset value of the Statement of Fiduciary Net Assets from the prior year to the current year. Both statements are in compliance with Governmental Accounting Standard Board (GASB) Pronouncements.
- The Notes to Combining Financial Statements is an integral part of the financial statements and provides additional information that is essential for a comprehensive understanding of the data provided in the financial statements. These notes describe the accounting and administrative policies under which OPERS operates, and provide additional levels of detail for selected financial statement items. (See Notes to Combining Financial Statements on pages 34-48 of this report.)

Because of the long-term nature of most pension plans, financial statements alone cannot provide sufficient information to properly reflect the ongoing plan

- perspective. Therefore, in addition to the financial statements explained above, this financial report includes two additional Required Supplementary Information schedules with historical trend information.
- The Schedule of Funding Progress (page 49) includes actuarial information about the status of the plan from an ongoing, long-term perspective, and the progress made in accumulating sufficient assets to pay pension benefits when due. Valuation Assets in excess of Actuarial Accrued Liabilities indicate that sufficient assets exist to fund the future pension benefits of the current members and benefit recipients. Actuarial Accrued Liabilities in excess of Valuation Assets result in an Unfunded Actuarial Accrued Liability (UAAL). The UAAL represents the value, in current dollars, that would need to be accumulated to fund the pensions of all active and retired members as of the date represented in the schedule. For OPERS, the UAAL is being systematically funded over 29 years.
- The Schedule of Employer
   Contributions (page 49) presents
   historical trend information regarding
   the value of total annual contributions
   required to be paid by employers, and
   the actual performance of employers in
   meeting this requirement.
- The Notes to Required Supplementary Information provide background information and explanatory detail to aid in understanding the required supplementary schedules.

The Administrative Expense Schedules that follow the Required Supplementary Information display the operating costs of managing the System. These expenses include costs for investment and consultant services, which are detailed in the accompanying schedules.

## Financial Highlights

- The OPERS investment portfolio reported a total return of 25.33% for the year 2003.
- Plan net assets increased by \$11.1 billion, or 23.2%, during 2003, primarily due to strong investment returns.
- Due to three straight years of market declines (2000-2002), OPERS' actuarial accrued liabilities exceeded its actuarial value of assets, creating an unfunded actuarial accrued liability of \$7.2 billion as of December 31, 2002, the date of the latest actuarial valuation.
- OPERS' funding objective is to meet long-term benefit obligations and, to the extent possible, fund health-care benefits. As of December 31, 2002, the date of the latest actuarial valuation, the funded ratio of OPERS was 86%. In general, this means that for each dollar's worth of future pension liability, OPERS has accumulated \$0.86 to

- meet that obligation. The latest actuarial report indicates that if future activity proceeds according to assumptions, OPERS will accumulate sufficient assets to pay all pension liabilities for active members and retirees within 29 years.
- Additions to plan net assets for the year 2003 were \$14,518,671,062, which includes member and employer contributions of \$2,650,173,494 and net gains from investment activities and other miscellaneous income totaling \$11,868,497,568.
- Deductions from plan net assets increased from \$3,079,456,058 during 2002 to \$3,407,293,143 in 2003, or about 10.6%. The increase relates to increases in pension benefits and health-care payments. Refunds of member contributions (including interest and qualifying matching employer funds) increased by approximately \$6 million, or 3.3%, to \$193,209,598 from 2002 to 2003.

## OPERS' Net Assets (Table 1)

For the Years Ended December 31, 2003, 2002 and 2001 (\$ in millions)

	2003	2002	2001	Amount Increase/ (Decrease) from 2002 to 2003	Percent Increase/ (Decrease) from 2002 to 2003
Current and other Assets	\$ 716	\$ 827	\$ 525	\$ (112)	(13.5%)
Investments at Fair Value	63,823	49,906	56,736	14,319	28.7%
Capital Assets	127	118	87	9	7.6%
Total Assets	64,666	50,851	57,348	14,216	28.0%
Total Liabilities	5,568	2,865	3,376	3,104	108.3%
Net Assets	\$59,098	\$47,986	\$53,972	\$11,112	23.2%

## **Analysis of Financial Activities**

OPERS' funding objective is to meet longterm benefit obligations through investment income and contributions. Accordingly, the collection of employer and member contributions, and the income from investments provide the reserves needed to finance future retirement benefits.

For the year 2003, OPERS' net investment income totaled \$11.9 billion. This more than recouped the \$8.9 billion in investment losses experienced over the preceding three years. Member contributions decreased slightly due to the effects of enhanced year-end accrual procedures instituted in 2002. Employer contributions for 2003 decreased slightly due to reductions in early retirement buy outs. Net assets held in trust for pension and health-care benefits increased by \$11.1 billion in 2003. See Table 1, page 25.

Member and employer contributions have remained level, as a percent of payroll, for quite some time. In fact, the percentage of payroll that members and employers contribute for the state or local divisions of OPERS has not increased since 1977. In future years as total assets and liabilities grow, OPERS' investment income will play an increasingly significant role in funding future retirement benefits—eventually providing 80-90% of the necessary funds. Therefore, investment return over the long term is critical to the funding status of the System.

OPERS' funding status can be somewhat misleading when looking strictly at OPERS' actuarial reports. For instance, OPERS' actuarial reports generally take about eight months to complete (which is typical for pension funds). Therefore, the data is eight months old at best. In addition, the actuarial assets used to calculate funded status are not based on year-end fair value (market value) as of

the valuation date. Market gains and losses, for actuarial funding purposes, are smoothed over a rolling four years. This smoothing of actuarial gains and losses mitigates the need to constantly raise or lower contribution rates because volatile market conditions can be recognized (smoothed in) over several years.

The negative aspect of actuarial smoothing techniques is that the fair value (market value) of assets may be significantly different from funding value (actuarial value) of assets at a given point in time. This means that in periods of extended market decline the fair value of assets will usually be less than the funding, or actuarial value of assets. This was the case with OPERS during the extended down market from 2000 to 2002. At December 31, 2002, the date of our latest actuarial evaluation, the actuarial value of assets set aside to pay pension benefits (non-health care assets) was \$43.7 billion. The fair value of these assets, the value on the financial statements of OPERS, at December 31, 2002 was only \$39.1 billion. Therefore, OPERS appeared to be better funded, based on the actuarial value of assets, than the market value of assets would have indicated. It is likely that the reverse of this situation will be true when the 2003 actuarial valuation is completed. OPERS' fair value of pension (non-health care) assets at year-end 2003 rose to \$48 billion. It is important to understand how smoothing affects funded status when reviewing the actuarial-related data contained within this report.

Based upon our latest actuarial valuation for the year ended December 31, 2002, the System's actuarial value of liabilities exceeded its actuarial value of assets by \$7.2 billion. Actuarial projections indicate that the \$7.2 billion in unfunded liabilities will be amortized and funded over a 29-year period, which is within generally acceptable funding guidelines.

Increasing health-care costs continue to be a concern. Health-care expenses rose from \$776 million in 2002 to more than \$907 million in 2003, an increase of 17.0%. Non-health care inflation for the same period rose by only about 2.3%. The continued increase in health-care costs in excess of general inflation is a serious concern. The OPERS Retirement Board, in conjunction with various OPERS constituency groups, has been reviewing alternatives in health-care plan design and funding throughout 2003. The purpose of these meetings and deliberations is to extend the solvency period of the OPERS health-care fund. It is anticipated that the Board will approve new funding and plan design arrangements in late 2004.

## Financial Analysis - Summary

Net assets may serve over time as a useful indication of OPERS' financial position (see Table 1 on page 25). At the end of calendar year 2003, the assets of OPERS exceeded its liabilities, with \$59,097,674,984 in net assets held in trust for pension and post-employment health-care benefits. The net assets are available to meet OPERS' ongoing obligation to plan participants and their beneficiaries and to fund, as far as possible, OPERS provided health-care benefits.

The market turnaround in 2003 greatly boosted OPERS' funding position. However, in spite of the investment gains recorded in 2003, the Board found it necessary, commencing in 2004, to reduce the percentage of contributions to be used for funding post-retirement health care from 5% to 4% of payroll. It is possible that over the next several years, the percentage of employer contributions used to fund post-retirement health care will need to be reduced even further or, alternatively, that member and employer contribution rates will need to be

increased in order to maintain acceptable funding levels for OPERS' non-health care retirement benefits.

## Capital Assets

As of December 31, 2003, OPERS' investment in capital assets totaled \$126,842,607 (net of accumulated depreciation and amortization). This investment in capital assets includes equipment, furniture, the office building complex and construction in progress.

OPERS invested more than \$22 million in capital assets during 2003. The major single capital project during the past three years has been the expansion of OPERS' office facility. The expanded facility is expected to accommodate the quantity of staff needed to support the rapidly growing number of benefit recipients, and provide space to adequately house the service personnel necessary to provide quality support services to employers, members and retirees. The plaza, which is the final phase of the new office facility, was completed in January 2004. Completion of the new facility has eliminated the need for OPERS to rent supplemental downtown office space and additionally provides on-site facilities to accommodate OPERS-sponsored retirement-preparedness seminars.

## Reserves

OPERS' reserves are established from employer contributions, member contributions and the accumulation of investment income, net of investment and administrative expenses and benefit payments.

State statute requires that the Annuity and Pension Reserve Fund and the Survivor's Benefit Fund be fully funded. These two funds hold reserves set aside to pay benefits to retired members and their

## **OPERS' Reserves (Table 2)**

As of December 31, 2003, 2002 and 2001

	2003	2002	2001
Employees' Savings Fund	\$ 8,896,964,040	\$ 8,513,859,664	\$ 7,991,271,196
Employers' Accumulation Fund	27,368,711,915	18,979,364,269	27,435,948,587
Annuity & Pension Reserve Fund	21,562,826,137	19,305,720,320	17,438,484,109
Survivor Benefit Fund	1,143,463,941	1,096,358,667	1,027,255,264
Defined Contribution/VEBA	35,826,751	0	0
Income Fund	89,838,868	86,024,578	77,946,292
Expense Fund	43,332	4,969,567	1,824,898
Total Reserves at Fair Value	\$59,097,674,984	\$47,986,297,065	\$53,972,730,346

survivors. This statute ensures that priority is first given to setting aside funds necessary to pay non-health care pension and survivor benefits to those who have already retired and to their beneficiaries. Once these pension obligations have been met, reserves are accumulated to fund the future pension benefits of active members.

As of December 31, 2002, the date of our latest actuarial valuation, OPERS had not only accumulated sufficient assets to fund retirees and their beneficiaries, but had also provided 76% of the reserves necessary to fund pensions for active members, based on service credit earned through year-end 2002.

# Additions to Fiduciary Net Assets

As noted above, the reserves needed to finance retirement benefits are accumulated through the collection of employer and employee contributions and through investment income (net of investment expense). Additions for the year ended December 31, 2003, totaled \$14,518,671,062. Of this amount \$11,868,086,475 or 81.7%, resulted from net income on investing activities.

Additions to fiduciary net assets for 2003 increased by \$17,425,648,285 or 599.4% from the prior year primarily due to the significant increase in investment income

## Additions to Fiduciary Net Assets (Table 3)

For the Years Ended December 31, 2003, 2002 and 2001

	2003	2002	2001	Amount Increase/ (Decrease) from 2002 to 2003	Percent Increase/ (Decrease) from 2002 to 2003
Employer Contributions	\$ 1,626,778,671	\$ 1,683,021,503	\$1,408,392,987	\$ (56,242,832)	(3.3%)
Members' Contributions	1,023,394,823	1,094,343,553	931,050,640	(70,948,730)	(6.5%)
Net Investment Income	11,868,086,475	(5,684,965,700)	(2,717,233,466)	17,553,052,175	308.8%
Misc. Income	411,093	623,421	92,291	(212,328)	(34.1%)
Total	\$14,518,671,062	\$(2,906,977,223)	\$ (377,697,548)	\$17,425,648,285	599.4%

(from a loss of \$5.7 billion in 2002 to a gain of \$11.9 billion in 2003). The Investment Section of this report (page 55) summarizes the results of investment activity for the year ended December 31, 2003.

## Deductions from Fiduciary Net Assets

OPERS was created to provide retirement, survivor and disability benefits to qualified members and their beneficiaries. The cost of such programs includes recurring benefit payments as designated by the plan, elective refunds of

contributions to employees who terminate employment with a participating employer, and the cost of administering the System.

Deductions in fiduciary net assets for the year ended December 31, 2003 totaled \$3,407,293,143, an increase of 10.6% over 2002. The increase in benefits paid resulted primarily from an increase in the number of retirees receiving benefits and an increase in retiree health-care expenses. OPERS has consistently managed within its Administrative Expense Budget, with no material variances between planned and actual expenditures.

## Deductions in Fiduciary Net Assets (Table 4)

For the Years Ended December 31, 2003, 2002 and 2001

	2003	2002	2001	Amount Increase from 2002 to 2003	Percent Increase from 2002 to 2003
Benefits	\$3,144,246,755	\$2,836,137,068	\$2,574,189,051	\$308,109,687	10.9%
Administrative Expenses	69,836,790	56,267,175	40,081,348	13,569,615	24.1%
Refunds	193,209,598	187,051,815	262,681,258	6,157,783	3.3%
Total	\$3,407,293,143	\$3,079,456,058	\$2,876,951,657	\$327,837,085	10.6%

# Combining Statements of Fiduciary Net Assets

As of December 31, 2003 and 2002

	2003				
	Tradition	al	C	ombined	
	D	Post-empl	_		
	Pensions	Health	care	Pens	ions
Assets:	Ф 4 040 004 <del>7</del> 00	Φ 447.0	4 4 000	Φ 4-	74.050
Cash and Short-Term Investments	\$ 1,842,604,728	\$ 417,2	14,283	\$ 47	74,850
Receivables:					
Employer Contributions	186,862,550	71 /	64,614	1 0	17,297
Retirement Incentive Plan	65,773,505		24,584	1,0	17,237
Investment Sales Proceeds	51,416,587		34,818	,	33,028
Accrued Interest and Dividends	131,492,650		99,116		39,628
Due From Other Plans	21,942,343	23,4	133,110	,	33,020
	, ,	117.0	202 100	1.00	20.052
Total Receivables	457,487,635	117,0	23,132	1,00	39,953
Investments at Fair Value					
Investments, at Fair Value:	10 000 017 004	0.004.0	00 507	44.0	10 100
Global Bonds	10,009,617,804	2,264,2			19,199
Equities  Real Fateta	22,600,016,267		70,625		99,272
Real Estate	2,853,187,294		58,238		40,538
Private Equity International Securities	253,368,209		13,048		47,612 20,512
	10,192,396,823	2,305,4			00,513
Total Investments	45,908,586,397	10,384,1	90,620	28,00	07,134
Collateral on Loaned Securities	4,245,455,497	960,5	17,368	2,60	05,853
Capital Assets:					
Land	2,254,990		73,754		3,119
Building and Building Improvements	62,052,799		54,734		35,838
Furniture and Equipment	25,405,544		03,845		32,815
	89,713,333		32,333		71,772
Accumulated Depreciation	(14,984,813)		44,551)		19,146)
Total Capital Assets	74,728,520	48,1	87,782	1,0	52,626
Prepaid Expenses and Other	136,332,241				
TOTAL ASSETS	52,665,195,018	11,927,7	33,185	34,00	30,416
Liabilities:	0.000				
Undistributed Deposits	2,632,016		0.1.0.1.0		
Medical Benefits Payable	470 0		81,249		- 4 0 - 5
Investment Commitments Payable	170,057,706		50,816		51,956
Accrued Administrative Expenses	7,714,471	6	80,303		39,614
Due To Other Plans	4.045.455.465		47.000		12,505
Obligations Under Securities Lending	4,245,455,497	960,5	17,368	2,60	05,853
TOTAL LIABILITIES	4,425,859,690	1,113,9	29,736	11,10	39,928
Net Assets Held in Trust for Pension and					
Post-employment Health-care Benefits	\$48,239,335,328	\$10,813,8	03,449	\$22,89	90,488

A Schedule of Funding Progress is presented on page 49. See Notes to Combining Financial Statements, beginning on page 34.

				2002	
Member-	Voluntary	Total		Traditional Plan	
Directed	Employees Beneficiary Association	All Plans	Pensions	Post-employment Health care	Total
\$ 85,983	\$ 183,310	\$ 2,260,563,154	\$ 807,850,411	\$ 185,571,147	\$ 993,421,558
1,610,761 30,230 18,780	613,240 5,093 13,024	262,368,462 70,898,089 63,019,756 161,063,198 21,942,343	202,286,527 79,182,328 171,470,633 119,447,589	46,467,195 18,188,956 39,388,483 27,438,280	248,753,722 97,371,284 210,859,116 146,885,869
1,659,771	631,357	579,291,848	572,387,077	131,482,914	703,869,991
12,846,721 11,323,317 2,437,465	809,495 1,827,736 230,541 20,418 824,223	12,298,761,726 27,738,137,217 3,498,816,611 310,549,287 12,504,839,226	8,190,514,819 17,976,586,163 3,772,440,252 209,751,027 7,731,721,550	1,881,441,428 4,129,397,805 866,566,452 48,181,864 1,776,052,122	10,071,956,247 22,105,983,968 4,639,006,704 257,932,891 9,507,773,672
26,607,503	3,712,413	56,351,104,067	37,881,013,811	8,701,639,671	46,582,653,482
2,605,853	521,171	5,211,705,742	1,895,013,209	435,303,084	2,330,316,293
2,516 69,247 2,123,695	434 11,931 1,052,557	3,734,813 102,774,549 46,268,456	3,037,150 77,062,896 36,287,883	697,663 17,702,101 8,335,682	3,734,813 94,764,997 44,623,565
2,195,458	1,064,922	152,777,818	116,387,929	26,735,446	143,123,375
(255,290)	(131,411)	(25,935,211)	(20,325,575)	(4,668,983)	(24,994,558)
1,940,168	933,511	126,842,607	96,062,354	22,066,463	118,128,817
		136,332,241	99,870,094	22,941,138	122,811,232
32,899,278	5,981,762	64,665,839,659	41,352,196,956	9,499,004,417	50,851,201,373
25,208 349,703 11,454,100 2,605,853	16,844 16,704 2,245,738 521,171	2,632,016 114,581,249 208,302,530 9,000,795 21,942,343 5,211,705,742	4,466,539 346,221,826 6,480,403 1,895,013,209	1,026,008 95,374,085 79,530,542 1,488,612 435,303,084	5,492,547 95,374,085 425,752,368 7,969,015 2,330,316,293
14,434,864	2,800,457	5,568,164,675	2,252,181,977	612,722,331	2,864,904,308
\$18,464,414	\$ 3,181,305	\$ 59,097,674,984	\$ 39,100,014,979	\$8,886,282,086	\$ 47,986,297,065

# Combining Statements of Changes in Fiduciary Net Assets

For the years ended December 31, 2003 and 2002

				2003
	Traditiona	I	(	Combined
	Pensions	Post-emplo	-	Pensions
Additions: Contributions: Members' Employers'	\$ 1,006,863,812	570.00	M 261	\$8,807,214 8,452,570
Employers' Total Contributions	1,026,594,837	579,90		8,452,579
Total Contributions	2,033,458,649	579,90	J4,36 I	17,259,793
Income From Investing Activities:  Net Appreciation (Depreciation) in Fair Value of Investments  Bond Interest Dividends Real Estate Operating Income, net International Income Other Investment Income (Loss) Security Lending Income, net Total Investment Income Less: Investment Management Expenses  Net Income (Loss) from Investing Activities	8,005,594,795 458,551,817 379,059,207 270,511,055 466,546,910 32,598,614 7,290,857 9,620,153,255 (16,377,516) 9,603,775,739	88,99 63,46 109,54 7,67 67 2,258,66	38,517 91,564 68,603 45,453 79,475 77,601 69,134 03,059)	2,830,726 75,838 158,223 22,563 46,054 2,721 843 3,136,968 (59,213) 3,077,755
Other Income	411,000			
Total Additions	411,093 11,637,645,481	2,837,97	70.436	20,337,548
Deductions: Benefits Refunds of Contributions Administrative Expenses Total Deductions	2,236,477,663 192,768,335 57,195,937 2,486,441,935		69,092 79,981 49,073	49,490 4,480,051 4,529,541
Interplan Transfers Balance Transfers Plan Switches Settlement Activity Interest on Settlement Total Interplan Transfers	(20,637,974) 70,283 8,330,450 354,044 (11,883,197)			10,300,381 (20,828) (3,066,736) (130,336) 7,082,481
Net Increase (Decrease) Net Assets Held in Trust for Pension and Post-employment Health-care Benefits Balance, Beginning of Year	9,139,320,349	1,927,52 8,886,28		22,890,488
Balance, End of Year	\$48,239,335,328	\$10,813,80	03,449	\$22,890,488

See Notes to Combining Financial Statements, beginning on page 34. A Schedule of Funding Progress is presented on page 49.

				2002	
Member-	Voluntary	Total		Traditional Plan	
Directed	Employees Beneficiary Association	All Plans	Pensions	Post-employment Health care	Total
\$ 7,723,797 7,464,773	4,362,121	\$1,023,394,823 1,626,778,671	\$ 1,094,343,553 1,109,983,205	573,038,298	\$ 1,094,343,553 1,683,021,503
15,188,570	4,362,121	2,650,173,494	2,204,326,758	573,038,298	2,777,365,056
2,609,478 40,648 152,767 8,609 709 2,812,211 (58,739) 2,753,472	344,505 19,725 16,303 11,633 20,067 1,403 132 413,768 (334) 413,434	9,891,947,425 566,426,545 468,378,064 334,013,854 576,167,093 40,282,213 7,970,142 11,885,185,336 (17,098,861) 11,868,086,475	(5,045,933,248) 493,628,592 239,080,967 166,588,433 (690,803,335) 6,585,487 4,025,826 (4,826,827,278) (15,072,514) (4,841,899,792)	(899,648,951) 135,276,163 65,521,483 45,652,477 (189,310,970) 1,801,360 1,104,834 (839,603,604) (3,462,304) (843,065,908)	(5,945,582,199) 628,904,755 304,602,450 212,240,910 (880,114,305) 8,386,847 5,130,660 (5,666,430,882) (18,534,818) (5,684,965,700)
		411,093	623,421		623,421
17,942,042	4,775,555	14,518,671,062	(2,636,949,613)	(270,027,610)	(2,906,977,223)
391,773 5,098,717 5,490,490	382,104 382,104	3,144,246,755 193,209,598 69,836,790 3,407,293,143	2,060,130,216 187,051,815 52,199,729 2,299,381,760	776,006,852 4,067,446 780,074,298	2,836,137,068 187,051,815 56,267,175 3,079,456,058
(49,455) (4,100,984) (174,292)	(1,162,730) (49,416)	0 0 0			
6,012,862	(1,212,146)	0			
18,464,414	3,181,305	11,111,377,919	(4,936,331,373)	(1,050,101,908)	(5,986,433,281)
		47,986,297,065	44,036,346,352	9,936,383,994	53,972,730,346
\$18,464,414	\$3,181,305	\$ 59,097,674,984	\$ 39,100,014,979	\$8,886,282,086	\$ 47,986,297,065

### Notes to Combining Financial Statements

#### 1. DESCRIPTION OF OPERS

a. Organization—The Ohio Public Employees Retirement System (OPERS or System) is a cost-sharing multiple-employer public employee retirement system comprised of three separate plans: the Traditional Plan—a defined benefit plan; the Combined Plan—a combination defined benefit/defined contribution plan; and the Member-Directed Plan—a defined contribution plan. All public employees in Ohio, except those covered by one of the other state or local retirement systems in Ohio, are members of OPERS. The Member-Directed Plan and the Combined Plan commenced operations effective January 1, 2003. Membership in these two plans was open to Ohio workers who had established membership in the Traditional Plan but had accumulated less than 5 years of service credit as of December 31, 2002. These members had 180 days from January 1, 2003 to elect into one of the new plans. New public employees (those who establish membership in OPERS on or after January 1, 2003) have 180 days from the commencement of employment to select membership in one of the three plans. However, contributions to OPERS are effective with the first day of employment. Contributions made prior to the employee's election are maintained in the Traditional Plan and later transferred, as appropriate. Also in 2003, the Voluntary Employees Beneficiary Association (VEBA) was established, providing Member-Directed Plan participants with a medical savings account option.

OPERS is administered in accordance with Chapter 145 of the Ohio Revised Code (ORC). The accompanying financial statements comply with the provisions of the Governmental Accounting Standards Board (GASB) Statement No. 14, *The Financial Reporting Entity*. This statement requires that financial statements of the reporting entity include all of the organizations, activities, functions and component units for which the reporting entity is financially accountable. Financial accountability is defined as the appointment of a voting majority of the component unit's board and either (1) the reporting entity's ability to impose its will over the component unit, or (2) the possibility that the component unit will provide a financial benefit to or impose a financial burden on the reporting entity. OPERS does not have financial accountability over any entities.

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

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

Employer, employee and retiree data as of December 31, 2002 (our latest available actuarial data) and 2001 follows:

	2002	2001
Employer Units*		
State group	263	266
Local government group	3,182	3,169
Law enforcement group	251	255
Employee Members and Retirees		
Retirees and beneficiaries currently receiving benefits	141,019	136,456
Terminated employees not yet receiving them	62,746	78,289
Active Employees		
State group	110,017	109,219
Local government group	247,377	243,202
Law enforcement group	8,030	7,892

<sup>\*</sup>The number of employer units exceeds the number of reporting employers as some employers report multiple divisions or agencies. The number of employers reporting at December 31,2003 was 3,254.

All public employees, except those covered by another state retirement system in Ohio or the Cincinnati Retirement System, are required to become contributing members of OPERS when they begin public employment unless they are exempted or excluded. For actuarial purposes, employees who have earned sufficient service credit (5 years or 60 contributing months) are entitled to a future benefit from OPERS.

- **b. Benefits** All benefits of the System and any benefit increases are established by the legislature pursuant to ORC 145. Chapter 145 of the ORC provides the Retirement Board with the authority to provide health-care benefits. Health-care benefits are not mandated by statute nor are they vested benefits. Health-care benefits may be reduced or eliminated at the discretion of the Retirement Board.
- Age-and-Service Benefits Benefits in the Traditional Plan are calculated on the basis of age, final average salary, and service credit. Members are eligible for retirement benefits at age 60 with 5 years or 60 contributing months of service credit, at age 55 with 25 or more years of service credit, or at any age with 30 or more years of service credit. The annual benefit is based on 2.2% of final average salary multiplied by the actual years of service for the first 30 years of service credit, and 2.5% for years of service in excess of 30 years. Members retiring before age 65 with less than 30 years of service credit receive a percentage reduction in benefit amounts. The base amount of a member's pension benefit is "locked in" upon receipt of the initial benefit payment.

Benefits in the Combined Plan consist of both an age-and-service formula benefit (defined benefit) and a defined contribution element. The defined benefit element is calculated on the basis of age, final average salary and years of service. Members are eligible for retirement benefits at age 60 with 5 years or 60 contributing months of service credit, at age 55 with 25 or more years of service credit, or at any age with 30 or more years of service credit. The annual benefit is based on 1.0% of final

average salary multiplied by actual years of service in the Combined Plan. Persons retiring before age 65 with less than 30 years of service credit receive a percentage reduction in benefit amounts. The defined contribution portion of the benefit is based on accumulated member contributions plus or minus any investment gains or losses on those contributions.

- Defined Contribution Benefits—Benefits in the Member-Directed Plan are equal to the total of member and vested employer contributions to the plan, plus or minus any investment gains or losses thereon. Employer contributions vest at a rate of 20% per year, over a five year vesting period.
- Law Enforcement Officers' Benefits—Effective January 1, 2001, HB 416 divided the OPERS Law Enforcement program into two separate divisions: Law Enforcement and Public Safety. Both groups of members, as defined in ORC Chapter 145, are eligible for special retirement options under the Traditional Plan and are not eligible to participate in the Member-Directed or Combined Plans. Law enforcement officers may file an application for retirement benefits at age 48 or older with 25 or more years of credited service. In 2001, those members classified within the public safety group were eligible for retirement at age 52 with 25 or more years of credited service. Annual benefits under both divisions are calculated by multiplying 2.5% of final average salary by the actual years of service for the first 25 years of service credit and 2.1% of final average salary for each year of service over 25 years. These options also permit early retirement under qualifying circumstances as early as age 48.
- Early Retirement Incentive Plan—Employers under OPERS may establish an early
  retirement incentive plan utilizing the purchase of service credit. To be eligible,
  employees must be able to retire under existing plan provisions after the purchase
  of the additional credit. Electing employers must contribute all such additional costs
  as are actuarially determined to fund the benefit. Such a plan, if adopted by an
  employer, must be offered to a minimum of 5% of covered employees and provide
  for the purchase not to exceed five years credit, limited to a maximum of 20% of
  total service credit.
- Disability Benefits—OPERS administers two disability plans. Members of the system as of July 29, 1992 could elect, by April 7, 1993, coverage under either the original plan or the revised plan. All members of the Traditional or Combined plans who entered the System after July 29, 1992 are automatically covered under the revised plan. Members of the Member-Directed Plan are not eligible for disability benefits. Under the original plan, a member who becomes disabled before age 60 and has completed 60 contributing months is eligible for a disability benefit. Benefits are funded by the employee and employer contributions and terminate if the member is able to return to work. The revised plan differs in that a member who becomes disabled at any age with 60 contributing months will be eligible for disability benefits until a determined age. After the disability benefit ends, the member has an opportunity to apply for a service retirement benefit, or a refund of their contributions, which are not reduced by the amount of disability benefits received. Law enforcement officers are immediately eligible for disability benefits if disabled by an on-duty illness or injury.

- Survivor Benefits—Dependents of deceased members who participated in either
  the Traditional Plan or the Combined Plan may qualify for survivor benefits if the
  deceased employee had at least 18 months of service credit with the plan and
  at least three months of credit within the two and one-half years immediately
  preceding death. ORC Chapter 145 specifies the dependents and the conditions
  under which they qualify for survivor benefits.
- Health-care Benefits—The ORC permits, but does not require, OPERS to offer health-care benefits. The System currently provides comprehensive health-care benefits to retirees with 10 or more years of qualifying service credit in either the Traditional or Combined plans and offers coverage to their dependents on a premium deduction basis. Coverage includes hospitalization, medical expenses, prescription drugs, and reimbursement of monthly Medicare premiums. The System determines the amount, if any, of the associated health-care costs that will be absorbed by the System. The System attempts to control costs by utilizing managed care, HMOs, case management, disease management, and other programs. A portion of employer contributions is placed in a VEBA (Retiree Medical Account or RMA) on behalf of members of the Member-Directed Plan. RMA funds may be used by the terminated members and retirees to pay for medical-related expenses.
- Other Benefits—Once a benefit recipient retiring under the Traditional Plan has
  received benefits for 12 months, an annual 3% cost-of-living adjustment is provided.
  Members retiring under the Combined Plan receive a 3% cost-of-living adjustment
  with relation to the defined benefit portion of their benefit. A death benefit of \$500\$2,500, determined by number of years of service credit of the retiree, is paid to the
  beneficiary of a deceased retiree or disability benefit recipient under the Traditional
  and Combined Plans. Death benefits are not available to beneficiaries of MemberDirected Plan participants.
- Money Purchase Annuity—OPERS age-and-service retirees who become reemployed in an OPERS-covered position must contribute to the System. All reemployed retirees are required to contribute toward a money purchase annuity. The money purchase annuity is based on the calculation of employee contributions for the period of re-employment plus allowable interest, multiplied by two.
- Refunds—Members of the Traditional Plan, upon their termination of employment,
  may withdraw their accumulated contributions, interest earned, and any qualifying
  matching funds. Combined Plan members also receive any qualifying matching
  funds upon refund. The law requires a three-month waiting period after service
  termination before the refund may be paid. The acceptance of a refund cancels the
  individual's rights and benefits in OPERS. Employer contributions to OPERS are not
  refundable except for the vested portion of employer contributions made to the
  Member-Directed Plan.
- **c. Contributions**—OPERS' funding policy provides for periodic member and employer contributions to all three plans (Traditional, Combined and Member-Directed Plans) at Board-established rates. The rates established for member and employer contributions in both the Traditional and Combined Plans were approved based upon the recommendation of the System's actuary. Member and employer contributions to the Member-Directed Plan are not actuarially determined. All contribution rates were within the limits authorized by the Ohio Revised Code.

Member and employer contribution rates, as a percent of covered payroll, were the same across all three plans for the year ended December 31,2003. Within the Traditional Plan, member and employer contributions (employer contributions only for the Combined Plan) and an actuarially determined rate of interest return are adequate to accumulate sufficient assets to pay defined benefits when due. Employee contributions within the Combined Plan are not used to fund the defined benefit retirement allowance. Level percentage of payroll employer contribution rates are determined using the entry age normal actuarial funding method. This formula determines the amount of contributions necessary to fund: (1) the current service cost, which represents the estimated amount necessary to pay for defined benefits earned by the employees during the current service year; and (2) the prior service cost for service earned prior to plan inception and subsequent benefit increases. These contributions represent the amount necessary to fund accrued liabilities for retirement allowances and survivor benefits over a period of time. Based upon the recommendations of the System's actuary, the annual required contributions for the Traditional Plan and the Combined Plan were \$1,026,594,837 and \$8,452,579, respectively. Employers satisfied 100% of the contributions.

Based upon the recommendations of the System's actuary, a portion of each employer's contribution to OPERS is set aside for the funding of post-retirement health care (employer contributions to the Member-Directed Plan are turned over to a retiree medical account (RMA) on behalf of the member). For 2003 and 2002, the total employer contribution rate for state employers was 13.31% of covered payroll for all plans; local employers contributed at 13.55% of covered payroll for all plans; and law enforcement and public safety employers contributed at 16.70% of covered payroll. The percentage of the employer contribution rate used to fund health care, for all divisions of the Traditional and Combined plans, was 5.0% for calendar years 2003 and 2002. For the year 2003, the first year of existence for the Member-Directed Plan, 4.81% of employer contributions for state division employees and 5.05% of employer contributions for local division employees, was used to fund RMAs. ORC Chapter 145 assigns authority to the Retirement Board to amend the funding policy. As of December 31, 2003 the Retirement Board adopted all contribution rates that were recommended by the Actuary.

### **Board-approved Contribution Rates for All Plans:**

	Employee Rate		Employer Rate			
	2003	2002	2001	2003	2002	2001
State group	8.5%	8.5%	8.5%	13.31%	13.31%	13.31%
Local government group	8.5%	8.5%	8.5%	13.55%	13.55%	13.55%
Law enforcement group	10.1%	10.1%	10.1%	16.70%	16.70%	16.70%
Public safety group	9.0%	9.0%	9.0%	16.70%	16.70%	16.70%

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

As of December 31, 2002, the date of the last actuarial study, the necessary funding period for the state division was 38 years, 25 years for the local division and 36 years on average for both the law and public safety divisions. This yielded a combined funding period of 29 years for all divisions. As of December 31, 2001, all divisions of OPERS were fully funded.

**d. Commitments and Contingencies**—OPERS has committed to fund various private equity investments totalling approximately \$681.9 million at December 31, 2003 and \$325.4 million at December 21, 2002. The expected funding dates for these commitments extend through 2015. OPERS is a party in litigation relating to plan benefits. While the final outcome cannot be determined at this time, management is of the opinion that the liability, if any, for these legal actions will not have a material adverse effect on OPERS' financial position.

#### 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The following are the significant accounting policies followed by OPERS:

a. Basis of Accounting—The financial statements are prepared using the accrual basis of accounting under which expenses are recorded when the liability is incurred. Revenues are recorded in the accounting period in which they are earned and become measurable. Accordingly, both member and employer contributions for the years ended December 31, 2003 and 2002 include year-end accruals based upon estimates derived from historical payment patterns. Member and employer contributions, which are based on members' salaries, are due 30 days after the month in which salaries are earned. Investment purchases and sales are recorded as of their trade date. Benefits and refunds are recognized when due and payable in accordance with the terms of the plan.

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

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

GASB Statement No. 25, Financial Reporting for Defined Benefit Pension Plans and Note Disclosures for Defined Contribution Plans and Statement No. 26, Financial Reporting for Post-employment Health-care Plans Administered by Defined Benefit Pension Plans requires that the three pension plans (Traditional, Member-Directed and Combined) and the two health care funds be shown separately in the Combined Financial Statements as they are legally separate plans. To meet this requirement, plan assets and liabilities, where possible, are specifically identified to a plan or health-care fund. Assets and liabilities that were not specifically identifiable to a plan or health-care fund were allocated based on calculation and projection formulas that take into account daily investment return, daily plan cash inflows and outflows, and analysis and allocation of administrative expenses.

**b. Investments**—OPERS is authorized by ORC Section 145.11 to invest under a prudent person standard and does so through an investment policy established by the

Retirement Board. The prudent person standard requires the Retirement Board, "To discharge their duties with respect to the funds solely in the interest of the participants and beneficiaries and defraying reasonable expenses of administering the System; with care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with these matters would use in the conduct of an enterprise of a like character and with like aims; and by diversifying the investments of the system so as to minimize the risk of large losses, unless under the circumstances it is clearly prudent not to do so."

Participants in the Member-Directed Plan self-direct the investment of both member and employer contributions. Contributions must be invested with an investment manager approved by the OPERS Board. Participants in the Combined Plan similarly direct the investment of member contributions.

Plan investments are reported at fair value. Fair value is the amount that a plan can reasonably expect to receive for an investment in a current sale between a willing buyer and a willing seller, that is, other than in a forced or liquidation sale. All investments, with the exception of real estate and private equity, are valued based on closing market prices or broker quotes. The fair value of real estate investments is based on estimated current values and independent appraisals. Private equities are valued based on September 30th net asset values plus or minus purchases, sales and cash flows from October 1, through December 31, of the reporting year.

Net appreciation (depreciation) is determined by calculating the change in the fair value of investments between the end of the year and the beginning of the year, less purchases of investments at cost plus sales of investments at fair value. Investment asset management fees are netted against investment income and are not included in either investment management expenses or administrative expenses. Investment asset management fees for 2003 and 2002 were \$62,598,382 and \$60,559,510, respectively. Investment management expenses (which do not include investment asset management fees) consist of those expenses directly related to OPERS' investment operations and a proportional amount of overhead and are allocated based on either the ratio of OPERS' investment department square footage to total office square footage or investment payroll to total OPERS' payroll as appropriate.

c. Securities Lending—OPERS maintains a securities lending program. The Retirement Board uses its own discretion to determine the type and amount of securities lent under the program. Under this program, securities are loaned to brokers. In return, OPERS receives cash or investment-grade securities as collateral and agrees to return the collateral for the same securities in the future. Cash collateral from securities loaned is, simultaneous to the loan, reinvested in repurchase agreements (repos) and short-term securities. Securities loaned are collateralized at a minimum of 102% of the market value of loaned U.S. securities and 105% of the market value of loaned international securities. Collateral is marked-to-market daily. OPERS does not have the ability to pledge or sell collateral securities absent a broker default. If the market value of the collateral held falls below the minimum required levels, additional collateral is provided. There is always a positive spread between the cost of funds raised from a securities loan and the income earned from the associated repo. At year-end, OPERS had no credit risk exposure to borrowers because the fair value of collateral OPERS held exceeded the fair value of securities loaned.

As of December 31, 2003, the fair values of securities on loan was \$5,438,971,505. Associated collateral totaling \$5,613,002,163 was comprised of cash, \$5,211,705,742, and securities, \$401,296,421.

As of December 31, 2002, the fair value of loaned securities and associated cash collateral were \$2,258,203,440 and \$2,330,316,293, respectively.

Collateral on loaned securities at year-end 2003 and 2002 consisted of repurchase agreements collateralized by investment grade bonds.

Net security lending income is composed of three components: gross income, broker rebates, and agent fees. Gross income is equal to earnings on cash collateral received in a security lending transaction. A broker rebate is the cost of using that cash collateral. Agent fees represent the fees paid to the agent for administering the lending program. Net security lending income is equal to gross income less broker rebates and agent fees. Securities lending income for 2003 and 2002 was recorded on a cash basis which approximated accrual basis.

Income from Security Lending Activity	2003	2002
Security Lending Gross Income	\$ 29,940,709	\$ 31,887,361
Security Lending Expenses		
Security Lending-Agent Fees	(1,788,298)	(869,708)
Security Lending - Broker Rebates	(20,182,269)	(25,886,993)
Total Expenses	(21,970,567)	(26,756,701)
Net Income from Security Lending Activity	\$ 7,970,142	\$ 5,130,660

- d. Derivatives—Derivatives are generally defined as contracts whose value depends on, or is derived from, the value of an underlying asset, reference rate or index. OPERS has classified the following as derivatives:
- Mortgage and Asset-Backed Securities—As of December 31, 2003 and 2002, the System held the following mortgage and asset-backed securities which may be categorized as derivative securities:
  - Ginnie Mae (GNMA), Fannie Mae (FNMA), and Freddie Mac (FHLMC) pass-throughs with amortization terms of 15 years, 30 years, and 30-year amortization/7-year balloons.
  - Collateralized mortgage obligation securities (CMOs) backed by FNMA and FHLMC 15 and 30-year pass throughs.
  - Commercial mortgage-backed securities (CMBS) backed by commercial mortgages and leases on a variety of property types such as office, retail, hotel, self-storage, warehouse, and industrial.
  - Asset-backed securities (ABS) backed by auto loans, credit card receivables, home equity loans, home improvement loans, and electric-utility receivables.

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

any market adjustments, is lost. Accordingly, the yields and maturities of mortgage-backed securities generally depend on when the underlying mortgage loan principal and interest are repaid. If market rates fall below a mortgage loan's contractual rate, it is generally to the borrower's advantage to repay the existing loan and obtain new lower financing. The fair value of mortgage- and asset-backed securities was \$5,067,370,788 and \$3,930,905,540 as of December 31, 2003 and December 31, 2002, respectively.

- Forward-Currency Contracts—The System enters into various forward-currency contracts to manage exposure to changes in foreign-currency exchange rates on its foreign portfolio holdings. The System may also enter into forward-currency exchange contracts to provide a quantity of foreign currency needed at a future time at the current exchange rates, if rates are expected to change dramatically. A forward-exchange contract is a commitment to purchase or sell a foreign currency at a future date at a negotiated forward rate. Risk associated with such contracts includes movement in the value of foreign currency relative to the U.S. dollar and the ability of the counterparty to perform. The contracts are valued at forward exchange rates, and the changes in value of open contracts are recognized as net appreciation/depreciation in the statement of changes in plan net assets. The realized gain or loss on forward currency contracts represents the difference between the value of the original contracts and the closing value of such contracts and is included as net appreciation/depreciation in the statement of changes in plan net assets. As of December 31, 2003 and December 31, 2002, the fair values of forward-currency contracts held by the System were \$35,566,350 and \$25,428,693 respectively. The contracts hedged \$32,808,238 and \$22,085,966 at December 31, 2003 and 2002, respectively.
- Stock Index Futures Contracts—The System enters into various stock index futures contracts to manage exposure to changes in equity markets and to take advantage of equity index movements on an opportunistic basis. A stock index future is a futures contract that uses a stock index as its base, and which is settled by cash or delivery of the underlying stocks in the index. Futures contracts differ from forward contracts by their standardization, exchange trading, margin requirements, and daily settlement (marking to market). Risk associated with stock index futures contracts includes adverse movements in the underlying stock index. At December 31, 2003, the fair value of stock index futures contracts, which the System purchases with cash, was \$2,210,175. OPERS held no stock index futures at December 31, 2002.
- e. International Investments—The Retirement Board has authorized investments in various instruments including international securities. In November 1994, OPERS executed an investment management agreement to take advantage of expected favorable long-term trends in the global forest products industry by making specialized investment in offshore forest products companies. In fiscal 1996, OPERS began investing in international equity investments through the use of outside money managers. It is the intent of OPERS and the money managers to be fully invested in non-cash equivalent international securities, however, cash and short-term fixed income investments are often held temporarily. OPERS also invests in forward-currency contracts (see Note 2d). The following is a summary of international investments at December 31, 2003 and 2002.

INTERNATIONAL INVESTMENTS	2003	2002
Cash	\$ 43,871,673	\$ 39,481,678
Cash Equivalents	39,358,186	110,412,799
Depository Receipts	433,288,017	146,219,906
Preferred Stock	28,928,877	
Corporate Bonds	6,811,821	
Netted Receivable/(Payable) Interest	13,934,879	14,600,810
Netted Receivable/(Payable) Trades	16,552,495	(10,945,104)
Netted Receivable/(Payable) foreign exchange	1,282,635	(3,140,610)
International Stock	5,355,516,223	3,930,893,746
Convertible Bonds	8,454,789	
Stock Index Funds	6,556,761,251	5,280,250,447
Warrants	78,380	
TOTAL International Investments	\$12,504,839,226	\$9,507,773,672

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

	Years
Buildings and building improvements	50
Furniture and equipment	3-10

- **g. Undistributed Deposits**—Cash receipts are recorded as undistributed deposits until such time as they are allocated to employers' receivables, members' contributions or investment income.
- **h. Federal Income Tax Status**—OPERS is a qualified plan under Section 401(a) of the Internal Revenue Code and is exempt from federal income taxes under Section 501(a).
- **i. Funds**—In accordance with state statute, various funds have been established to account for the reserves held for future and current benefit payments. Statutory funds within each of the three pension plans are as follows:

### **Traditional Plan**

- The Employees' Savings Fund represents members' contributions held in trust
  pending their refund or transfer to a benefit disbursement fund. Upon an employee's
  refund or retirement, such employee's account is credited with an amount of interest
  (statutory interest) on the employee's contributions based on a rate of 3 to 4%.
  Employees eligible for a refund also receive matching funds from the Employers'
  Accumulation Fund, if qualified. The ORC Chapter 145 requires statutory interest to
  be compounded annually.
- The Employers' Accumulation Fund is used to accumulate employers' contributions
  to be used in providing the reserves required for transfer to the Annuity and Pension
  Reserve Fund as members retire or become eligible for disability and health-care
  benefits and to the Survivors' Benefit Fund for benefits due dependents of deceased
  members.

- The Annuity and Pension Reserve Fund is the fund from which annuity, disability, and health-care benefits are paid. This reserve was fully funded according to the latest actuarial study dated December 31, 2002, and accordingly, there are sufficient assets available in this fund to pay the vested (pension) benefits of all retirees and beneficiaries as of the valuation date.
- The Survivors' Benefit Fund is the fund from which benefits due dependents of deceased members of the System are paid. This fund also was fully funded with relation to vested pension benefits as of December 31, 2002.
- The Income Fund is the fund which is credited with all investment earnings and
  miscellaneous income. The balance in this fund is transferred to other funds to aid
  in the funding of future benefit payments and administrative expenses.
- The Expense Fund provides for the payment of administrative expenses with the necessary monies allocated to it from the Income Fund.

#### **Member-Directed Plan**

- The Defined Contribution Fund represents members' and employers' contributions
  held in trust pending their refund or commencement of benefit payments. Members
  self-direct the investment of these funds. Employer funds vest with the member over
  a five-year period at a rate of 20% per year.
- The Income Fund is the fund which is credited with all investment earnings and miscellaneous income. The balance in this fund is transferred to other funds to the credit of member accounts and for the payment of administrative expenses.
- The Expense Fund provides for the payment of administrative expenses with the necessary monies allocated to it from the Income Fund.

### **Combined Plan**

- The Defined Contribution Fund represents members' contributions held in trust pending their refund or commencement of benefit payments. Members self-direct the investment of these funds.
- The Employees' Savings Fund represents members' deposits for the purchase of prior service credit held in trust pending their refund or transfer to a benefit disbursement fund. Upon an employee's refund or retirement, such employee's account is credited with an amount of interest (statutory interest) on the employee's deposits based on a rate of 4%.
- The Employers' Accumulation Fund is used to accumulate employers' contributions
  to be used in providing the reserves required for transfer to the Annuity and Pension
  Reserve Fund as members retire. Disability and survivor benefits are provided by
  fund transfers to the Traditional Plan.
- The Annuity and Pension Reserve Fund is the fund from which retirement
  allowances and health-care benefits are paid. As of December 31, 2003 there were
  no benefits being paid out of this fund to Combined Plan participants and
  accordingly the fund had a \$0 balance.
- The Income Fund is the fund which is credited with all investment earnings and miscellaneous income. The balance in this fund is transferred to other funds to the

credit of member account and to aid in the funding of future benefit payments and administrative expenses.

• The Expense Fund provides for the payment of administrative expenses with the necessary monies allocated to it from the Income Fund.

### **Voluntary Employees Beneficiary Association**

- The Voluntary Employees Benefit Association (VEBA) Fund is the fund used to
  accumulate employer contributions to the Retiree Medical Account. The effective
  date of the VEBA program coincides with the effective date of the Member-Directed
  Plan. Accordingly, since January 1, 2003, a portion of employer contributions made
  on behalf of members electing to participate in the Member-Directed Plan have
  been deposited to the VEBA.
- The Income Fund is the fund which is credited with all investment earnings and
  miscellaneous income. The balance in this fund is transferred to other funds to the
  credit of member accounts and for the payment of administrative expenses.
- The Expense Fund provides for the payment of administrative expenses with the necessary monies allocated to it from the Income Fund.

Combined Fund balances for all plans at December 31, 2003 and 2002 are as follows:

	2003	2002
Employees' Savings Fund	\$ 8,896,964,040	\$ 8,513,859,664
Employers' Accumulation Fund	27,368,711,915	18,979,364,269
Annuity & Pension Reserve Fund	21,562,826,137	19,305,720,320
Survivors' Benefit Fund	1,143,463,941	1,096,358,667
Defined Contribution Fund	35,826,751	
Income Fund	89,838,868	86,024,578
Expense Fund	43,332	4,969,567
Total Fund Balance	\$59,097,674,984	\$47,986,297,065

**j. Risk Management**—OPERS is exposed to various risks of loss related to theft of, damage to, and destruction of assets; injuries to employees; and court challenges to fiduciary decisions. To cover these risks, OPERS maintains commercial insurance and holds fidelity bonds on employees. There have been no reductions in coverage nor have there been any settlements exceeding insurance coverage for the past three years. As required by state law, OPERS is registered and insured through the state of Ohio Bureau of Workers' Compensation for injuries to employees. OPERS is self-insured for employee health-care coverage. The only outstanding liabilities at the end of 2003 and 2002 were related to the employee health-care coverage (see Note 8).

### 3. CASH AND INVESTMENTS

At December 31, 2003 and 2002, the carrying amount of OPERS' cash deposits was \$18,713,217 and \$83,007,017 respectively, and the bank balance was \$50,678,368 and \$108,900,397 respectively. Of the bank balance, \$100,000 was insured by the Federal Deposit Insurance Corporation (Category 1 as defined by the Government Accounting Standards Board). The remaining bank balance cash deposits were

uninsured and uncollateralized and were held in the name of OPERS' pledging financial institution, as required by the ORC (Category 3).

A summary of short-term securities and investments held at December 31, 2003 and 2002 is as follows:

	2003 Fair Value	2002 Fair Value
Short-Term Securities:		
Commercial Paper	\$ 0	\$ 26,384,606
U.S. Treasury Obligations	503,939	884,029,935
Short-term Investment Funds (STIF)	2,241,345,998	
Total Short-term Securities	\$ 2,241,849,937	\$ 910,414,541
Investments:		
Global Bonds:		
Corporate Bonds:		•
Not on securities loan	\$ 4,171,946,524	\$ 3,819,464,755
On securities loan	279,558,390	184,203,613
Government and Agencies:		
Not on securities loan	1,405,347,904	1,072,285,743
On securities loan	1,965,091,875	1,065,096,596
Mortgage & Mortgage-backed:		
Not on securities loan	4,476,817,033	3,930,905,540
On securities loan		
Equities:		
Not on securities loan	26,533,395,407	21,409,479,605
On securities loan	1,204,741,810	696,504,363
Real Estate:		
Not on securities loan	3,498,816,611	4,639,006,704
On securities loan		
Private Equities:		
Not on securities loan	310,549,287	257,932,891
On securities loan		
International Securities:		
Not on securities loan	10,515,259,796	9,195,374,804
On securities loan	1,989,579,430	312,398,868
Collateral on loaned securities		
Cash	5,211,705,742	2,330,316,293
Securities	401,296,421	
Total Investments	\$61,964,106,230	\$48,912,969,775

**a. Fair Value**—If available, quoted market prices have been used to value investments as of December 31, 2003 and 2002. Securities not having a quoted market price have been valued based on yields currently available on comparable securities of issuers with similar credit ratings. The fair value of real estate is based upon estimated current values and independent appraisals. Private equities are valued based on September 30 net asset values plus or minus purchases, sales and cash flows from October 1, through December 31, of the reporting year.

GASB Statement No. 3, *Deposits with Financial Institutions, Investments, and Reverse Repurchase Agreements*, requires governmental entities to categorize investments to give an indication of the level of custodial credit risk assumed by the entity at year-end. Category 1 includes investments that are insured or registered for which the securities are held by OPERS or by its agent in the name of OPERS. Category 2 includes uninsured and unregistered investments for which the securities are held by the counterparty's trust department or agent in the name of OPERS. Category 3 includes uninsured and unregistered investments for which the securities are held by the counterparty or by its trust department or agent but not in OPERS' name.

All investments of OPERS meet the criteria of Category 1 except real estate, private equity and securities on loan, which by their nature are not required to be so categorized. Investments are held in the name of OPERS or its nominee by the Treasurer of the state of Ohio as custodian.

#### 4. LEASES

OPERS leases equipment with lease terms of one year or less. Total lease expense was \$558,989 and \$538,282 for the years ended December 31, 2003 and 2002, respectively.

### 5. VACATION AND SICK LEAVE

As of December 31, 2003 and 2002, \$4,350,117 and \$3,904,953, respectively, were accrued for unused vacation and sick leave for OPERS' employees. Employees who resign or retire are entitled to full compensation for all earned unused vacation. Unused sick leave pay is lost upon termination. However, employees who retire with more than 10 years of service are entitled to receive payment for a percentage of unused sick leave.

### 6. DEFERRED COMPENSATION PLAN

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

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

### 7. OPERS' SCHEDULE OF REQUIRED CONTRIBUTIONS

All employees of the System are eligible for membership in OPERS. The System's annual required contributions for the year ended December 31, 2003 and for each of the five preceding years is as follows:

Year Ended December 31	Annual Required Contribution	% Contributed
1998	1,700,572	100%
1999	1,783,233	100
2000	1,766,772	100
2001	3,078,282	100
2002	4,350,989	100
2003	4,556,831	100

### 8. SELF-INSURED EMPLOYEE HEALTH CARE

OPERS is self-insured under a professionally administered plan for general health and hospitalization employee benefits. OPERS maintained specific stop-loss coverage per employee for medical benefits in the amount of \$250,000, for both 2003 and 2002. OPERS also maintained a lifetime maximum stop-loss coverage per employee for medical benefits in the amount of \$1,000,000 for both 2003 and 2002.

The summary of changes in incurred but not paid claims for the years ended December 31, 2003 and 2002 follows:

	General Health Insurance*
Claims Liability as of December 31, 2001	\$ 45,548
Claims Incurred	3,785,450
Claims Paid	(3,766,239)
Claims Liability as of December 31, 2002	64,759
Claims Incurred	4,800,867
Claims Paid	(4,808,909)
Claims Liability as of December 31, 2003	\$ 56,717

<sup>\*</sup>Figures include pharmacy expenses.

# Required Supplementary Information

### Schedule of Funding Progress\*\*

(Dollar Amounts in Millions)

Valuation Year	Actuarial Accrued Liabilities (AAL)	Valuation Assets	Unfunded Actuarial Accrued Liabilities (UAAL)	Ratio of Assets to AAL	Active Member Payroll	UAAL as of % of Active Member Payroll
1993	\$26,056	\$23,063	\$ 2,993	89%	\$7,236	41%
1994	28,260	25,066	3,194	89	7,625	42
1995	30,556	27,651	2,905	90	7,973	36
1996	32,631	30,534	2,097	94	8,340	25
1997	34,971	33,846	1,125	97	8,640	13
1998	37,714	38,360	(646)*	102	9,017	(7)*
1999	43,070	43,060	10	100	9,477	0
2000	46,347	46,844	(497)*	101	10,192	(5)*
2001	47,492	48,748	(1,256)*	103	10,782	(12)*
2002	50,872	43,706	7,166	86	11,207	64

<sup>\*</sup> At December 31, 1998, 2000 and 2001, valuation assets were in excess of AAL.

### Schedule of Employer Contributions — Traditional Plan\*

Year Ended December 31	Annual Required Contributions	% Contributed
1998	\$ 886,684,170	100%
1999	935,426,954	100
2000	718,807,713	100
2001	977,289,237	100
2002	1,109,983,205	100
2003	1,026,594,837	100

### Schedule of Employer Contributions — Combined Plan\*

Year Ended December 31	Annual Required Contributions	% Contributed
2003	\$8,452,579	100%

<sup>\*</sup>The Board has approved all contribution rates as recommended by the Actuary. The amounts reported in this schedule do not include contributions for post-employment health-care benefits.

See Notes to Required Supplementary Schedules.

<sup>\*\*</sup>The amounts reported in this schedule do not include assets or liabilities for post-employment health-care benefits.

### Notes to Required Supplementary Information

### 1. DESCRIPTION OF SCHEDULE OF FUNDING PROGRESS

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

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

### 2. ACTUARIAL ASSUMPTIONS AND METHODS

**Funding Method**—An entry age normal actuarial cost method of valuation is used in determining benefit liabilities and normal cost. Differences between assumed and actual experience (the actuarial gains and losses) become part of unfunded actuarial accrued liabilities. Unfunded actuarial accrued liabilities for pension benefits are amortized over a period of time to produce payments which are level percents of payroll contributions based on an open amortization period.

As of December 31, 2002, the date of the last actuarial study, the funding periods, by division, were: state—38 years, local—25 years, and law—36 years. The combined funding period for all divisions was 29 years.

As of December 31, 2001, all divisions were fully funded.

**Asset Valuation Method**—For actuarial purposes, assets are valued utilizing a method which recognizes book value plus or minus realized and unrealized investment gains and losses amortized on a straight line basis over a four-year period.

Significant actuarial assumptions employed by the actuary for funding purposes as of December 31, 2002, the date of the latest actuarial study, and 2001 include:

**Investment Return**—An investment return rate of 8%, compounded annually, for all members, retirees, and beneficiaries was assumed for the years 2002 and 2001.

**Salary Scale**—As of December 31, 2002, the date of the latest actuarial valuation, the active member payroll was assumed to increase 4% annually, which is the portion of the individual pay increase assumption attributable to inflation and overall productivity.

Also assumed were additional projected salary increases ranging from .50% to 6.30% per year depending on age, attributable to seniority and merit.

**Benefit Payments**—Benefit payments are assumed to increase by 3% of the original retirement benefit per year after retirement.

### **Multiple Decrement Tables:**

Mortality—For retirees, 90% of the rates in the 1971 *Group Annuity Mortality Male and Female Tables*, projected to 1984 were used to project mortality. The mortality rates for disability allowances were 300% of the rates in the 1983 *Group Annuity Mortality Table for Males*, and 400% of the rates in the 1983 *Group Annuity Mortality Table for Females*.

Disability—Projections for active employees are based on OPERS' experience.

Withdrawal—Projections for active employees are based on OPERS' experience.

**Health-Care Benefits**—Health-care benefits are financed through employer contributions and investment earnings earned on those contributions. Employer contributions, equal to a fixed percent of member covered payroll, are used to fund health-care expenses. The contributions allocated to retirees' health care, along with investment income on allocated assets are expected to be sufficient to sustain the program for 15 years based on the current plan design. Health-care expenses are assumed to increase between 6 1/2% and 11% from 2003 through 2011. Years 2012 and after are assumed to increase at a level of 4%.

The portion of employer contributions used to fund health-care expenses was 5% of member covered payroll for both 2003 and 2002.

OPERS' actuarial valuation is calculated separately for retirees and beneficiaries and for active and inactive members.

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

The actuarial accrued liability for active and inactive members is calculated using the entry age normal actuarial cost method. The assets of the Employees' Saving Fund, Employers' Accumulation Fund, and the market value adjustment are compared to the actuarial accrued liability of active and inactive members to arrive at the unfunded actuarial accrued liability or, in cases where assets exceed liabilities, assets in excess of actuarial accrued liability.

The unfunded actuarial liability based upon the two most recent annual actuarial valuations is as follows:

### **Unfunded Actuarial Accrued Liability**

				December 31, 2002	December 31, 2001
	State Group	Local Government Group	Law Enforcement Group	Total	Total
Present value of actuarial accrued					
liability for active and inactive					
accounts	\$11,821,956,908	\$16,709,401,112	\$1,135,207,523	\$29,666,565,543	\$28,405,010,738
Less:					
Employers' Accumulation Fund*	3,718,844,082	5,114,679,363	396,013,621	9,229,537,066	16,444,530,949
Employees' Savings Fund	3,317,823,753	4,908,880,876	287,235,035	8,513,859,664	7,991,271,196
Market Value Adjustment	1,927,884,725	2,658,364,185	170,498,668	4,756,747,578	5,225,656,114
Unfunded/(Assets in excess of) actuarial accrued liability**	\$ 2,857,404,348	\$ 4,027,556,688	\$ 281,460,199	\$ 7,166,421,235	\$ (1,256,447,521)

<sup>\*</sup> Amounts shown reflect transfers out of the Employers' Accumulation Fund to fully fund the Annuity and Pension Reserve Fund and Survivors' Benefit Fund.
\*\* At December 31, 2001, Valuation Assets were in excess of Unfunded Actuarial Accrued Liabilities.

# Administrative Expenses\*

For The Years Ended December 31, 2003 and 2002

	2003	2002
Personnel Services		
Salaries and Wages	\$30,778,073	\$28,264,628
Retirement Contributions	4,391,982	4,026,467
Employee Insurance	5,636,229	4,464,750
Other Personnel Expense	253,752	398,100
Other Services and Charges:		
Professional Services:		
Actuarial Services	708,783	2,250,255
Audit Services	415,824	598,281
Consulting Services	3,254,675	2,437,616
Investment Services	3,022,352	2,688,665
Legal and Investigation Services	732,721	549,496
Medical Examinations	1,699,737	1,786,008
Retirement Study Council	251,386	273,544
Banking Fees and Financial Services	8,473,010	4,215,802
Communication:		
Postage & Shipping	2,869,305	2,114,701
Printing & Publications	783,621	1,353,915
Information Technology	2,810,147	2,732,822
Office Equipment & Supplies	1,391,128	1,580,878
Training & Travel Expense	1,725,776	1,852,488
Facility Expenses	3,673,705	2,014,881
Child Care Center Expenses	262,277	151,792
Miscellaneous	195,456	164,112
	\$ 73,329,939	\$63,919,201
Depreciation		
Building Depreciation	\$ 5,030,141	\$ 437,897
Equipment Depreciation	8,575,571	10,444,895
	\$ 13,605,712	\$10,882,792
Total Administrative Expenses	\$86,935,651	\$74,801,993

<sup>\*</sup>Includes investment-related administrative expenses

# Schedule of Investment Expenses

For the Years Ended December 31, 2003 and 2002

	2003	2002
Investment Services	\$ 5,417,923	\$ 4,519,511
Investment Staff Expense	7,117,390	6,757,043
Investment Legal Services	311,715	344,680
Allocation of Administrative Expenses	4,251,833	6,913,584
(See Note 2b to Financial Statements)		
Total Investment Expenses*	\$17,098,861	\$18,534,818

<sup>\*</sup>Excludes fees and commissions, please see Schedule of U.S. Stock Brokerage Commissions Paid presented on page 70.

# Schedule of Payments To Consultants

Total	\$ 2,009,352
WF Pridmore LTD	33,000
•	,
The Townsend Group	320,000
Pacific Corporate Group	1,000,000
McLagan Partners, Inc.	17,052
Macroeconomic Advisors, LLC	31,300
G Andrew Karolyi	5,000
Ennis Knupp + Associates	572,000
Cost Effectiveness Measurement Inc.	15,000
Basis Point Group LLC	8,000
Access Data	\$ 8,000

# **Investment Section**



### **Investment Report**

Dear Members and Beneficiaries,

On behalf of the Investment Staff, I am pleased to report to you on our stewardship of the System's investment assets over the last year. As you certainly are aware, investment returns in 2003 were exceptionally strong following three down years in the stock market. The results that OPERS achieved last year were truly impressive. Before I discuss the 2003 numbers, it might be helpful to review some of the actions taken in recent years—some of which were described to you in prior reports—that laid the groundwork for the strong performance we now enjoy.

### 2000

 At the direction of the Board, a comprehensive review of our investment strategies and operations is conducted, led by two national consulting firms. The review advances numerous recommendations and actions, as described in the following text.

#### 2001

- The Board retains a general investment consultant to assist the Board and staff in developing and assessing investment policy, strategy, and actions. Governance and oversight of the investment program is strengthened.
- In the midst of a bear market, OPERS
  repositions its investment portfolio for
  improved long-term performance.
   Important changes include increased
  allocations to U.S. and international
  stocks, and the development of a
  Private Equity program that will reach
  an allocation of 4% of the fund by 2007.
- Working with the consultant, staff hires six external money managers to manage U.S. equity portfolios, and six external money managers to manage bond portfolios. The manager relationships introduce a degree of

external management to asset classes previously managed exclusively internally, thus further diversifying the portfolio and introducing sub-asset classes to the fund such as small-cap equity, high-yield bonds and emergingmarket debt.

#### 2002

- The Board retains a dedicated consultant to assist the Board and staff in developing and assessing investment policy, strategy, and actions for private equity investments. A private equity professional is hired, a policy and strategy are developed and approved, and initial commitments are made.
- The Board retains a dedicated consultant to assist the Board and staff in developing and assessing investment policy, strategy, and actions for real estate investments. A policy and strategy are developed and approved, and the repositioning of the OPERS real estate portfolio is begun to reduce risk and enhance long-term returns.
- The Board directs staff to hire a master record keeper to position OPERS to offer a Defined Contribution Plan (DC, also referred to as the Member-Directed Plan). State Street Bank is retained to provide OPERS the functionality to unitize investment portfolios and offer existing low-fee defined benefit portfolios to DC Plan participants.
- International equity investments are repositioned to eliminate style biases and to introduce meaningful allocations to sub-asset classes such as small cap stocks and emerging markets.
- At the direction of the Board, staff works with the investment consultant to redevelop the strategy, process and approach to actively managing U.S.

- stocks internally. A \$4.5 billion internal portfolio is started, employing quantitative and fundamental security selection techniques, overlaid with a portfolio management approach that focuses on controlling risk.
- Staff follows a Board-approved rebalancing policy of maintaining a target allocation to U.S. and international stocks. A total of \$1.5 billion is added to stocks at the lows of the bear market in July and October, positioning the fund for strong gains in 2003.
- Internal staffing is strengthened with the hiring of seasoned professionals in a number of disciplines, including domestic stocks, bonds, and fund administration.

#### 2003

- Working with the general investment consultant and staff, the Board conducts a formal review of OPERS' pension assets and liability characteristics and affirms the current asset mix.
- Working with the general investment consultant and staff, the Board conducts a review of the health-care assets and assesses the need for a separate investment policy and asset mix for the Health Care Trust Fund.
- At the direction of the Board, staff works with the investment consultant to redevelop the strategy, process, and approach to actively managing U.S. fixed income internally. The \$10.7 billion internally managed bond portfolio outperforms its index by one-half of 1% in 2003.
- The Board directs staff to hire a
   Corporate Governance officer to work
   with the Board and staff to improve
   investment returns by encouraging and
   supporting corporate reforms and,
   where appropriate, advancing and

- supporting shareholder initiatives.
- Working with a project consultant, staff evaluates OPERS' securities lending programs and begins to implement changes targeted at raising return while continuing to tightly control program risk.

### 2003 Performance Highlights

Our efforts to redevelop and reposition the investment program over the past few years were rewarded in 2003 as financial markets in the U.S. and abroad rebounded from a bear market that was more severe than any witnessed since the 1930s. Here are the highlights:

- OPERS' assets grow by \$11.1 billion on the strength of investment gains.
- The fund earns an investment return of 25.33%, the highest return achieved since 1985.
- The fund outperforms its composite benchmark by eight-tenths of 1%, resulting in an incremental investment gain of \$427 million of value to the fund.
- The fund's one-year return ranks in the first percentile of a peer group of comparable public funds with assets in excess of \$10 billion.
- The fund's three-year return ranks in the top 5% of the same universe.
- The fund's five-year return ranks at the sixty-fourth percentile of the same universe, reflecting a lower allocation to higher-returning equities in the latter part of the bull market of the 1990s.

### **Challenges Ahead**

While we are pleased to report the recent gains and competitive returns achieved, we are at the same time cautious in believing that financial markets will continue to be as kind as they were in 2003. Much of the under-valuation in

financial markets that was present in late 2002 and early 2003 has been removed by the strong gains achieved since March of last year. Given current valuations and related economic developments, some notable market observers expect that stock and bond returns will be somewhat muted over the next few years, averaging in the mid single digits. We don't disagree. In such an environment, we see two primary challenges:

Increased Competition for Return
When broad market indices such as the
S&P 500 or the Lehman Bond Index are
not expected to provide meaningful
returns, market participants increase their
search for return through the use of
active-management strategies. The
evidence of the search for incremental
return can be found in the dramatic growth
of hedge funds, the amount of money
flowing into areas such as high-yield
bonds, small-cap stocks, emerging
markets, and real assets such as real
estate and commodities.

The continuing challenge is to remain ahead of the investing crowd and to proactively identify and seize market opportunities before they are exploited by market participants generally.

In 2004, we will be addressing this challenge in two ways. First, we have identified 14 areas of possible incremental return. Throughout the year, we will be working with the Board and our consultants to research and measure possible investment opportunities and invest where justified by our analysis. Second, we have recognized that our internal organizational structure does not always lend itself to quickly capturing market opportunities. We will be working with the Board to reorganize the Investment Division to enhance

oversight and improve flexibility and responsiveness.

Need for Greater Diversification OPERS' asset mix has a relatively high weighting to equities, premised on the historical basis that equities provide a higher return over the long term than other major asset classes. While this relationship is likely to continue to hold true, the challenge is in surviving the "near term" in order to experience the "long term." In an expected low return environment, and in a climate of increasing economic risks associated with budget and trade deficits as well as a weakening dollar, we are evaluating ways to broaden the diversification of the asset mix. In 2004, we will be working with the Board and the investment consultant to evaluate investment options that enhance the diversification of the fund.

# **Investment Management Principles**

While we continually seek to enhance our investment performance through various means, there are four enduring principles by which we abide as we manage the fund:

### (1) Investment vs. Speculation

We are a pension fund with a longterm investment horizon. The way we seek to earn investment return is, in priority:

- a. Investing broadly in major asset classes that are expected to benefit from the long-term growth in the U.S. and world economies.
- Identifying and capitalizing on situations of material under- and over-valuation within asset classes and sectors, while managing risks.

c. To a significantly lesser degree, capturing shorter-term trading situations and low-risk arbitrages that, from time to time, present themselves in the ordinary course of investing.

We are not speculators who seek to market-time or take extreme risk. In all of the investing we do, we measure performance to an appropriate benchmark and seek to earn, over a market cycle, the benchmark return plus a premium that is commensurate with the risk we accept.

### (2) Process

Our investment decisions, whether in directly managing portfolios or in the hiring of external investment managers, are process driven. We establish clear, written, agreed-upon guidelines and manage to a process. Investment management processes are regularly reviewed and updated.

### (3) Risk Control

While still an area of development for public and private money managers alike, we evaluate our portfolios and asset class constructions rigorously through the use of quantitative tools and software technology. In the publicly traded asset classes, we evaluate investment actions in the context of risk and return. At the total fund level and across asset classes and portfolios, investment risk is controlled to levels that have been agreed upon by the Board and reviewed by the investment consultant.

### (4) Cost Control

In the short term, asset management fees and investment costs don't appear to be meaningful in the context of the assets under management or the returns experienced from year to year. However, we know from academic research that investmentmanagement costs matter a great deal to long-run returns. We strive to maintain low costs through the use of internal asset management where justified, through the use of passive investment strategies where markets are generally efficient (markets where it is difficult to earn an above-market rate of return consistently), and through regular measurement and benchmarking of our costs to peer funds.

### Closing

In closing, on behalf of the Investment Staff, I wish to extend our sincere appreciation to the OPERS Retirement Board and Executive Director. The Board, in conjunction with the Executive Director, provided the vision, leadership, resources, patience, and encouragement that have allowed us to be able to report to you such favorable results. It has been a challenging time for all investors. We are grateful to have had such thoughtful leadership during a difficult period of time.

Additionally, we wish to thank our business partners—our consultants and money managers—who have worked closely with us to shape and guide our investment processes and actions. We appreciate your advice and continued support and assistance.

Finally, we are grateful to you, the members and beneficiaries, for supporting OPERS as it faced a variety of challenges recently. We appreciate your continued support and confidence.

On behalf of the Investment Staff, I wish to reaffirm our commitment to you, the members and beneficiaries, to always manage your pension assets in accordance with the applicable sections of the Ohio Revised Code, Sections 145.11

(A) and (B) of the Code, describing our fiduciary duty, are reproduced here in part. The full text of Section 145 of the Code, which governs OPERS, can be found on our web site at www.opers.org.

In appreciation,

Neil V. Toth

Director – Investments

VIII H

### Investment and fiduciary duties of board.

- (A) The members of the public employees retirement board shall be the trustees of the funds created by section 145.23 of the Revised Code. The board shall have full power to invest the funds. The board and other fiduciaries shall discharge their duties with respect to the funds solely in the interest of the participants and beneficiaries; for the exclusive purpose of providing benefits to participants and their beneficiaries and defraying reasonable expenses of administering the public employees retirement system; with care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with these matters would use in the conduct of an enterprise of a like character and with like aims; and by diversifying the investments of the system so as to minimize the risk of large losses, unless under the circumstances it is clearly prudent not to do so. . .
- (B) In exercising its fiduciary responsibility with respect to the investment of the funds, it shall be the intent of the board to give consideration to investments that enhance the general welfare of the state and its citizens where the investments offer quality, return, and safety comparable to other investments currently available to the board. In fulfilling this intent, equal consideration shall also be given to investments otherwise qualifying under this section that involve minority owned and controlled firms and firms owned and controlled by women either alone or in joint venture with other firms. . .

See Investment Policy Summary, beginning on page 83.

### Letter from Investment Consultant

# **ENNISKNUPP**

3.30.04

Board of Trustees
Public Employees Retirement System of Ohio
277 East Town Street
Columbus, OH 43215-4642

As independent investment advisor to the Board of Trustees of the Public Employees Retirement System of Ohio ("PERS"), we comment on the reporting of PERS investment results, PERS investment policy and the Board's oversight of System investments.

<u>Investment Results.</u> PERS investment results, as presented in this report, fairly represent, in our opinion, the investment performance of PERS assets. All measurements and comparisons have been made using standard performance evaluation methods, and results are presented in a manner consistent with the Performance Presentation Standards of the Association for Investment Management and Research.

<u>Investment Policy.</u> PERS assets are managed under well-articulated policies, which, in our opinion, are appropriate to the circumstances of PERS. Investment policy is progressive, yet prudent. The policies ensure diversification and exhibit attention to risk control generally. Throughout the year the Board, Executive Director and Director of Investments have taken appropriate measures to ensure that investments have conformed with the Board's policies.

<u>Prudent Oversight.</u> While delegating day-to-day investment management responsibility to its staff, the Board retains the responsibility to monitor all aspects of investment. In our opinion, the Board has established and executed an appropriately comprehensive process for overseeing the management of assets. Through regular reviews by the Board, quarterly performance appraisals by an independent firm, and the day-to-day oversight activities of the staff, the Board has achieved a high degree of awareness and critical oversight of PERS investments.

Very truly yours,

Richard M. Ennis, CFA

Richard Ennis

Principal

G:\OPERS\Wp\Letters\Board of Trustees - 2003 CAFR.doc

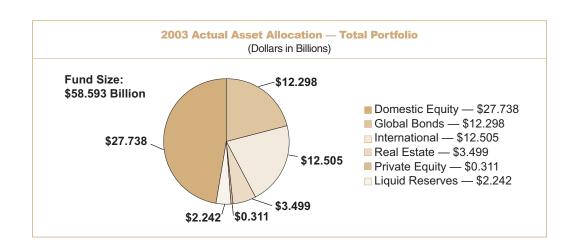
Ennis Knupp + Associates 10 South Riverside Plaza, Suite 700 Chicago, Illinois 60606-3709 vox 312 715 1700 fax 312 715 1952 www.ennisknupp.com

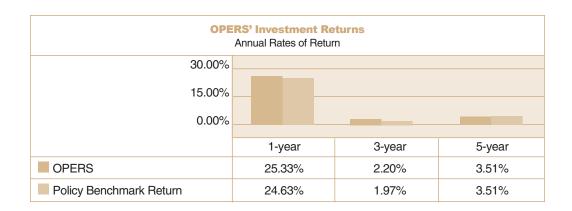
### **Investment Overview**

### **Investment Summary**

	2003		2002	
		% of		% of
	Fair Value	Total Fair Value	Fair Value	<b>Total Fair Value</b>
Global Bonds:				
U.S. Government and Agencies	\$ 3,370,439,779	5.76 %	\$ 2,137,382,339	4.50%
Corporate Bonds	4,451,504,914	7.60	4,003,668,368	8.43
Mortgage & Mortgage Backed	4,476,817,033	7.64	3,930,905,540	8.28
Total Global Bonds	\$12,298,761,726	21.00	\$10,071,956,247	21.21
Common Stock	27,738,137,217	47.34	22,105,983,968	46.54
Real Estate	3,498,816,611	5.97	4,639,006,704	9.77
Private Equities	310,549,287	0.53	257,932,891	0.54
International	12,504,839,226	21.34	9,507,773,672	20.02
Short-term Investments				
Commercial Paper	0	0.00	26,384,606	0.06
U.S. Treasury Obligations	503,939	0.00	884,029,935	1.86
Short-term Investment Funds (STIF)	2,241,345,998	3.82		
Total	\$58,592,954,004	100.00%	\$47,493,068,023	100.00%

# Facts at a Glance — Total Portfolio





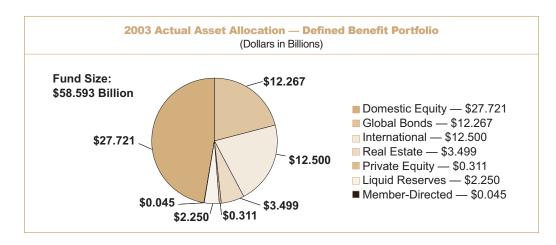
#### **Portfolio Structure**

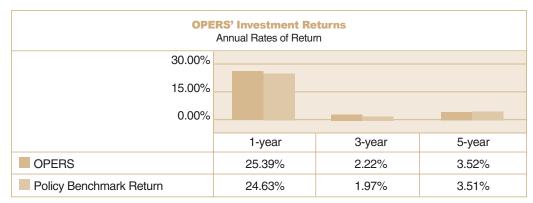
OPERS' total investment portfolio, as reflected in the Combining Statements of Fiduciary Net Assets pages 30-31, is comprised of both defined benefit (DB) and defined contribution (DC) assets. The DB assets originate from member and employer contributions to the Traditional Plan and employer contributions to the Combined Plan. The management of these assets is the responsibility of OPERS' investment staff under the direction of the Retirement Board. Defined contribution assets originate from employee contributions to the Combined Plan and both member and employer contributions to the Member-Directed Plan. The investment of DC assets is self directed by the members of the Combined and Member-Directed Plans, but is limited to

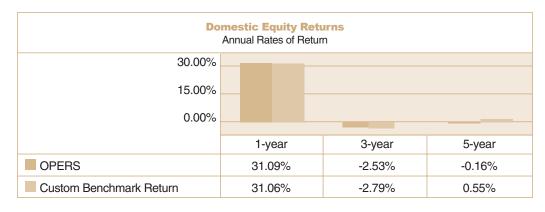
investment vehicles approved by the Retirement Board.

The data displayed within the Investment Section of this Annual Report is comprised of both total portfolio data (DB and DC) and data relating only to DB assets. Investment Section information, displayed prior to this point (pages 56-63), relates to the entire combined portfolio and includes both DB and DC assets. The balance of the information in the Investment Section of this Annual Report (pages 64-87) relates only to the DB portion of the portfolio, which is the only portion of the portfolio over which OPERS' investment staff exercises investment discretion. The DB portfolio accounted for more than 99.9% of all OPERS investment assets as of December 31, 2003.

### Facts at a Glance — Defined Benefit Portfolio

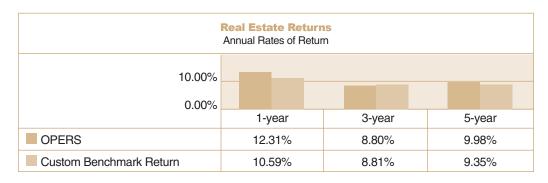












### **Investment Returns**

The OPERS investment portfolio returned 25.39% in 2003. We compare our overall portfolio return to a composite benchmark return that could be achieved by a portfolio that is passively invested in the broad market, with percentage weights allocated to each asset class as specified in OPERS' Statement of Investment Objectives and Policies. The return of the composite benchmark for 2003 was 24.63%.

The historical returns for the investment portfolio and composite benchmark are shown above.

### **Comparative Performance**

In addition to measuring the portfolio's performance relative to the composite benchmark, the Retirement Board compares the performance of the portfolio over time to the returns achieved by a universe of comparable public pension plan portfolios. The analysis facilitates a

percentile ranking of our performance relative to the universe. In this type of analysis, a lower score is more favorable than a higher score. For example, a rank of 25 would indicate that our portfolio outperformed 75% of all the funds contributing to the survey.

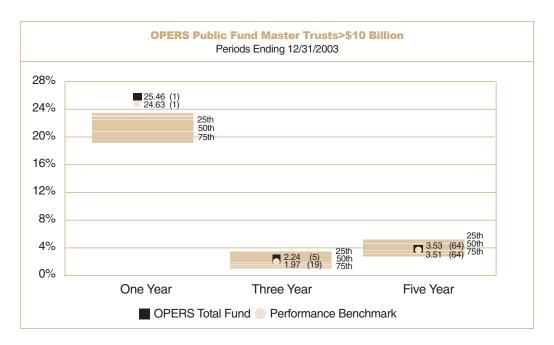
In 2003, OPERS' investment performance ranked 1 in a universe of public plans, indicating that our results were better than 99% of the plans contributing to the survey. Our cumulative three-year and five-year results have achieved a ranking of 5 and 64, respectively, indicating that we performed better than 95% and 36% of the plans contributing to the survey over this period.

Our performance ranking last year was exceptionally strong, reflecting our somewhat higher allocation to stocks than our peers. In periods of time when the stock market is falling, as has

happened in 2001 and 2002, OPERS' returns will tend to trail the returns earned by funds with lower allocations to stocks. While the near-term results are encouraging, it is important to note that OPERS' decision to have a higher exposure to stocks is a long-term investment decision that is expected to

provide superior investment returns over time.

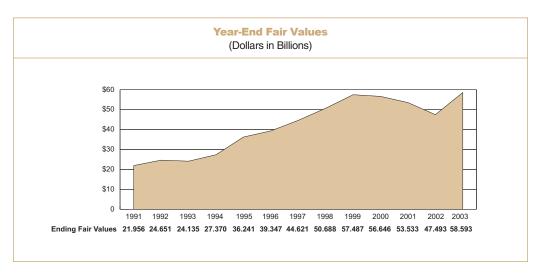
This chart shows our one-year, three-year, and five-year rankings. The bars in the chart represent the gross-of-fee performance distribution of funds contributing to the survey, and are divided into quartiles.



### Growth of Portfolio

This chart shows the growth of the portfolio since 1991. We ended the year

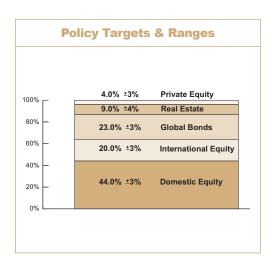
with assets of \$58.593 billion, up from \$47.493 billion at the end of 2002.



#### **Asset Allocation Policy**

In December of 2000, the Retirement Board adopted a revised asset allocation policy. The chart to the right shows the current policy allocation reached in December of 2001, and that was in effect for 2003.

Currently, our internal policy allocations for Domestic Equity and Private Equity are 47% and 0.6%, respectively. Over the next five years, we plan to increase the Private Equity allocation from 0.6% to 4% while decreasing the Domestic Equity allocation accordingly.



#### **Long-Term Assumptions**

The asset allocation policy was developed through formal asset-liability studies conducted in 2001 and 2003 by our external investment advisor, Ennis Knupp + Associates. The studies provided probabilities regarding the future funded status of the System under various assumptions involving the growth

rate of liabilities and the return on various asset mixes. A key input into the studies was the expected long-term rate of return of major asset classes and the expected rate of inflation. The key investment assumptions used in the asset-liability studies are displayed in the accompanying table.

Long-Term Assumptions							
Capital Market Assumptions	Re	-Term turn tations	Risk*				
	2001	2003	2001	2003			
Domestic Equity	9.0%	8.3%	16.3%	16.7%			
Global Bonds	6.8%	4.5%	8.1%	7.7%			
International Equity	8.9%	8.3%	19.7%	18.7%			
Real Estate	8.1%	6.4%	14.7%	12.1%			
Private Equity	10.5%	11.3%	31.2%	31.2%			
Expected Return on Portfolio	8.4%	7.34%	12.5%	12.58%			
Price Inflation	3.0%	2.5%	-	-			

<sup>\*</sup>Risk is defined as the standard deviation of expected return. For example, we expect that two-thirds of the time, the range of outcomes for Domestic Equity will be between -8.4% (8.3% - 16.7%) and 25% (8.3%+16.7%).

### Schedule of Investment Results

	2003	Rolling 3-Year	Rolling 5-Year
Total Portfolio Custom Benchmark <sup>1</sup>	25.39	2.22	3.52
	24.63	1.97	3.51
Domestic Equity Portfolio	31.09	-2.53	-0.16
Russell 3000 Stock Index <sup>2</sup>	31.06	-2.79	0.55
Global Bond Portfolio	6.49	8.14	6.91
Lehman Universal Index <sup>3</sup>	5.83	8.08	6.92
International Equity Portfolio MSCI ACWIF x U.S.4	40.70	-1.46	2.89
	40.83	-1.30	1.34
Real Estate Portfolio Custom Real Estate Index⁵	12.31	8.80	9.98
	10.59	8.81	9.35
Private Equity Portfolio Russell 3000 Stock Index + 300 bps <sup>6</sup>	22.02	-2.23	9.56
	29.68	-9.52	1.41
<b>Short-Term Portfolio</b>	1.18	2.27	3.70
90-day U.S. Treasury Bill <sup>7</sup>	1.14	2.45	3.68

#### Footnotes for Schedule of Investment Results

<sup>1</sup> **Customized benchmark** - performance data is calculated based upon the asset allocation targets and implementation schedules as specified by the Investment Policy in effect for each year. The asset allocation targets and associated time intervals these targets were in effect are displayed in the following table:

Asset Class	Full Year 1999	Full Year 2000	Full Year 2001	Full Year 2002	Full Year 2003
Domestic Equity	35.00%	35.00%	47.00%	47.00%	47.00%
Global Bonds	35.00%	35.00%	20.00%	20.00%	20.00%
International	18.00%	18.00%	23.00%	23.00%	23.00%
Real Estate	11.00%	11.00%	9.00%	9.00%	9.00%
Private Equity	N/A	N/A	0.60%	0.60%	0.60%
Short-Term Investments	1.00%	1.00%	0.40%	0.40%	0.40%
Total	100.00%	100.00%	100.00%	100.00%	100.00%

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

Asset Class	1/1/96 through 9/30/98	10/1/98 through 1/31/01	2/01/01 through 11/30/01	12/31/01	1/1/02 through 12/31/03
Domestic Equity	S&P 500	S&P Supercomposite	S&P 1500/Russell 3000 Blend	Russell 3000	Russell 3000
Global Bonds	SSB BIG Index	SSB BIG Index	Lehman Aggregate	Lehman Universal	Lehman Universal
International	MSCI EAFE	MSCI AWI Free x U.S.	MSCI ACWI Free x U.S.	MSCI ACWI Free x U.S.	MSCI ACWI Free x U.S.
Real Estate	NCREIF	RE Custom Composite	RE Custom Composite	RE Custom Composite	RE Custom Composite
Private Equity*	S&P 500	S&P 500	S&P 500	S&P 500	Russell 3000 + 300 bps
Short-Term Investments	90-day U.S. Treasury Bill	90-day U.S. Treasury Bill	90-day U.S. Treasury Bill	90-day U.S. Treasury Bill	90-day U.S. Treasury Bill

<sup>\*</sup>Name changed from Venture Capital 12/31/2001; management of International Private Equity moved to Private Equity class.

<sup>&</sup>lt;sup>2</sup> Russell 3000 Stock Index - A capitalization-weighted stock index consisting of the 3,000 largest publicly traded U.S. stocks by capitalization. This index is a broad measure of the performance of the aggregate domestic equity market.

<sup>&</sup>lt;sup>3</sup> **Lehman Universal Index** - A market value weighted index consisting of the Lehman Brothers Corporate, Government and Mortgage-Backed Indices. This index is the broadest available measure of the aggregate U.S. fixed income market.

<sup>&</sup>lt;sup>4</sup> MSCI All Country World Ex-US Index (MSCI ACWIF x U.S.) - A capitalization-weighted index of stocks representing 47 developed and emerging country markets, excluding the U.S. market.

<sup>&</sup>lt;sup>5</sup> **Custom Real Estate Index** - 60% NCREIF (appraisal-based valuations of privately-owned commercial real estate) adjusted for representative fees, plus 20% Wilshire Real Estate Securities Index (publicly traded real estate investment trust securities), plus 20% Giliberto-Levy Commercial Mortgage Performance Index (a representative portfolio of institutional grade, fixed-rate/fixed-term, commercial mortgage whole loan), adjusted for representative fees.

<sup>&</sup>lt;sup>6</sup> Russell 3000 Stock Index + 300 bps - A capitalization-weighted stock index consisting of the 3000 largest publicly traded U.S. stocks by capitalization adjusted for risk.

<sup>&</sup>lt;sup>7</sup> **90-day US Treasury Bill** - The 90-day Treasury Bill return as measured by Lehman Brothers.

# List of Largest Assets Held

# Largest Equity Holdings (By Fair Value)\*

As of December 31, 2003

	Shares	Stock	Fair Value
1)	23,399,148	General Electric Company	\$724,905,605
2)	19,047,120	Pfizer Incorporated	672,934,750
3)	15,267,594	Exxon Mobil Company	625,971,354
4)	12,731,201	Citigroup Incorporated	617,972,497
5)	21,904,689	Microsoft Corporation	599,531,338
6)	15,322,607	Intel Corporation	491,089,554
7)	17,612,568	Cisco Systems Incorporated	426,752,523
8)	5,382,156	American International Group	356,729,300
9)	6,548,734	Johnson & Johnson	338,307,598
10)	3,632,065	IBM Corp.	336,619,784

# Largest Global Bond Holdings (By Fair Value)\*

As of December 31, 2003

Par Value	Description	Coupon	Maturity	Rating	Fair Value
\$200,000,000	Federal National Mortgage Association Agency Bond	5.000%	5/14/07	Rating AAA	\$202,680,000
200,000,000	Federal National Mortgage Association Agency Bond	3.250%	8/15/08	Rating AAA	198,440,000
187,063,000	U.S. Treasury Bond	5.375%	2/15/31	Rating AAA	195,069,296
378,000,000	U.S. Treasury Bond Principal Strip		11/15/21	Rating AAA	144,112,500
100,000,000	U.S. Treasury Inflation Protected Note	3.875%	1/15/09	Rating AAA	127,406,500
120,000,000	U.S. Treasury Notes	3.375%	12/15/08	Rating AAA	120,828,000
100,000,000	U.S. Treasury Notes	1.875%	11/30/05	Rating AAA	100,190,000
90,000,000	Federal National Mortgage Association TBA	7.000%	1/1/34	Rating AAA	95,287,500
90,734,934	Federal Home Loan Corp MBS	5.500%	6/1/33	Rating AAA	91,877,287
89,000,000	Federal National Mortgage Association MBS	4.750%	6/18/07	Rating AAA	90,335,000

<sup>\*</sup> A complete list of assets held at December 31, 2003 is available on our web site: www.opers.org

# Schedule of U.S. Stock Brokerage Commissions Paid

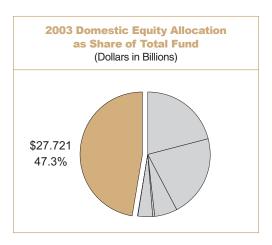
#### Year Ended December 31, 2003

Brokerage Firm	Shares Traded	Commissions Paid	Average Cents Per Sha
Goldman, Sachs & Co.	24,051,219	\$ 707,278	2.9
Lehman Brothers	11,938,035	466,925	3.9
Morgan Stanley & Co.	69,225,866	462,550	0.7
Prudential Securities	22,016,765	417,700	1.9
Bear, Stearns & Co.	8,876,544	405,711	4.6
Deutsche Bank Securities	8,282,048	392,945	4.7
J. P. Morgan Securities	8,206,380	356,185	4.3
Merrill Lynch & Co.	7,084,107	324,762	4.6
Salomon Smith Barney	6,261,759	292,929	4.7
Banc of America	5,222,680	256,089	4.9
UBS	4,785,637	221,918	4.6
CS First Boston Corporation	4,489,493	211,380	4.7
Cowen & Co.	4,324,983	207,735	4.8
Bloomberg Trade Book	9,769,530	195,391	2.0
Wachovia Securities	5,334,467	171,268	3.2
Gerard Klauer Mattison & Co.	3,871,401	159,070	4.1
Cantor Fitzgerald	4,685,533	157,683	3.4
Bernstein, Sanford	2,803,373	128,243	4.6
CIBC/Oppenheimer	2,366,716	114,936	4.9
ITG Inc.	5,266,195	103,923	2.0
Greenstreet Advisors	3,429,125	102,874	3.0
Jones & Associates	1,906,047	88,993	4.7
McDonald & Co.	1,715,770	84,256	4.9
Charles Schwab/Washington Research	2,479,123	81,944	3.3
Jeffries & Co.	1,558,012	70,765	4.5
Others (Includes 18 Brokerage Firms)	22,329,682	772,770	3.5
TOTAL	252,280,490	\$6,956,223	2.8

# Asset Class Reviews — Domestic Equity

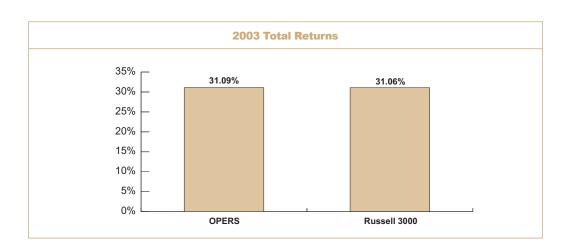
#### **Fair Value**

As of December 31, 2003, the Domestic Equity portfolio had a fair value of \$27.721 billion. This represented 47.3% of the total OPERS fund. During the year, the stock purchases were \$3,652,728,478, while sales totaled \$4,320,678,167. Portfolio turnover was 6.7% versus 9.9% in 2002. The OPERS portfolio generated total dividend income of \$426,673,577 versus \$359,124,910 in 2002.



#### **OPERS' Results**

The total return for the OPERS' Domestic Equity portfolio in 2003 was 31.09% versus a total return of 31.06% for the Russell 3000 Index (R3000). The portfolio outperformed its benchmark by 3 basis points in 2003. This marked the fourth consecutive year that the Domestic Equity asset class beat its benchmark.



#### **2003 Major Initiatives**

Upgrading the internal research process, creating a more cost-effective package of data resources, identifying precursors of early stage financial distress and selecting a corporate governance rating service were the four major initiatives completed in 2003.

The internal research process associated with the R1000 Research portfolio was enhanced with the second-generation development of the quantitative model/ Stock Selection System. In addition, the entire investment methodology (model, fundamental research process, portfolio construction process, monitoring, etc.) has been documented and compiled into a manual. This manual will serve as a single source for all documents related to the operations of the R1000 Research portfolio and provide a detailed description of the portfolio investment process.

The review of the department's data platforms and vendor systems resulted in a superior package of research tools at a substantial cost discount. In the Domestic Equity department, the projected budget cost savings totaled nearly \$400,000.

Because identifying potential underperforming securities due to financial distress would assist both the internally managed Index and R1000 Research portfolios, a project team worked with an external consultant, Quantitative Services Group (QSG) to identify the appropriate factors and create the Financial Distress Model. The model's output was designed to be utilized by the analytical staff as a check on a company's financial conditions.

When deciding to make an investment in a company, the corporate governance policies and practices should be scrutinized for any possible investment insights. A project team evaluated several organizations that produced corporate governance rating scores. The team recommended that OPERS hire GovernanceMetrics International (GMI) as its governance rating service for calendar year 2004.

### Schedule of Managers - Domestic Equity Portfolio

As of December 31, 2003

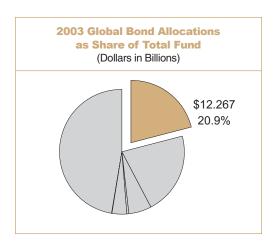
	Assets Under	% of Domestic	2003			Benchmark
Portfolio/Manager	Management*	Equity	Mgr Return	Fees	Benchmark	Return
Active Internal						
Research Portfolio	\$ 5,221,937,568	18.84%	30.51%	\$ 0	Russell 1000	29.89%
Active External						
AllianceBernstein	\$ 1,039,363,490	3.75%	30.57%	\$2,182,179	Russell 1000	29.89%
Wellington	\$ 1,001,269,895	3.61%	30.11%	\$2,317,531	Russell 1000	29.89%
Capital Guardian	\$ 189,326,260	0.68%	43.38%	\$ 555,963	Russell 2000	47.25%
Fidelity	\$ 205,524,767	0.74%	38.41%	\$1,102,424	Russell 2000	47.25%
Invesco	\$ 218,523,206	0.79%	50.17%	\$ 900,022	Russell 2000	47.25%
Total Active	\$ 7,875,945,186	28.41%	31.42%	\$7, 058,119		
Passive Internal						
Russell 3000 Passive	\$18,797,924,435	67.81%	30.97%	\$ 0	Russell 3000	31.06%
Passive External						
Barclays	\$ 1,047,517,608	3.78%	30.81%	\$ 327,089	Russell 3000	31.06%
Total Passive	\$19,845,442,043	71.59%	30.93%	\$ 327,089		
Total Domestic Equity	\$27,721,387,229	100.00%	31.09%	\$7,385,208	Russell 3000	

<sup>\*</sup> Market Values do not include accruals

### Asset Class Reviews — Global Bonds

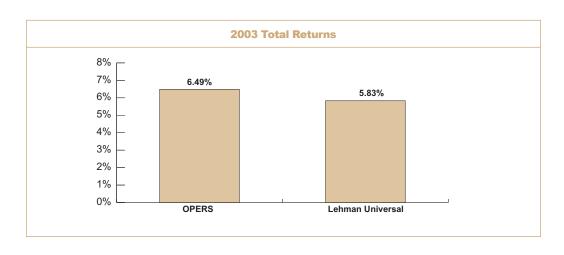
#### **Fair Value**

As of December 31, 2003, the Global Bond portfolio had a fair value of \$12.267 billion. This represented 20.9% of the total OPERS fund and is comprised of both the core and extended sectors.



#### **OPERS' Results**

OPERS' Global Bond holdings returned 6.49% for the year, compared to a return of 5.83% for the Lehman Universal Index. The positive performance of the asset class was supported by the strong gains generated by the internal portfolio. Two external managers, Citigroup and Morgan Stanley, added value as their returns outperformed their respective benchmarks. Although our high-yield managers, W.R. Huff and Shenkman, generated positive returns, they significantly underperformed the Lehman High Yield Index. Capital Guardian, an emerging market debt manager, was unable to match its index return.



#### **2003 Major Initiatives**

In 2003, the Global Bond Department developed an Asset Class Policy and Strategy document; terminated Metropolitan West, a core plus manager, and initiated the search for a third high-yield manager. The department also evaluated and implemented a mortgage dollar roll program\*, which is expected to generate incremental return for the core portfolio while assuming minimal risk.

At the end of 2003, the Global Bond staff refined its internal investment management strategy and process. The philosophy is focused on a risk-controlled investment approach and alpha strategies

based on security selection, sector allocation and opportunistic trading. The department implemented an organizational structure to support its decision-making process.

In addition to the high-yield manager activity, staff will conduct a search for a core manager to complement the internal portfolio. Research initiatives will be undertaken in 2004 to improve diversification and enhance return of the asset class; specifically, staff will evaluate investment grade non-U.S. debt and various high yield strategies such as CMBS and distressed/stressed debt.

### Schedule of Managers – Global Bonds Portfolio

As of December 31, 2003

	A	Assets Under	% of Global	2003			Benchmark
Portfolio/Manager	Ma	anagement***	Bonds	Mgr Return	Fees	Benchmark	Returns
OPERS Internal Staff	\$1	0,457,265,153	85.25%	4.62%	\$ 0	Lehman Aggregate Index	4.11%
Morgan Stanley	\$	619,139,494	5.05%	7.52%	\$1,078,163	Lehman Universal Index	5.83%
Metropolitan West**	\$	0	0.00%	NA	\$ 354,310	Lehman Universal Index	5.83%
Shenkman Capital	\$	400,284,682	3.26%	15.33%	\$1,468,886	Lehman High Yield Index	28.97%
W.R. Huff	\$	285,254,222	2.32%	19.32%	\$1,203,446	Lehman High Yield Index	28.97%
Capital Guardian	\$	254,995,322	2.08%	25.47%	\$ 814,993	Lehman Emerging Market Debt	26.94%
Salomon	\$	250,180,081	2.04%	30.42%	\$ 915,739	Lehman Emerging Market Debt	26.94%
Total Global Bonds	\$1	2,267,118,954	100.00%	6.49%	\$5,835,537		

<sup>\*</sup> A transaction in which an investor of a mortgage-backed security agrees to sell the security to another investor, while agreeing to buy back a similar mortgage-backed security for a specified price on a specified date. The investor who sells the security gives up the cash flows during the roll period, but instead has use of the proceeds. Dollar rolls are typically used to cover short positions, take advantage of an arbitrage situation, or obtain attractive financing rates for other investments.

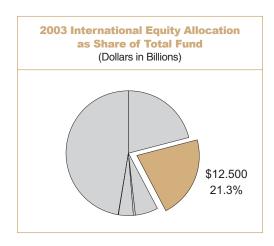
<sup>\*\*</sup> Manager was terminated on September 30,2003.

<sup>\*\*\*</sup> Market Values do not include accruals.

# Asset Class Reviews — International Equity

#### **Fair Value**

As of December 31, 2003, the International Equity portfolio had a fair value of \$12.500 billion. This represented 21,3% of the total OPERS fund.



#### **OPERS' Results**

In 2003, the International Equity portfolio returns were an impressive 40.7%, the highest of any OPERS asset class. Nevertheless, the portfolio underperformed its benchmark, the Morgan Stanley Capital International All Country World Index Free excluding the U.S. index (MSCI ACWIFxU.S.), by 13 basis points, or 0.13%.

The underperformance primarily was a result of two factors:

 Active Management: In 2003, lowerquality companies—many with weak balance sheets, no earnings and poor management teams—rallied on improving global growth prospects. In this environment, value investing substantially outperformed earnings focused investment approaches. As a result, only three of OPERS' 13 active managers returns exceeded their respective benchmarks. Nevertheless, all of the portfolio's enhanced index and index managers, which represented 50% of the total portfolio, exceeded benchmark.

restructured the external manager lineup to better enhance future returns and bring the portfolio into conformity with its new policy and strategy. Six external managers were terminated and five new managers were selected and funded. The cost of transitioning these portfolios in a rapidly rising market produced a performance drag.



Several actions by senior investment staff helped to moderate this underperformance:

- Emerging Markets: The portfolio held an intentional overweight position in emerging markets throughout 2003.
   This overweight position in emerging markets enhanced performance as emerging markets returned 55.8% and strongly outperformed developed non-U.S. equity markets by 17.2%.
- Small Capitalization: The increased allocation to small capitalization stocks aided returns as the MSCI World, excluding U.S. Small Cap Index, returned an impressive 61.8%.
- Enhanced Indexing: Enhanced index strategies were overweighted in the early part of the year due to rebalancing efforts. These low-cost, low-risk strategies performed well and added valued by exceeding the benchmark return.

returned 11.28% and trailed the index return due to its overweighting of defensive companies.

#### **2003 Major Initiatives**

In 2003, the International Equity Department completed the following initiatives:

 Implementation of a new International Equity Policy & Strategy—Staff spent most of the year reorganizing the portfolio to conform to the new international investment strategy adopted at the end of 2002.

- This effort involved three major external manager searches—a growth, a core and a small capitalization search—and the selection of five new external managers.
- Internalization Research—Staff continued to investigate the feasibility of internalizing a portion of the International Equity portfolio. During the year, time was spent on evaluating the merits of using external manager stock selection ideas to construct an enhanced index portfolio.
- Foreign Currency Audit—This initiative sought to ensure that OPERS' foreign currency transactions were being handled in the most costeffective manner.
- Restructuring of the Commission
  Recapture Program—The initiative
  refined and improved the existing
  International Commission Recapture
  program. Particular objectives included
  ensuring the program made economic
  sense, was competitive and conforms
  with the OPERS Soft Dollar and
  Commission Recapture policy.
- Country Policy Research—This
  project provided members of the
  OPERS Retirement Board with a
  summary of the OPERS' growing
  emerging market exposure.
  The project reviewed the actions of
  other public plans to control unique
  country risk and determine if such
  measures are applicable for OPERS.

# Schedule of Managers – International Equity Portfolio

As of December 31, 2003

			2003			
	Assets Under	% of Int'l	Mgr			Benchmark
Portfolio/Manager	Management	Equity	Return	Fees	Benchmark	Returns
Active	3	11.17				
Cap Guardian	\$ 1,049,219,856	8.40%	38.81%	\$ 2,579,942	MSCI ACWIFxU.S.	40.83%
Brandes	\$ 1,064,019,381	8.51%	50.35%	\$ 4,083,049	ACWIFxU.S.	40.83%
Marvin & Palmer*	\$ 209,373	0.00%	NA	\$ 876,490	ACWIFxU.S.	40.83%
Bk of Ireland	\$ 377,511,452	3.02%	29.97%	\$ 1,379,886	ACWIFxU.S.	40.83%
TT Int'l.	\$ 467,443,964	3.74%	35.06%	\$ 864,352	ACWIFxU.S.	40.83%
Nicholas-App.**	\$ 382,756	0.00%	NA	\$ 544,845	ACWIFxU.S.	40.83%
Oechsle	\$ 422,981,853	3.38%	31.10%	\$ 1,130,530	ACWIFxU.S.	40.83%
JP Morgan Fleming	\$ 445,778,416	3.57%	NA	\$ 1,118,442	ACWIFxU.S.	40.83%
Walter Scott & Partners	\$ 470,408,758	3.76%	NA	\$ 857,956	ACWIFxU.S.	40.83%
Alliance Bernstein	\$ 869,064,518	6.95%	NA	\$ 1,499,012	ACWIFxU.S.	40.83%
JP Morgan***	\$ 532,985	0.00%	NA	\$ 400,325	MSCI EAFE	40.83%
Driehaus#	\$ 132,062	0.00%	NA	\$ 112,322	ACWIFxU.S.	40.83%
Lazard	\$ 204,701,204	1.64%	64.38%	\$ 1,009,520	MSCI EMF	55.82%
Scudder##	\$ 3,368,831	0.03%	NA	\$ 0	MSCI EMF	55.82%
Boston Company	\$ 249,561,085	2.00%	55.52%	\$ 1,393,649	MSCI EMF	55.82%
First State	\$ 242,855,047	1.95%	57.40%	\$ 940,363	MSCI EMF	55.82%
Wellington	\$ 138,537,761	1.11%	NA	\$ 236,119	MSCI WorldxU.S. Small Cap	61.81%
Acadian	\$ 187,915,612	1.50%	NA	\$ 192,757	MSCI WorldxU.S. Small Cap	61.81%
Nicholas-App. Sm. Cap###	\$ 91,629	0.00%	NA	\$ 53,683	MSCI WorldxU.S. Small Cap	61.81%
Harris Assoc.+	\$ 92,108	0.00%	NA	\$ 212,096	MSCI WorldxU.S. Small Cap	61.81%
Total Active	\$ 6,194,808,651	49.56%	NA	\$19,485,338		
Enhanced						
Barclays Enhcd.	\$ 2,473,560,885	19.79%	41.61%	\$ 2,753,589	ACWIFxU.S.	40.83%
Baring	\$ 1,046,394,513	8.37%	42.59%	\$ 1,553,163	MSCI ACWIFXU.S.	40.83%
Total Enhanced	\$ 3,519,955,398	28.16%	41.87%	\$ 4,306,752		
Passive	, -,- : -,,-			,,. 02		
Barclays Index	\$ 2,784,979,823	22.28%	41.49%	\$ 840,556	ACWIFxU.S.	40.83%
Total Passive	\$ 2,784,979,823	22.28%	41.49%	\$ 840,556		
Total Int'l Equity	\$12,499,743,872	100.00%	40.70%	\$24,632,646		

<sup>\*</sup> Manager was terminated on August 19, 2003
\*\* Manager was terminated on April 15, 2003
\*\*\*Manager was terminated on May 20, 2003

<sup>\*</sup> Manager was terminated on February 18, 2003

<sup>\*\*</sup> Manager was terminated on December 2, 2002

<sup>\*\*\*</sup> Manager was terminated on April 15, 2003

<sup>\*</sup> Manager was terminated on November 18, 2003

### Asset Class Reviews — Real Estate

#### **Fair Value**

As of December 31, 2003, the Real Estate portfolio had a fair value of \$3.499 billion. This represented 6.0% of the total OPERS fund.

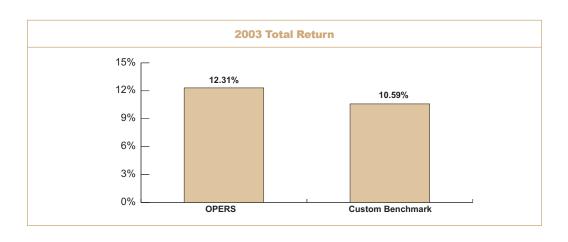


#### **OPERS' Results**

OPERS' Real Estate portfolio generated exceptional returns in 2003 due to strong performance by REITs and direct equity portfolios, and a tactical overweighting to REITs. OPERS' return for 2003 was 12.31%, while the return of the custom benchmark was 10.59%. The OPERS portfolio return was comprised of the private portfolio's return of 9.41% and the REIT portfolio return of 33.49%. The income component of the return was 4.10%, and appreciation was 8.05% for the entire portfolio.

Our Direct Equity holdings performed well, returning 9.63% for the year. Our direct equities were driven by the portfolios managed by Rothschild, with a total return

of 19.23%; Faison, with a total return of 13.61%; and Lowe, with a total return of 11.46%. The High Return portfolio had the best performance, benefiting from income returns and the unrealized appreciation in the Five Arrows program, with a total return of 12.43%. The Enhanced portfolio followed with a total return of 8.97%. This was driven by the sale of the Outlet Mall portfolio, as well as sales of a number of hotels. The Stable portfolio returned 8.48%, beating the NPI by 0.55%. Contributing to the outperformance of the Stable portfolio was Bristol Group with a total return of 8.92%, TGM with a total return of 8.50%, and Great Point with a total return of 8.38%.



The total return on the REIT portfolio for the year ended December 31, 2003 was 33.49%. While on an absolute basis the return is significant, the portfolio underperformed the Wilshire Real Estate Securities Index by 3.33%. The poor performance relative to the benchmark is attributed to two main reasons. First, the REIT portfolio was underweighted to the hotel sector. This sector was one of the best performing during 2003. The second reason for the poor performance was due to security selection. However, the overweighting to the REIT sector did aid overall performance, as the REIT portfolio vastly outperformed the NCREIF Property Index.

#### **2003 Major Initiatives**

During the year, the Real Estate staff focused on two key initiatives:

- Implementing the Real Estate Strategic Plan to reposition the real estate portfolio so that the composition is consistent with the Real Estate Policy and Strategic Plan developed in 2002.
- Reassessing internal/external resources for management of the Real Estate asset class.

### Schedule of Managers – Real Estate Portfolio

As of December 31, 2003

	Assets Under	% of	2003	Estimated		
Portfolio/Manager	Management	Real Estate	Mgr Return	Fees	Mandate	Sector
REIT	\$ 594,433,631	16.99%	33.49%	\$ 0	REIT	Hotel, Residential,
						Commercial
AFL-CIO	\$ 75,575,622	2.16%	2.96%	\$ 277,126	Debt	Residential
Bristol	\$ 752,787,081	21.52%	8.92%	\$ 3,431,540	Direct Equity	Commercial
Faison	\$ 333,649,293	9.54%	13.61%	\$ 818,986	Direct Equity	Commercial
Great Point	\$ 45,296,882	1.29%	8.38%	\$ 317,619	Debt/Direct Equity	Commercial
CBA Huntoon Hastings	\$ 3,473,066	0.10%	(3.31%)	\$ 409,965	Debt	Commercial
Legg Mason	\$ 63,437,673	1.81%	1.10%	\$ 268,286	Debt/Direct Equity	Commercial
Lowe	\$ 301,584,166	8.62%	11.46%	\$ 7,325,023	Debt/Direct Equity	Commercial
Rothschild	\$ 281,377,126	8.04%	19.23%	\$ 6,053,347	Debt/Direct Equity	Commercial
Sentinel	\$ 458,002,310	13.09%	1.96%	\$ 3,572,649	Direct Equity	Commercial, Residential
TGM	\$ 589,199,761	16.84%	8.50%	\$ 2,270,420	Direct Equity	Residential
Total Real Estate	\$3,498,816,611	100.00%	12.31%	\$24,744,961		

# Asset Class Reviews — Private Equity

#### Introduction

The Private Equity program was launched in 2002, targeting a 4% asset allocation exposure by 2008. This asset class invests in private equity partnerships and discretionary managers that invest in private equity partnerships.

The Private Equity policy identifies the objective, benchmark, risk management, investable securities and program elements. The targeted portfolio structure is shown below with a brief description of each sub-asset class.

#### Corporate Finance

Commonly referred to as buyouts, the underlying companies are generally mature with positive cash flows and have the ability to borrow significant capital.

#### Venture Capital

The underlying companies are young, generally focused on technology or life sciences with negative cash flows and the inability to borrow significant capital.

#### Special Situations

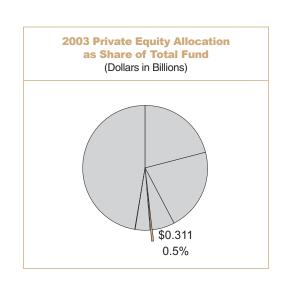
These partnerships may invest in a variety of companies including sector-specific funds such as energy or health care. Investments may also include secondary funds or capital structure funds such as distressed debt or mezzanine.

While the Private Equity program is committed to a long-term return of the Russell 3000 plus 300 basis points, it will generate negative returns until the investments begin to mature in several years. This effect is commonly referred to as the J-curve.

Sub-Asset Class	Domestic	International	Total
Corporate Finance	40%	15%	55%
Venture Capital	20%	5%	25%
Special Situations	15%	5%	20%
Total	75%	25%	100%

#### **Fair Value**

As of December 31, 2003, the Private Equity portfolio had a fair value of \$311 million, representing 0.5% of the total OPERS fund. This is based on adjustments for unrealized gains and losses through September 30, 2003 and cash flows through December 31, 2003.



#### **OPERS' Results**

Based on fair values at September 30 with cash flows through December 31 (with the exception of publicly held securities which are valued as of December 31), the Private Equity portfolio ended the year with a fair value of \$311 million.

Private Equity investments provided a total return of 22.0% for the 12 months ended December 31, 2003. Consistent with industry practice, private equity returns are reported with a one-quarter lag, adjusted for the following quarter's cash flows. Private equity returns are inherently volatile in the short-term, affected by factors including the stage of investment, macro and micro-economic conditions, public

markets, vintage year and geographic exposure. OPERS is a long-term investor and expects that long-term, risk-adjusted returns will favorably impact the total fund returns.

For the 12 months ended December 31, 2003, the OPERS Private Equity portfolio had \$78.75 million of capital calls\* and \$49.28 million in distributions with a net cash outflow of \$29.47 million.

#### **2003 Major Initiatives**

A request for proposals for a Discretionary \$100 million Diversified Fund of Funds Mandate was issued in August. With the selection of finalists complete, staff anticipates awarding the mandate during the first guarter of 2004.

<sup>\*</sup> The requirement of investors in private equity funds is to supply capital per their commitment with the partnership.

### Schedule of Managers – Private Equity Portfolio

As of December 31, 2003 (\$ Millions)

Legacy   Primus Capital Fund II   Venture Capital   Venture Capital   Domestic   1992   1.7   15.0   0.0   0.0   0.0   12.8%				Vin-	Market		Domeining	Cash	Cook	Net
Legacy	Doutmonoloin	Time	O a a sura make s				Remaining		Cash	
Primus Capital Fund II   Venture Capital   Venture Capital   Venture Capital   Venture Capital   Venture Capital   Domestic   1992   1.7   15.0   0.0   0.0   0.0   0.0   12.8%   Primus Capital Fund III   Venture Capital   Domestic   1993   0.7   10.0   0.0   0.0   0.0   0.0   22.7%   O.7   O.7   0.0   0.0   0.0   0.0   0.0   0.0   22.7%   O.7   O.7   0.0		туре	Geography	tage	value	Communent	Communent	Outilow	Innow	Inn
Blue Chip Capital I		Vantuus Canital	Damastia	1007	ድር ር	<b>0100</b>	<b>#0.0</b>	фо o	Ф4 Г	10.00/
Primus Capital Fund III   OPERS Int'l Timber Fund I'   Special Situations   International   1994   127.7   234.3   0.0   0.0   22.7%   0.0   0.0   24.1   -3.5%   0.0   0.0   0.0   24.1   -3.5%   0.0   0.0   0.0   24.1   -3.5%   0.0   0.0   0.0   0.0   24.1   -3.5%   0.0   0							*			
OPERS Int'l Timber Fund I' AlG Global Emerging										
AlG Global Emerging   Markets Fund   Corporate Finance   International   1997   22.3   50.0   17.8   2.9   5.4   1.8%	·									
Markets Fund   Corporate Finance   International   1997   22.3   50.0   17.8   2.9   5.4   1.8%		Special Situations	International	1994	127.7	234.3	0.0	0.0	24.1	-3.5%
Blue Chip Capital II										
Primus Capital Fund IV   Special Situations   Spe		i i					_	_	_	
Special Situations   International   1997   26.9   63.7   0.0   0.0   0.0   0.4   -10.0%										
Linsalata Capital Partners   Fund III	·									
Fund III	•	Special Situations	International	1997	26.9	63.7	0.0	0.0	0.4	-10.0%
MCM Capital Partners   Corporate Finance   Domestic   1998   11.1   15.0   3.6   0.0   2.5   7.6%	·									
Blue Chip Capital III   Venture Capital   Domestic   1999   8.3   25.0   0.0   1.3   1.3   -26.4%		'								0.0,.
Blue Chip Capital IV	·								-	
Linsalata Capital Partners   Fund IV   Corporate Finance   Domestic   Domestic   2000   9.8   25.0   15.4   1.5   0.0   -1.9%   Primus Capital Fund V   Venture Capital   Domestic   2000   6.7   25.0   15.7   2.4   0.0   -25.0%   Sub-Total   Sub			Domestic						1.3	
Fund IV	Blue Chip Capital IV	Venture Capital	Domestic	2000	6.1	25.0	16.2	1.3	0.9	-12.9%
Primus Capital Fund V         Venture Capital         Domestic         2000         6.7         25.0         15.7         2.4         0.0         -25.0%           Sub-Total         \$243.1         \$543.0         \$69.1         \$9.4         \$46.9           New Blackstone Capital Partners IV         Corporate Finance Coller International Partners IV         Domestic         2002         \$36.9         \$175.0         \$138.7         \$38.3         \$0.0         NIM***           Coller International Partners IV         Special Situations Charterhouse Capital Partners VII**         Corporate Finance International Domestic 2003         8.5         94.5         85.2         9.1         0.0         NIM***           Castle Harlan Partners IV         Corporate Finance FS Equity Partners V         Corporate Finance Corporate Finance Finance FS Equity Partners V         Corporate Finance Domestic 2003         6.8         75.0         68.0         7.0         1.1         NIM***           Permira Europe III***         Corporate Finance Finance Finance Permira Europe III**         Corporate Finance Domestic 2003         0.0         62.9         62.9         0.0         0.0         NIM***           First Reserve Fund X         Special Situations Sub-Total         Domestic 2003         0.0         50.0         50.0         0.0         0.0         NIM***     <	Linsalata Capital Partners									
Sub-Total   Sub-	Fund IV	Corporate Finance	Domestic	2000	9.8	25.0	15.4	1.5	0.0	-1.9%
New Blackstone Capital   Partners IV   Corporate Finance   Corpo	Primus Capital Fund V	Venture Capital	Domestic	2000	6.7	25.0	15.7	2.4	0.0	-25.0%
Partners IV   Corporate Finance   Domestic   2002   \$36.9   \$175.0   \$138.7   \$38.3   \$0.0   NM***	Sub-Total				\$243.1	\$543.0	\$69.1	\$9.4	\$46.9	
Partners IV         Corporate Finance         Domestic         2002         \$36.9         \$175.0         \$138.7         \$38.3         \$0.0         NM***           Coller International Partners IV         Special Situations         International International Partners VII**         2002         7.5         75.0         67.1         6.4         0.4         NM****           Charterhouse Capital Partners VII***         Corporate Finance International Castle Harlan Partners IV         Corporate Finance Partners IV Partners IV Corporate Finance Partners IV Part	New									
Partners IV         Corporate Finance         Domestic         2002         \$36.9         \$175.0         \$138.7         \$38.3         \$0.0         NM***           Coller International Partners IV         Special Situations         International International Partners VII**         2002         7.5         75.0         67.1         6.4         0.4         NM****           Charterhouse Capital Partners VII***         Corporate Finance International Castle Harlan Partners IV         Corporate Finance Partners IV Partners IV Corporate Finance Partners IV Part	Blackstone Capital									
Coller International Partners IV         Special Situations         International International         2002         7.5         75.0         67.1         6.4         0.4         NM***           Charterhouse Capital Partners VIII***         Corporate Finance International Castle Harlan Partners IV         Corporate Finance Corporate Finance Permira Europe III**         Domestic Corporate Finance Permira Europe III**         2003 Corporate Finance Corporate Finance Domestic         2003 2003 2003 2003 2003 2003 2003 2003	·	Corporate Finance	Domestic	2002	\$36.9	\$175.0	\$138.7	\$38.3	\$0.0	NM###
Charterhouse Capital Partners VII**         Corporate Finance International Castle Harlan Partners IV         Corporate Finance International Domestic         2003         8.5         94.5         85.2         9.1         0.0         NM***           FS Equity Partners V FS Equity Partners V Fermira Europe III**         Corporate Finance Corporate Finance First Reserve Fund X Sub-Total         Domestic Corporate Finance Domestic         2003         1.2         50.0         48.8         1.2         0.0         NM****           Domestic Sub-Total         Domestic         2003         6.5         100.0         92.6         7.4         0.9         NM****           Sub-Total         \$67.4         \$682.4         \$612.8         \$69.4         \$2.4	Coller International				,	,	,	,	*	
Charterhouse Capital         Partners VII***         Corporate Finance International Castle Harlan Partners IV         Corporate Finance Pomestic Castle Harlan Partners IV         2003         8.5         94.5         85.2         9.1         0.0         NM***           FS Equity Partners V         Corporate Finance Pomestic Partners III**         Corporate Finance Pomestic Pomestic Pomestic Partners III**         2003         1.2         50.0         48.8         1.2         0.0         NM****           Permira Europe III**         Corporate Finance Pomestic Partners III**         Domestic Pomestic Pomestic Pomestic Partners III**         2003         0.0         62.9         62.9         0.0         0.0         NM****           First Reserve Fund X Sub-Total         Special Situations Pomestic Pomestic Pomestic Partners III**         2003         0.0         50.0         50.0         0.0         0.0         NM****           Sub-Total         Special Situations Pomestic Partners III**         867.4         \$682.4         \$612.8         \$69.4         \$2.4	Partners IV	Special Situations	International	2002	7.5	75.0	67.1	6.4	0.4	NM###
Partners VII***         Corporate Finance Castle Harlan Partners IV         Corporate Finance Corporate Finance Partners IV         International Domestic Domestic Partners IV         2003         8.5         94.5         85.2         9.1         0.0         NM***           FS Equity Partners V         Corporate Finance Partners IV         Corporate Finance Partners IV         Domestic Domestic Partners IV         2003         1.2         50.0         48.8         1.2         0.0         NM***           Permira Europe III**         Corporate Finance Partners IV         Corporate Finance Partners IV         Domestic Partners IV         2003         0.0         62.9         62.9         0.0         0.0         NM***           TPG IV         Corporate Finance Partners IV         Domestic Partners IV         2003         6.5         100.0         92.6         7.4         0.9         NM***           First Reserve Fund X         Special Situations Sub-Total         Special Situations Partners IV         2003         0.0         50.0         50.0         0.0         0.0         NM***	Charterhouse Capital									
Castle Harlan Partners IV         Corporate Finance FS Equity Partners V         Corporate Finance Corporate Finance Pomestic         2003         6.8         75.0         68.0         7.0         1.1         NM***           FS Equity Partners V         Corporate Finance Pomestic         Domestic Pomestic         2003         1.2         50.0         48.8         1.2         0.0         NM****           Permira Europe III**         Corporate Finance Pomestic Pomestic         Domestic Pomestic         2003         6.5         100.0         92.6         7.4         0.9         NM****           First Reserve Fund X Sub-Total         Special Situations         Domestic Pomestic Po	•	Corporate Finance	International	2003	8.5	94.5	85.2	9.1	0.0	NM###
FS Equity Partners V   Corporate Finance   Domestic   2003   1.2   50.0   48.8   1.2   0.0   NM***								_		NM###
Permira Europe III##         Corporate Finance         International Domestic         2003         0.0         62.9         62.9         0.0         0.0         NM###           TPG IV         Corporate Finance First Reserve Fund X         Special Situations Sub-Total         Domestic         2003         6.5         100.0         92.6         7.4         0.9         NM###           Sub-Total         \$67.4         \$682.4         \$612.8         \$69.4         \$2.4										
TPG IV         Corporate Finance First Reserve Fund X Sub-Total         Corporate Finance Domestic Domestic Pomestic Special Situations         2003	' '									
First Reserve Fund X         Special Situations Sub-Total         Domestic         2003         0.0         50.0         50.0         0.0         0.0         NM###           \$67.4         \$682.4         \$612.8         \$69.4         \$2.4	·									
Sub-Total         \$67.4         \$682.4         \$612.8         \$69.4         \$2.4										
711 712 712 721 721 721			_ 5							
	Total Private Equity				\$310.5		\$681.9	\$78.8	\$49.3	

<sup>\*</sup> Unrealized gains and losses through September 30, 2003 plus cash flows through December 31, 2003 (with the exception of publicly held securities which are valued as of December 31, 2003).

<sup>\*\*</sup> For the 12 months ended December 31, 2003.

<sup>\*\*\*</sup> For inception through September 30, 2003. The total includes exited partnerships.

<sup>\*</sup> Formerly Xylem Fund I. Data is from inception of Xylem Fund I.

<sup>\*\*</sup> Commitment denominated in euros. Conversion rate of 1.2595 at 12/31/03.

IRRs are generally not meaningful during the early years of a partmership's life. OPERS classifies the IRRs of all funds as NM for the first two years.

# **Investment Policy Summary**

The following are excerpts of major sections of the OPERS Investment Division's Statement of Investment Objectives and Policies, revised in June of 2003. The complete policy can be viewed on our web site, www.opers.org.

The primary investment objective is to secure statutory payments and ancillary benefits provided by OPERS. Meeting this objective necessitates prudent risk-taking with OPERS' investments. Additional objectives include earning sufficient returns to improve benefits periodically and to keep OPERS' costs reasonable for employees and employers.

#### Investment Philosophy

The Board believes OPERS' assets should be managed in a fashion that reflects OPERS' unique liabilities, funding resources and portfolio size, by incorporating accepted investment theory and reliable, empirical evidence. Specifically, OPERS has adopted the following principles:

- Asset allocation is the key determinant of return and, therefore, commitments to asset allocation ranges will be maintained through a disciplined rebalancing program.
- Diversification, both by and within asset classes, is the primary risk control element.
- The pursuit of returns in excess of riskfree alternatives entails the distinct probability of disappointing results over short periods of time and, therefore, the assets will be invested with a long-term perspective.
- Passive alternatives (index funds) to actively managed portfolios are suitable investment strategies, especially in highly efficient markets.

### Roles And Responsibilities

#### **Retirement Board**

The Retirement Board is ultimately responsible for the investment of OPERS' assets.

#### **Investment Committee**

The Investment Committee monitors investment activity. It evaluates proposals requiring Board action and makes recommendations for consideration by the Board. Through its activities, it represents the interests of the Board in all investment-related matters.

In addition to chairing meetings of the Committee, the Investment Committee chair serves as liaison between the Board. staff and external advisors in the interim between meetings of the Committee/Board. In this capacity, the Committee chair works with the Director-Investments in establishing the agenda for Committee meetings. The chair is also the staff's principal point of contact in the interim between meetings. If matters come to the attention of the Committee chair that he or she believes are important to communicate to the Board before the next regularly scheduled meeting, the chair has the responsibility to inform the Board Chair accordingly.

#### **Staff**

The role of the staff is to assist the Board in managing OPERS' investments. Staff authority derives from the Board.

Notwithstanding its ultimate responsibility for OPERS' investments, the Board expects staff to take a leadership role in investment management. Recognizing that most of its members are laypersons with respect to investments and all operate under a very high standard of care, the Board expects to rely heavily on the staff to assist it in discharging its fiduciary responsibilities and in managing OPERS'

investments successfully and efficiently. In this regard, the Board expects the staff to:

- Advise the Board when the staff believes action relative to investment policy or execution is required of the Board.
- Establish and conduct an appropriate process for monitoring OPERS' investments and implementing the Board's decisions.
- Inform the Board of any and all matters the staff believes to be of sufficient materiality as to warrant the Board's attention.
- Operate at all times in the best and exclusive interest of OPERS.

All members of the investment staff are accountable to the Director—Investments. The Director—Investments is responsible for all staff actions relative to the management of OPERS' investments. In this regard, it is the responsibility of the Director—Investments to satisfy himself/herself that all policies and directives of the Board are carried out faithfully.

#### Custodian

The State of Ohio Treasurer acts as custodian of OPERS as specified in Section 145.26 of the Ohio Revised Code. The State Treasurer may employ subcontractors to provide certain safekeeping functions. OPERS staff shall be responsible for reviewing OPERS' custodial needs and reporting on such needs to the Investment Committee as requested.

#### **Investment Advisor**

The Board may appoint a party otherwise unaffiliated with OPERS to advise it on various aspects of investment. The advisor, or general investment consultant,

which will be appointed by the Board and report to it, shall:

- Advise the Board in the management of OPERS' investments.
- Critically evaluate investment proposals that come before the Board and advise the Board accordingly, including the Annual Plan.
- Monitor OPERS' investments, internal investment activities and external managers.
- Report independently to the Board on the performance of OPERS' investments.
- Conduct periodic and special studies on behalf of the Board.
- Assist and support the staff in various projects, e.g., developing proposals for consideration by the Board; manager searches; evaluations of external managers and other service providers; etc.

#### **Actuary**

OPERS employs an actuary for the purpose of forecasting asset and liability growth and the many complex factors included in estimating future pension costs. These factors include, but are not limited to, interest rates, inflation, investment earnings, mortality rates, and employee turnover. These actuarial assumptions are then used to forecast uncertain future events affecting OPERS. The actuary shall provide periodic reports on the actuarial valuation of OPERS, and shall provide recommendations to the Board including, among other things, the estimated level of contributions necessary to fund promised benefits as specified in Section 145.22 of the Revised Code of Ohio. The actuary is appointed by, and serves at the pleasure of the Board.

### **Asset Allocation Policy**

#### **Purpose**

The purpose of the asset allocation policy is to establish an investment policy framework for OPERS that has a high likelihood, in the judgment of the Board, of realizing OPERS' investment objective.

#### **Targets and Ranges**

The principal components of investment policy are target allocation percentages for various areas of investment, known as "asset classes," and minimum and maximum percentages for each asset class. The following table contains OPERS' current target allocation percentages and ranges.

The ranges for all asset classes other than Real Estate are equal to the target percentages plus or minus three percentage points. The range for Real Estate is the target plus or minus four percentage points.

To the extent the actual allocation to Private Equity is less than the target percentage, a percentage equal to the difference between the two will be added to the target percentage for Domestic Equity for the purpose of determining the allowable range for Domestic Equity. In other words, the default position for any unfunded private equity allocation is Domestic Equity.

#### Rebalancing

The staff shall ensure conformance with the asset allocation policy through monthly review. In conducting rebalancing activities, the Board expects the staff to operate under these guidelines:

- Whenever asset-class allocation percentages fall outside the indicated range for that asset class, the staff shall initiate rebalancing transactions to bring all percentages to values that do not exceed the range limits.
- 2. At any time and in its discretion, the staff may bring the actual allocation to, or nearer to, the target percentages.
- At a minimum, the staff will ensure that, as a result of a rebalancing review, no asset-class allocation is outside the allowable range.
- 4. To the extent that it is possible to bring the actual allocation nearer to the target percentages without incurring transactions costs, or while incurring transaction costs, which, in the judgment of the staff, are unusually low, the staff shall do so.

The spirit of this policy is to ensure compliance with the target asset allocation percentages at a reasonable cost, recognizing that overly precise administration of policy targets can result in transaction costs that are not economically justified.

Asset Class	Target Allocation	Range
Domestic Equity	44%	41 to 47%
International Equity	20	17 to 23%
Real Estate	9	5 to 13%
Private Equity	4	0 to 7%
Global Bonds	23	20 to 26%
Total	100%	

Recognizing the complexity of achieving this result with a portfolio the size and complexity of OPERS, as well as the vagaries of transacting in investment markets, the Board accords the staff discretion to take those actions, which, in the judgment of the staff, are within the spirit of these guidelines and in the best interest of OPERS.

#### **Annual Review Process**

Annually the staff shall present to the Board for its consideration an Annual Plan. The principal functions of the Annual Plan are to:

- Define the essential asset management characteristics for the total portfolio and the principal asset classes, which include, but are not necessarily limited to, target percentages and ranges, benchmarks, investment strategy; policies concerning utilization of active and passive management, and proposed changes in investment guidelines;
- Specify expected excess (activemanagement) return and risk, provisions for risk control, and investment expense;
- Clarify delegations of authority by the Board to the staff for various aspects of investment management;
- Identify resource (staffing and budgetary) requirements;
- · Describe key initiatives for the year;

The Annual Plan is the principle, although not exclusive, vehicle by which the staff will seek approval of new investment strategies, revisions to the asset allocation policy, revisions to investment guidelines, and revisions of performance benchmarks. The Annual Plan will also be the principle vehicle by which the staff seeks approval

for the creation of new portfolios, as well as identify the need for appointment of new or replacement portfolios, managers or advisors.

#### Risk Control

The Board ensures adequate risk control through the following means:

#### **Diversification**

Investments shall be diversified to minimize the impact of the loss from individual investments. In addition to achieving diversification by asset class, careful attention shall be paid to diversification within each asset category (e.g., real estate) and subcategory (e.g., stable investments, enhanced investments, high-return investments, and REITs).

#### **Portfolio Guidelines**

Every portfolio that is a part of OPERS' overall investment portfolio shall operate under written guidelines, approved by the Board, which are designed to ensure the portfolio meets its objective and operates within acceptable risk parameters.

#### **Risk Budgeting**

A formal process shall be established whereby the total active risk (risk of achieving performance different than the total fund benchmark) shall be within a margin approved by the Board. The Board shall approve the risk budget by which total active risk is apportioned among the various asset classes as part of the Annual Plan. Estimates of active risk shall be performed periodically and reported to the Board to ensure compliance with the risk budget established.

#### **Compliance Monitoring**

A process shall be established by which compliance with all elements of the investment policy and portfolio guidelines shall be monitored with exceptions being reported promptly to the Board.

### Performance Objectives

#### **Total Fund**

The primary performance objectives for the total fund are to: (1) exceed the return of the OPERS Performance Benchmark, net of investment expenses over five-year periods; and (2) exceed the actuarial interst rate (currently 8%) over a reasonable longer time horizon. The Benchmark combines designated market indexes for asset classes, weighted by asset-allocation targets. Currently, the indexes are:

#### **Asset Classes**

Each asset class shall be measured relative to its designated market index. It is expected that the active management of individual asset classes will provide an investment return in excess of the index, net of expenses, over five-year periods.

The margin of superior performance for each asset class and the total fund are specified in the Annual Plan.

In all aspects of investing, the Board expects that results will be competitive. Total fund performance relative to OPERS' Performance Benchmark is expected to be competitive with that of other funds relative to their benchmarks. Likewise, OPERS' risk-adjusted performance is expected to be competitive with that of its peers. Active management within individual asset classes is expected to achieve returns in excess of the return available through passive investment within the asset class as indicated by the asset class benchmark. In all respects and measures, the Board expects to earn a return that compensates OPERS for the risk taken.

Market Index
Russell 3000 Stock Index
MSCI All Country World Free Index Ex-U.S.
Custom Real Estate Index
Lehman U.S. Universal Index

# **Actuarial Section**



# Report of the Actuary



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

OneTowne Square • Suite 800 • Southfield, Michigan 48076 • 248-799-9000 • 800-521-0498 • fax 248-799-9020

March 25, 2004

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

Dear Board Members:

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

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

The financial objective is addressed within the annual actuarial valuation. The valuation process develops contribution rates that are sufficient to fund the plans current cost (i.e., the costs assigned by the valuation method to the year of service about to be rendered), as well as to fund unfunded actuarial accrued liabilities as a level percent of active member payroll over a finite period. The most recent valuations were completed based upon population data, asset data, and plan provisions as of December 31, 2002.

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

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

#### **Actuarial Section**

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

#### **Financial Section**

Schedule of Funding Progress

The Retirement Board March 25, 2004 Page 2

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

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

Actuarial valuations are based upon assumptions regarding future activity in specific risk areas including the rates of investment return and payroll growth, eligibility for the various classes of benefits, and longevity among retired lives. The Board adopts these assumptions after considering the advice of the actuary and other professionals. The assumptions comply with the requirements of Statement 25 of the Governmental Accounting Standards Board. Each actuarial valuation takes into account all prior differences between actual and assumed experience in each risk area and adjusts the contribution rates as needed. The December 31, 2002 valuations were based upon assumptions that were recommended in connection with a study of experience covering the 1996-2000 period.

Pension experience was unfavorable during 2002. On a market value basis for the third consecutive year, investment return was disappointing for OPERS as it was for most other retirement funds across the nation. The actuarial method for recognizing pension asset gains and losses recognized \$8.8 billion dollars in investment loss this year. Investment markets have since rebounded somewhat so that remaining unrecognized losses may have a lesser effect on results in future years. Experience in the Retiree Health Plan continues to be cause for concern. Rapidly escalating health care costs, coupled with 3 successive years of disappointing investment results are likely to lead to further restructuring of the plan.

Based upon the results of the December 31, 2002 valuations, we are pleased to report to the Board that with respect to pension benefits, the Public Employees Retirement System of Ohio is meeting its basic financial objective and continues in sound condition in accordance with actuarial principles of level percent of payroll financing. However, continued recovery in the investment markets is very important to OPERS and to every other retirement plan in the United States.

Respectfully submitted,

GABRIEL, ROEDER, SMITH & COMPANY

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

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

Bran B Muply

BBM:lr

**GABRIEL, ROEDER, SMITH & COMPANY** 

# **Summary of Assumptions**

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

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

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

Investment Return: 8.00%, compounded annually, for all members and beneficiaries

#### **Active Employee Total Payroll:**

Increasing 4.00% annually, compounded annually, which is the inflation portion of the individual pay increase assumption. In effect, this assumes no change in the number of active employees.

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

### Individual Employee Pay Increases

Age	Merit & Seniority			Inflation	<b>Increase Next Year</b>			
	State	Local	Law		State	Local	Law	
30	3.00%	3.00%	4.00%	4.00%	7.00%	7.00%	8.00%	
40	1.80	1.80	0.85	4.00	5.80	5.80	4.85	
50	1.20	1.20	0.50	4.00	5.20	5.20	4.50	
60	0.70	0.70	0.50	4.00	4.70	4.70	4.50	

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

#### **Percent Separating Within Next Year**

	1 order of parating training to the second												
					Withdrawal						Disa	ability	
Sample	Years of	De	ath	S	tate	Law	Lo	cal	Sta	ate	Lo	cal	Law
Ages	Service	Men	Women	Men	Women	Enforcement	Men	Women	Men	Women	Men	Women	Enforcement
	0			38.00%	36.00%	15.00%	34.00%	32.00%					
	1			18.00	19.00	9.00	17.00	18.00					
	2			14.00	15.00	7.00	12.00	13.00					
	3			10.00	12.00	5.00	10.00	10.00					
	4			8.00	9.00	5.00	9.00	9.00					
30	5 & over	0.04%	0.02%	5.20	7.00	2.90	5.40	6.90	.13%	.14%	0.37%	0.17%	0.13%
40		0.07	0.04	3.50	4.20	1.50	3.20	4.20	0.41	0.36	0.95	0.44	0.33
50		0.23	0.10	2.20	3.10	1.20	2.50	3.00	0.86	0.88	2.03	0.90	0.66
60		0.55	0.25	2.10	2.70	1.20	2.50	2.80	1.86	1.56	2.88	1.54	1.35

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

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

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

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

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

**Percent of Eligible Active Members Retiring Next Year** 

Retirement		ate	Lo	cal	Law & Public
Age	Men	Women	Men	Women	Safety
50-54	40%	30%	35%	30%	22%
55	25	30	30	30	15
56-57	25	30	25	30	15
58	25	30	25	30	18
59	25	40	25	40	18
60	30	50	25	50	18
61	25	35	25	30	18
62	25	35	40	30	30
63	30	35	40	30	25
64	40	35	30	30	15
65	50	50	25	25	20
66	25	25	20	25	20
67-68	25	25	20	15	15
69	25	20	15	15	15
70-79	25	20	20	15	100
80	100	100	100	100	100

### **Actuarial Valuation Data**

		Active N	lembers			<b>Retired Lives</b>	
Valuation Year	Number	Annual Payroll (\$ Millions)	Average Pay	Percent Increase In Average Pay	Number*	Annual Allowance (\$ Millions)	Average Allowance
1993	339,190	\$7,236	\$ 21,333	3.38%	113,950	\$ 965	\$ 8,469
1994	343,477	7,625	22,119	3.68	116,001	1,024	8,828
1995	344,632	7,973	23,135	4.59	118,280	1,106	9,351
1996	352,408	8,340	23,666	2.30	121,219	1,216	10,031
1997	352,960	8,640	24,479	3.44	124,258	1,311	10,551
1998	354,431	9,017	25,441	3.93	127,139	1,409	11,082
1999	360,532	9,477	26,286	3.32	129,656	1,625	12,533
2000	366,975	10,192	27,773	5.66	132,603	1,753	13,220
2001	360,313	10,782	29,924	7.74	136,456	1,894	13,884
2002	365,424	11,207	30,668	2.49	141,019	2,080	14,750

<sup>\*</sup> Retired lives number represents an individual count of retirees and beneficiaries.

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

	Adde	ed to Rolls	Remove	ed from Rolls	Rolls at Year-End		Percentage	
Year Ended	Number	Annual Allowances	Number	Annual Allowances	Number*	Annual Allowances	Increase in Annual Allowances	Average Annual Allowances
1998	7,556	\$116,000,363	4,926	\$ 18,222,925	125,418	\$1,395,917,080	7.53%	\$11,130
1999	7,513	125,218,771	4,933	21,503,909	127,998	1,499,631,942	7.43	11,716
2000	8,459	154,006,435	5,029	3,910,980	131,428	1,649,727,397	10.01	12,552
2001	8,403	323,457,399	5,062	99,438,913	134,769	1,873,745,883	13.58	13,903
2002	10,099	285,426,010	5,203	106,040,402	139,665	2,053,131,491	9.57	14,700
2003	9,162	277,517,938	5,184	100,844,152	143,643	2,298,685,464	11.96	16,003

<sup>\*</sup>This number represents actual number of checks written at year-end. One benefit allowance may be issued to multiple beneficiaries.

#### **Short-Term Solvency Test**

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

A short-term solvency test is one means of checking a system's progress under its funding program. In a short-term solvency test, the plan's present assets (cash and investments) are compared with: 1) active member contributions on deposit; 2) the liabilities for future benefits to present retired lives; 3) the liabilities for service already rendered by active members.

In a system that has been following the discipline of level percent of payroll financing, the liabilities for active member contributions on deposit (1) and the liabilities for future benefits to present retired lives (2) will be fully covered by present assets (except in rare circumstances). In addition, the liabilities for service already rendered by active members (3) will be partially covered by the remainder of present assets.

Generally, if the system has been using level cost financing, the funded portion of (3) will increase over time. Column (3) being fully funded is very rare.

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

#### **Accrued Liabilities**

(\$ in millions)

	Aggrega	te Accrued Liab	oilities for					
	(1)	(2)	(3)		Po	Portions of Accrued		
	Active	Retirees	Active Members		Lia	bilities Covere	ed by	
Valuation	Member	and	(Employer-	Valuation	F	Reported Asse	ets	
Year	Contributions	Beneficiaries	Financed Portion)	Assets	(1)	(2)	(3)	
1993	\$4,481	\$10,010	\$19,688	\$29,251	100%	100%	75%	
1994	4,895	10,605	20,710	31,711	100	100	79	
1995	5,299	11,477	22,378	34,877	100	100	81	
1996*	5,681	12,531	14,419	30,534	100	100	85	
1997*	6,074	13,587	15,311	33,846	100	100	93	
1998*	6,508	14,665	16,541	38,360	100	100	104	
1999*	6,945	17,050	19,076	43,060	100	100	100	
2000*	7,448	18,017	20,882	46,844	100	100	102	
2001*	7,991	19,087	20,414	48,749	100	100	106	
2002*	8,514	21,206	21,152	43,706	100	100	66	

<sup>\*</sup> Does not include assets set aside to pay health-care benefits.

# Analysis of Financial Experience

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

	G	ain (or Loss) Fo	Year – \$ in Millio	ons
Type of Activity	2002	2001	2000	1999
Age & Service Retirements If members retire at older ages than assumed, there is a gain. If younger ages, a loss.	\$ (43.8)	\$ (22.8)	\$ 24.3	\$ 11.1
Disability Retirements If Disability claims are less than assumed, there is a gain. If more claims, a loss.	(26.4)	1.7	(21.6)	25.3
Death-In-Service Annuities If survivor claims are less than assumed, there is a gain. If more claims a loss.	2.7	13.4	12.1	1.9
Other Separations If more liabilities are released by other separations than assumed, there is a gain. If smaller releases, a loss.	(190.5)	(147.6)	(235.7)	(258.7)
Pay Increases If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss.	53.7	(169.2)	151.7	288.1
Investment Return If there is greater investment return than assumed, there is a gain. If less return, a loss.	(8,869.3)	606.9	1,590.7	1,733.3
Gain (or Loss) During Year From Financial Experience	\$ (9,073.6)	\$ 216.8	\$1,522.0	\$1,979.6

### Actual vs. Recommended Contribution Rates

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

# Statistical Section



# **Employer Contribution Rates**

### **Traditional Plan**

			Current		Unfunded	d Liability	
				Survivor	Past		
	Year	Normal	Health	Benefits	Service	Health	Total
State	1994	5.34%	3.37%	1.07%	2.61%	0.92%	13.31%
	1995	5.31	3.39	1.09	2.62	0.90	13.31
	1996	5.57	3.54	1.09	2.36	0.75	13.31
	1997	5.62	3.31	0.59	2.81	0.98	13.31
	1998	5.62	4.20	0.59	2.90	0.00	13.31
	1999	5.62	4.20	0.59	2.90	0.00	13.31
	2000*	4.90	4.30	0.51	0.94	0.00	10.65
	2001	6.96	4.30	0.72	1.33	0.00	13.31
	2002	6.27	5.00	0.72	1.32	0.00	13.31
	2003	5.75	5.00	0.42	2.14	0.00	13.31
Local	1994	4.81%	4.29%	0.99%	2.64%	0.82%	13.55%
	1995	4.85	4.26	1.00	2.59	0.85	13.55
	1996	5.16	4.44	1.00	2.28	0.67	13.55
	1997	5.57	4.29	0.59	2.28	0.82	13.55
	1998	5.57	4.20	0.59	3.19	0.00	13.55
	1999	5.57	4.20	0.58	3.20	0.00	13.55
	2000*	4.92	4.30	0.51	1.11	0.00	10.84
	2001**	6.96	4.30	0.72	1.57	0.00	13.55
	2002	6.26	5.00	0.72	1.57	0.00	13.55
	2003	5.66	5.00	0.48	2.41	0.00	13.55
Law	1994	8.21%	4.93%	1.44%	1.16%	0.96%	16.70%
Enforcement	1995	7.97	4.82	1.56	1.28	1.07	16.70
	1996	8.15	4.95	1.56	1.10	0.94	16.70
	1997	9.61	4.70	0.89	0.74	0.76	16.70
	1998	9.61	4.20	0.89	2.00	0.00	16.70
	1999	9.61	4.20	0.88	2.01	0.00	16.70
	2000*	9.76	4.30	0.81	0.83	0.00	15.70
	2001**	10.62	4.30	0.88	0.90	0.00	16.70
	2002	10.02	5.00	0.85	0.83	0.00	16.70
	2003	8.34	5.00	0.54	2.82	0.00	16.70
Public Safety	2001**	10.90%	4.30%	0.54%	0.61%	0.00%	16.70%
,	2002	10.01	5.00	0.98	0.71	0.00	16.70
	2003	8.34	5.00	0.54	2.82	0.00	16.70

### Member-Directed Plan

	Year	Pension	RMA***	Total
State	2003	8.50%	4.81%	13.31%
Local	2003	8.50%	5.05%	13.55%

### Combined Plan

	Year	Pension	Health	Total
State	2003	8.31%	5.00%	13.31%
Local	2003	8.55%	5.00%	13.55%

<sup>\*</sup> One-time employer contribution rate

<sup>\*\*</sup> HB 416 separated the Law Enforcement program into two divisions effective January 1, 2001. \*\*\*Retiree Medical Account

### **Traditional Plan**

Year	Members' Contributions	Employers' Contributions	Employers' Contributions as a Percentage of Covered Payroll	Investment Income (Net)	Other	Total
1994	\$ 679,907,661	\$1,065,570,715	13.51%	(\$134,383,505)	\$ 229,502	\$ 1,611,324,373
1995	698,987,279	1,107,696,800	13.53	6,134,722,598	263,915	7,941,670,592
1996	737,292,990	1,181,597,072	13.54	2,848,123,681	867,738	4,767,881,481
1997	773,100,594	1,233,637,457	13.54	5,421,861,077	754,023	7,429,353,151
1998	799,281,516	1,266,445,268	13.55	6,045,862,119	237,360	8,111,826,263
1999	839,186,449	1,327,889,681	13.56	6,495,797,615	1,785,346	8,664,659,091
2000	879,844,987	1,171,674,955	13.57	(443,108,186)	884,651	1,609,296,407
2001	931,050,640	1,408,392,987	13.56	(2,717,806,094)	664,919	(377,697,548)
2002	1,094,343,553	1,683,021,503	13.57	(5,684,965,700)	623,421	(2,906,977,223)
2003*	1,006,863,812	1,026,594,837	8.57	9,603,775,739	411,093	11,637,645,481

### Traditional and Combined Plan Post-Employment Health Care

2003			\$	579,904,361	5.00%	\$2,2	258,066,075	\$2,	837,970,436
Combi	nec	d Plan							
2003	\$	8,807,214	\$	8,452,579	8.48%	\$	3,077,755	\$	20,337,548
Memb	Member-Directed and VEBA Plans*								
2003	\$	7,723,797	\$	11,826,894	13.47%	\$	3,166,906	\$	22,717,597

<sup>\*</sup> Employee Contributions for 1994-2002 in the Traditional Plan include contributions for both pension and post-employment health-care benefits. Effective January1, 2003, OPERS began offering two defined contribution plans to members. A portion of the employer contributions to the Traditional and Combined Plans are set aside for post-employment health-care benefits under the IRC 401(h) plan. A portion of the employer contributions to the Member-Directed Plan are deposited to the retiree medical account under the VEBA Plan.

# Expenses by Type

# Traditional Plan

Year	Benefit Payments	Refunds	Administrative Expenses	Total
1994	\$1,352,327,301	\$ 93,190,094	\$17,212,600	\$ 1,462,729,995
1995	1,455,869,026	108,029,484	18,232,175	1,582,130,685
1996	1,566,534,763	110,043,743	18,650,473	1,695,228,979
1997	1,694,449,673	139,624,174	20,107,718	1,854,181,565
1998	1,842,835,738	125,609,907	21,530,875	1,989,976,520
1999	2,029,539,511	120,631,961	24,142,273	2,174,313,745
2000	2,215,870,453	81,830,345	29,642,466	2,327,343,264
2001	2,574,189,051	262,681,258	40,081,348	2,876,951,657
2002	2,836,137,068	187,051,815	56,267,175	3,079,456,058
2003	3,144,246,755	192,768,335	59,875,918	3,396,891,008
Combined Plan				,
2003	\$0	\$ 49,490	\$ 4,480,051	\$ 4,529,541
Member-Direct	ed Plan			
2003	\$0	\$ 391,773	\$ 5,098,717	\$ 5,490,490
VEBA				
2003	\$0	NA	\$ 382,104	\$ 382,104

# Schedule of Benefit Recipients by Benefit Type

#### At December 2003

### **Traditional Plan Only**

Amount of Monthly Benefit	Number of Recipients	Annuities	Disabilities	Survivors
\$1-299	16,136	14,956	458	722
300-499	15,111	11,886	616	2,609
500-999	35,646	26,362	3,390	5,894
1,000-1,499	25,720	18,803	4,907	2,010
1,500-1,999	19,277	14,100	4,435	742
2,000 & Over	31,753	26,140	5,053	560
Totals	143,643	112,247	18,859	12,537

# Schedule of Average Benefit Payments

### **Traditional Plan Only**

			Years Cred	ited Service		
	5-9	10-14	15-19	20-24	25-30	30+
Period 1/1/98-12/31/98 Average Monthly Benefit* Average Final Average Salary Number of Active Recipients	\$ 399	\$ 561	\$ 903	\$ 1,289	\$ 1,683	\$ 2,532
	\$19,228	\$24,442	\$28,410	\$31,506	\$34,457	\$40,082
	524	1,252	967	922	980	2,093
Period 1/1/99-12/31/99 Average Monthly Benefit* Average Final Average Salary Number of Active Recipients	\$ 514	\$ 607	\$ 928	\$ 1,325	\$ 1,733	\$ 2,644
	\$22,221	\$26,242	\$29,546	\$33,107	\$35,718	\$42,590
	538	1,166	906	937	998	2,219
Period 1/1/00-12/31/00 Average Monthly Benefit* Average Final Average Salary Number of Active Recipients	\$ 568	\$ 587	\$ 920	\$ 1,303	\$ 1,816	\$ 2,698
	\$22,432	\$25,812	\$29,769	\$32,741	\$37,500	\$43,878
	606	1,319	1042	1,034	1088	2,634
Period 1/1/01-12/31/01 Average Monthly Benefit* Average Final Average Salary Number of Active Recipients	\$ 649	\$ 633	\$ 984	\$ 1,371	\$ 1,895	\$ 2,716
	\$23,441	\$27,668	\$32,216	\$35,165	\$39,650	\$45,042
	616	1,253	962	1,006	1,198	2,839
Period 1/1/02-12/31/02 Average Monthly Benefit* Average Final Average Salary Number of Active Recipients	\$ 699	\$ 611	\$ 969	\$ 1,323	\$ 1,894	\$ 2,764
	\$24,723	\$27,158	\$32,911	\$34,772	\$41,206	\$47,147
	702	1,342	1,112	1,118	1,398	3,670
Period 1/1/03-12/31/03 Average Monthly Benefit* Average Final Average Salary Number of Active Recipients	\$ 739	\$ 649	\$ 1,024	\$ 1,356	\$ 1,910	\$ 2,815
	\$25,955	\$29,413	\$35,358	\$37,250	\$42,781	\$49,740
	574	1,201	995	922	1,250	3,044

<sup>\*</sup>Average Monthly Benefit includes post retirement and yearly 3% cost-of-living increases.

# Number of Benefit Recipients by Category

# Traditional Plan Only\*

Year-end	Annuities	Disabilities	Survivors	Total
1994	92,224	10,758	11,360	114,342
1995	93,718	11,561	11,426	116,705
1996	95,739	12,547	11,510	119,796
1997	97,833	13,335	11,620	122,788
1998	99,619	14,146	11,653	125,418
1999	101,345	14,868	11,785	127,998
2000	103,680	15,811	11,937	131,428
2001	105,876	16,727	12,166	134,769
2002	109,565	17,809	12,291	139,665
2003	112,247	18,859	12,537	143,643

<sup>\*</sup> In 2003 there were no benefit recipients in the Combined or Member Directed plans.

# Number of New Benefit Recipients and Refund Payments

### All Plans

Year	Annuities	Disabilities	Survivors	Refund
1994	4,428	1,327	563	39,457
1995	4,908	1,353	535	39,536
1996	5,394	1,536	567	38,195
1997	5,371	1,470	616	40,806
1998	5,490	1,487	579	38,299
1999	5,387	1,474	652	36,442
2000	6,065	1,739	655	31,157
2001	5,999	1,650	754	40,615
2002	7,600	1,799	700	32,186
2003	6,559	1,833	770	37,022

# Disbursements by Category

### **Traditional Plan**

			Ber	nefits			
Year	Annuities	Disabilities	Other Systems	Survivors	СРІ	Post-Retirement Legislative Increase	
1994	\$ 655,822,239	\$105,602,623	\$ 5,222,468	\$46,229,029	\$167,031,125	\$39,123,353	
1995	701,867,702	119,699,694	6,762,310	48,103,168	182,925,717	36,520,590	
1996	757,995,460	138,848,062	4,734,682	50,844,206	199,783,533	39,127,634	
1997	822,581,843	155,239,567	6,037,460	53,220,591	219,887,499	41,172,682	
1998	881,261,294	173,229,819	5,937,875	55,975,704	241,745,889	37,766,500	
1999	947,588,558	189,724,304	6,688,026	59,181,847	261,973,594	34,475,613	
2000	1,038,847,107	213,894,998	7,767,254	64,975,799	285,195,103	39,119,094	
2001	1,162,871,313	243,297,512	6,984,942	79,678,241	323,734,033	57,179,842	
2002	1,281,852,146	270,583,859	11,242,369	84,329,145	353,657,726	51,466,246	
2003	1,402,741,097	297,720,557	7,812,726	88,129,714	387,655,698	45,745,486	

### **Combined Plan**

	Benefits			Benefits Refunds			
Years	Annuities	CPI	Death Benefits	Separation	Beneficiaries	Other	Payments
2003	\$0	\$0	\$0	\$47,738	\$0	\$1,752	\$49,490

### Member-Directed Plan

	Benefits	Refunds			
Years	Annuities	Separation	Beneficiaries	Other	Payments
2003	\$0	\$ 389,565	\$0	\$2,208	\$391,773

### **VEBA**

	Benefits	
Years	Payouts	Health-care Payments
2003	\$0	\$0

I	ı	Refunds			
Health Care	Death Benefits	Separation	Beneficiaries	Other	Payments
\$327,578,426	\$5,718,038	\$ 86,026,417	\$ 5,403,248	\$ 1,760,429	\$1,445,517,395
353,685,547	6,304,298	100,842,250	5,100,749	2,089,485	1,563,901,510
369,213,858	5,987,329	102,212,756	5,598,156	2,232,831	1,676,578,507
389,845,273	6,464,758	131,184,720	5,827,194	2,612,260	1,834,073,847
440,596,663	6,321,994	116,866,392	5,824,082	2,919,433	1,968,445,645
523,599,349	6,308,220	101,426,721	4,477,399	14,727,841	2,150,171,472
559,606,294	6,464,804	69,381,933	2,374,820	10,073,592	2,297,700,798
693,484,110	6,959,058	231,665,029	22,378,095	8,638,134	2,836,870,309
776,006,852	6,998,725	159,348,529	15,180,435	12,522,851	3,023,188,883
907,769,092	6,672,385	150,846,499	28,263,206	13,658,630	3,337,015,090

### **All Plans**

Year-end	Active Contributing	Inactive	Total
1994	358,149	110,745	468,894
1995	365,383	127,491	492,874
1996	369,467	148,274	517,741
1997	365,384	175,020	540,404
1998	371,563	192,273	563,836
1999	383,286	207,345	590,631
2000	399,919	220,189	620,108
2001	411,076	224,677	635,753
2002	402,041	255,528	657,569
2003	368,996*	302,546	671,542

<sup>\*</sup> Effective 2003, members contributing under more than one employer are counted only once.

# **Member Contribution Rates**

# All Plans

Year	State & Local	Law Enforcement	Public Safety
1994	8.5%	9.0 %	N/A
1995	8.5	9.0	N/A
1996	8.5	9.0	N/A
1997	8.5	9.0	N/A
1998	8.5	9.0	N/A
1999	8.5	9.0	N/A
2000	8.5	9.0	N/A
2001	8.5	10.1	9.0%
2002	8.5	10.1	9.0
2003	8.5	10.1	9.0

# Number of Employer Units

# All Plans\*

Calendar Year	State	County	Law Enforcement	Municipalities	Villages	Miscellaneous	Libraries	Townships	Totals
1994	287	238	207	340	634	340	257	1,311	3,614
1995	288	238	208	340	651	354	256	1,310	3,645
1996	289	238	213	339	658	374	256	1,312	3,679
1997	292	236	226	338	666	379	256	1,312	3,705
1998	327	247	233	338	672	400	256	1,312	3,785
1999	332	247	233	337	673	406	257	1,312	3,797
2000	318	243	232	334	673	414	257	1,312	3,783
2001	266	239	255	258	665	442	256	1,309	3,690
2002	263	237	251	256	671	450	256	1,312	3,696
2003	268	239	247	255	673	450	257	1,313	3,702

<sup>\*</sup>The number of employer units exceeds the number of reporting employers as some employers report multiple divisions or agencies. The number of employers reporting at December 31,2003 was 3,254.

# Plan Statement



### Plan Statement

# THE OHIO PUBLIC EMPLOYEES RETIREMENT SYSTEM (OPERS,

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

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

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

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

## Plan Types

For more than 60 years, OPERS has provided members with retirement benefits under a defined benefit plan, better known

as the Traditional Pension Plan.

House Bill 628 (HB 628), enacted into law in 2000, required OPERS to establish one or more defined contribution plans to be offered to members in addition to the existing Traditional Pension Plan. With input from members and employers, OPERS began offering three retirement plans to its members as of January 1, 2003: they include the Traditional Pension Plan, the new Member-Directed Plan, and the new Combined Plan. A brief overview of each plan is described below:

#### The Traditional Pension Plan

The Traditional Pension Plan is a defined benefit plan under which a member's retirement benefit is based on a formula. The formula is determined by years of contributing service and the average of the three highest years of earnable salary (or final average salary). The OPERS investment professionals manage the investment of employee and employer contributions to ensure that funds are available to pay the formula benefit.

#### • The Member-Directed Plan

The Member-Directed Plan is a defined contribution plan under which employee and employer contributions are deposited into a member's individual OPERS account and invested as directed by the member. The member's retirement benefit is based on employee and employer contributions and the gains and losses on those contributions. Under the Member-Directed Plan, the member directs the investment by selecting from nine professionally managed OPERS Investment Options.

#### The Combined Plan

The Combined Plan is a retirement plan with both a defined benefit and a defined contribution component. Under

the defined benefit portion of the Combined Plan, the member's retirement benefit is determined by a reduced formula (similar to the Traditional Pension Plan). Ohio PERS investment professionals manage the investment of employer contributions to ensure that funds are available to pay the reduced-formula benefit. Under the defined contribution portion of the Combined Plan, employee contributions are deposited into the member's individual account and invested as directed by the member. The member's retirement benefit under this portion of the Combined Plan is based on employee contributions and the gains and losses on those contributions. The member directs the investment by selecting from among the nine OPERS Investment Options.

#### Contributions

Employers are required to make contributions to the System on the basis of a percentage of reportable payroll and at a rate based upon the recommendations of OPERS' actuary. Penalties and interest are added for late payments. The state contribution rate is 13.31%. Local employers contribute 13.55% and employers in the law enforcement division contribute 16.70%.

The current contribution rate for members is 8.5% of earnable salary. Members in the law enforcement division pay 9.0 or 10.1% of earnable salary. Individual accounts for each member of OPERS are maintained and funds contributed by the member are fully refundable at service termination or death. Each year, in April, members are sent a statement of their individual account as of the previous December 31. A report disclosing the financial status of the System and describing major developments during the year at OPERS

is also sent with the statement of account.

# Benefits Under The Traditional Pension or Combined Plan

#### Age-and-Service Retirement

Members are eligible to retire at age 60 with at least five years of total service credit. They may retire with a reduced benefit as early as age 55 with 25 years of service. With 30 years of credit, there is no age requirement or benefit reduction because of age.

Service credit allowed under Chapter 145 of the ORC includes:

- Service for the state of Ohio or an Ohio political subdivision for which contributions have been paid;
- Certain military service which interrupted contributing public service;
- Any out-of-public service period of three years or less during which the member was receiving an award under Workers' Compensation;
- Previously unreported service in Ohio:
- 5) Service purchased by the member for:
  - a) Other military service that is not being used for other retirement programs, except Social Security;
  - b) Prisoner-of-war service;
  - c) An authorized leave of absence, which did not exceed one year;
  - d) Comparable public service that is not being used for other retirement programs, except Social Security, performed outside Ohio or with the federal government or for which contributions were made to an Ohio municipal retirement system;

- e) Service restored by redeposit which had been cancelled by an earlier refund of OPERS contributions;
- f) Service in an Ohio police or fire department and covered by the Police and Firemen's Disability and Pension fund, service in the State Highway Patrol and covered by the Highway Patrol Retirement System, or service covered by the Cincinnati Retirement System, that is not being used for other retirement benefits;
- g) Service which was previously covered by a valid exemption under OPERS;
- h) The amount of 35% additional credit on completed terms of fulltime contributing elective service or board, commission, or other public body service by members who are appointed by the governor with the advice and consent of the Senate;
- 6) Service purchased by an employer under a retirement incentive plan.

A choice of several benefit payment plans, options A through E, are available. The choices include benefits payable throughout the member's lifetime (Plan B-single life annuity) or in a lesser amount during the individual's life but continuing after the member's death to a joint survivor. The joint survivor selections include a 50% joint survivor payment to a spouse (Plan A), 0-99% joint survivor payment to a designated beneficiary (Plan C), 100% payment to a designated beneficiary (Plan D).

A benefit payable under Plan A, C, or D is the actuarial equivalent of Plan B, but the payment to the member is reduced because it is based on the combined life expectancies of the member and

the beneficiaries. A fifth payment plan (Plan E-guaranteed period) is also the actuarial equivalent of Plan B, but the payment is reduced to guarantee the period.

Effective January 1, 2004, Senate Bill 247 provided OPERS the authority to establish a Partial Lump-Sum Option Payment for certain retirees and benefit recipients. The Partial Lump-Sum Option Payment, or PLOP, is an option at retirement that allows a recipient to initially receive a lump-sum benefit payment along with a reduced monthly retirement allowance. The PLOP cannot be less than six times or more than 36 times the monthly amount that would be payable to the member under the plan of payment selected and does not result in a monthly allowance that is less than 50% of that monthly amount. The total amount paid as a lump sum and a monthly benefit is the actuarial equivalent of the amount that would have been paid had the lump sum not been selected. Benefit payments vary in amount depending on length of public service, final average salary (FAS), age, and plan of payment selection. FAS is determined by taking the average of the three highest years of earnable salary. In no case can the age-and-service formula benefit exceed 100% of the FAS or the limits under Internal Revenue Code Section 415.

#### · Disability Benefits

OPERS' members are eligible for one of two disability programs, the original plan or the revised plan. Employees who had contributions on deposit with OPERS on July 29, 1993 had a one-time opportunity to select coverage under on of these programs. Those employees hired after July 29, 1992 are covered only under the revised plan. There are a number of features common to both plans.

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

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

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

The amount of the disability allowance under the original plan is based on the FAS and years of service with OPERS, plus the length of time between the effective date of disability and age 60. The disability benefit cannot exceed 75%, nor be less than 30% of the member's FAS. The benefit is fully

taxable until normal retirement age and then a specified dollar amount each month representing the return of taxed contributions is tax-free. For a law enforcement member disabled due to an on-duty injury or illness, 30% of the benefit payment is excludable from taxable income.

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

When the disability benefit under the revised plan ends, the member may have the opportunity to apply for a service retirement benefit or apply for a refund of the account, which is not reduced by the amount of disability benefits paid. The benefit amount would be the greater of: a) 2.2% of FAS multiplied by the years of service (contributing and disability) not to exceed 45% of FAS, or b) the regular or law enforcement benefit calculation using only the member's years of contributing service.

#### • Survivor Benefits

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

- 1) Spouse;
- 2) Children;
- 3) Dependent parents;
- 4) If none of the above, parents share equally in a refund of the account;

5) If none of the foregoing, a refund of the account is paid to the estate.

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

- The member had 18 full months of Ohio service credit with three of those months within the two and one-half years immediately before death, or
- Receiving a disability benefit from OPERS, or
- 3) Eligible for retirement, but did not retire and continued to work.

If, at the member's death, none of these requirements were met, a refund of contributions paid into OPERS for the account may be made. The member's beneficiary may choose a refund of the member's account only if there are no children eligible for monthly benefits. If the member dies while receiving a disability benefit under the original plan and eligible survivors are allowed to select a cash refund of the account, the amount is reduced by the amount of disability benefits that had already been paid. There is no reduction in amount if the member dies while receiving a benefit under the revised disability plan or while still working.

If the member had at least 10 full years of Ohio service credit, the surviving spouse (with no children eligible for monthly benefits) may receive benefits of \$250 a month, an amount equal to 25% of final average salary, or a percent determined by service credit (if more than 20 years), whichever is higher. If the member had less than 10 full years, but at least 18 full months, of Ohio service credit, the surviving

spouse (at age 62 or older with no children eligible for monthly benefits) may receive the greater of \$250 per month or 25% of FAS.

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

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

A child may qualify for monthly benefits if they have never been married or are a natural or legally adopted child under age 18, (or 22, if a qualified student attending an accredited school) or a child, at any age, who is physically or mentally incompetent at the time of the member's death. Benefits terminate upon the child's first marriage, adoption by someone other then a stepparent, abandonment, death, or during active military service.

Also, survivor benefits will be stopped after a child reaches age 18, unless proof is submitted that the child is attending an institution of learning or training and pursuing a program of study equivalent to at least two-thirds of the full-time curriculum requirement of the institution. Forms are provided by OPERS for submission of the necessary proof by the surviving spouse or student, and by the school.

A dependent parent is one who received at least one-half support from the member during the 12 months preceding the member's death. A dependent parent may receive survivor benefits if age 65 or older, or at any age if adjudged physically or mentally incompetent at the time of the member's death. Survivor benefit payments, made to a parent, terminate upon the parent's death or remarriage.

#### Additional Benefits

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

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

#### Medicare Part B Reimbursement—

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

**Cost-of-Living Adjustment**—Once a benefit recipient has received benefits for 12 months, an annual 3% cost-of-living adjustment is provided to benefit recipients each year.

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

#### Refunds

Under the Traditional Pension Plan, full recovery of all employee contributions to OPERS is guaranteed. Members may apply for, and receive, their accumulated contributions, interest, and a matching amount if the member has five or more years of service credit.

A member participating in the Combined Plan may receive all employee contributions and any investment earnings on those contributions. If the member has five or more years of service credit, the member may receive a matching amount of the employer contributions.

For members with at least five years of service credit, the amount is 33% of the member's eligible contributions. For a member with at least 10 years of service credit, the amount is 67% of eligible contributions.

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

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

## Benefits Under The Member-Directed Plan

#### Age-and-Service Retirement

Members participating in the Member-Directed Plan are eligible to retire after they reach age 55. At the time these members file their applications for retirement, they may select one of several payment options for payment the vested portions of their individual OPERS accounts. They can purchase a monthly annuity form OPERS with their account balance, which includes joint and survivor options. Other payment options include partial lumpsum payments (subject to limitations), payments for a guaranteed period, payments of a specific monthly amount, or a combination of these options. Members also may defer payment of their individual OPERS account.

#### Disability Benefits

The vested portion of a Member-Directed Plan participant's individual OPERS account will be available through a refund after the member becomes disabled.

#### Survivor Benefits

In the event of a Member-Directed Plan participant's death, the vested portion of the member's individual account balance will be available to the member's beneficiaries.

Health-Care Coverage—For members participating in the Member-Directed Plan, a portion of the employer contribution is credited to a Retiree Medical Account (RMA). Amounts contributed to the RMA may be used for the payment of qualified health, dental, and vision care expenses.

#### Refunds

Members participating in the Member-Directed Plan may receive employee contributions and any investment earnings on those contributions. Depending on length of participation in the Plan, a member may also receive a portion of the employer contributions, plus any investment earnings, based on the following schedule:

Years of	Percentage		
<b>Participation</b>	Vested		
1 year	20%		
2 years	40%		
3 years	60%		
4 years	80%		
5 or more years	100%		

# Coverage and Benefits for Re-employed Retirees

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

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

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

All re-employed retirees will continue to receive their retirement allowance and must make contributions toward a money purchase annuity, which is based on the calculation of the sum of employee contributions for the period of reemployment, plus allowable interest, multiplied by two.

Re-employed retirees have a choice of several payment options: Plans A through D are available. The choices include benefits payable throughout the member's lifetime (Plan B-single life annuity) or in a lesser amount during the individual's life but continuing after their member's death to a joint survivor. The joint survivor selections include a 50% joint survivor payment to a spouse (Plan A), 0-99% joint survivor payment to a designated beneficiary (Plan C), or 100% payment to a designated beneficiary (Plan D). A benefit payable under Plan A, C, or D is the actuarial equivalent of Plan B, but the payment to the member is reduced because it is based on the combined life expectancies of the member and the beneficiaries.

The employer must provide the reemployed retiree's primary health-care coverage if it is available to employees in comparable positions. The employer health care coverage cannot be waived by the re-employed retiree. Suspension or forfeiture of the retirement allowance interrupts the retiree's health care coverage.

A person who is retired from OPERS and returns to OPERS-covered employment as an elected official is treated as a reemployed retiree. A person who is retired from another state of Ohio retirement system and becomes an OPERS member as an elected official also is treated as a reemployed retiree. However, if an OPERS member is covered for non-elected official service, and is also an elected official contributing to Social Security for the elected position, that person's elected service has an effect on OPERS re-employed retirees for subsequent elected services.

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

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



KPMG LLP
Suite 500
191 West Nationwide Boulevard
Columbus, OH 43215-2568

Telephone 614 249 2300 Fax 614 249 2348

Independent Auditors' Report on Compliance and on Internal Control Over Financial Reporting Based on an Audit of Financial Statements Performed in Accordance With Government Auditing Standards

The Retirement Board
The Ohio Public Employees Retirement System

and

The Honorable Betty Montgomery Auditor of State:

We have audited the combining financial statements of the Ohio Public Employees Retirement System (OPERS) as of and for the year ended December 31, 2003, and have issued our report thereon dated April 16, 2004. We conducted our audit 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.

#### Compliance

As part of obtaining reasonable assurance about whether OPERS' financial statements are free of material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts and grants, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and, accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance that are required to be reported under *Government Auditing Standards*.

#### **Internal Control Over Financial Reporting**

In planning and performing our audit, we considered OPERS' internal control over financial reporting in order to determine our auditing procedures for the purpose of expressing our opinion on the financial statements and not to provide assurance on internal control over financial reporting. Our consideration of internal control over financial reporting would not necessarily disclose all matters in internal control over financial reporting that might be material weaknesses. A material weakness is a condition in which the design or operation of one or more internal control components does not reduce to a relatively low level the risk that misstatements in amounts that would be material in relation to the financial statements being audited may occur and not be detected within a timely period by employees in the normal course of performing their assigned functions. We noted no matters involving internal control over financial reporting and its operation that we consider to be material weaknesses.

This report is intended solely for the information and use of the Retirement Board, the management of the Ohio Public Employees Retirement System and the Ohio Auditor of State and is not intended to be and should not be used by anyone other than these specified parties.



April 16, 2004





88 East Broad Street P.O. Box 1140 Columbus, Ohio 43216-1140

Telephone 614-466-4514

800-282-0370

Facsimile 614-466-4490

# OHIO PUBLIC EMPLOYEES RETIREMENT SYSTEM FRANKLIN COUNTY

### **CLERK'S CERTIFICATION**

This is a true and correct copy of the report which is required to be filed in the Office of the Auditor of State pursuant to Section 117.26, Revised Code, and which is filed in Columbus, Ohio.

**CLERK OF THE BUREAU** 

Susan Babbitt

**CERTIFIED JUNE 8, 2004**