

2012

# COMPREHENSIVE ANNUAL FINANCIAL REPORT

*Securing the future for Ohio's police & firefighters*







# Dave Yost • Auditor of State

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

We have reviewed the *Independent Auditors' Report* of the Ohio Police and Fire Pension Fund, Franklin County, prepared by Clark, Schaefer, Hackett & Co., for the audit period January 1, 2012 through December 31, 2012. 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 Police and Fire Pension Fund is responsible for compliance with these laws and regulations.

A handwritten signature in black ink that reads "Dave Yost".

Dave Yost  
Auditor of State

August 28, 2013

**This page intentionally left blank.**

# Comprehensive Annual Financial Report

For the year ending Dec. 31, 2012

Prepared through the combined efforts of OP&F staff.



140 East Town Street • Columbus, Ohio 43215  
www.op-f.org • 1-888-864-8363



# Table of Contents

---

## Introductory Section (Unaudited)

Board of Trustees .....	ii
Administrative Staff .....	iii
Professional Consultants .....	iii
Awards.....	iv
Letter of Transmittal .....	vi

## Financial Section

Independent Auditors' Report.....	2
Management's Discussion and Analysis (Unaudited).....	4

### Basic Financial Statements

Statements of Net Position .....	8
Statements of Changes in Net Position.....	10
Notes to Basic Financial Statements .....	12

### Required Supplementary Information (Unaudited)

Schedule of Funding Progress .....	30
Schedule of Contributions from Employers and Other Contributing Entities .....	30
Notes to Required Supplementary Information .....	31

### Additional Information

Schedule of Administrative Expenses.....	33
Schedule of Investment Expenses.....	33
Combining Statement of Changes in Assets and Liabilities—Public Safety Officers Death Benefit Fund.....	34

## Investment Section (Unaudited)

Investment Report .....	36
Investment Portfolio Summary.....	44
Schedule of Investment Results .....	45
Investment Consultants and Money Managers.....	46
Schedule of Brokers' Fees Paid .....	47
Investment Policy and Guidelines.....	48

## Actuarial Section (Unaudited)

Report of Actuary.....	58
Description of Actuarial Assumptions and Methods.....	60
Plan Summary—Summary of Benefits and Contribution Provisions.....	63
Analysis of Financial Experience—Pension Trust Fund .....	69
Short-Term Solvency Test - Pension Trust Fund.....	69
Active Member Valuation Data .....	70
Retirees and Beneficiaries Added to and Removed from Rolls - Pension Trust Fund .....	70
Short-Term Solvency Test - Health Care Trust Fund .....	71
Retirees and Beneficiaries Added to and Removed from Rolls—Health Care Trust Fund.....	71
Analysis of Financial Experience –Health Care Trust Fund .....	71

## Statistical Section (Unaudited)

Statistical Objectives .....	73
Financial Trends.....	74
Revenue Capacity Information .....	79
Debt Capacity Information .....	86
Demographic and Economic Information .....	86
Operating Information .....	87
Death Benefit Fund.....	88
List of Professional Acronyms.....	89

---

## Board of Trustees

---



### About the Board of Trustees

Ohio law provides for the Ohio Police & Fire Pension Fund (OP&F) Board of Trustees to be comprised of nine members. There are six employee members elected to four-year terms by their respective member groups: two active representatives of police departments, two active representatives of fire departments, one retired police officer and one retired firefighter. The Board also includes three statutory members. Each statutory member – one appointed by the Governor of Ohio, one by the Ohio Treasurer of State, and one appointed jointly by the Ohio Senate President and the Ohio Speaker of the House – must have professional investment expertise.

The OP&F Board of Trustees appoints the Executive Director, an actuary, and other advisors necessary for the transaction of business. By law, the Ohio Treasurer of State is custodian of OP&F's funds. The Board meets monthly, except for one month each year. In 2012 the Board did not meet in the month of August and in 2013 the Board will not meet in the month of July. The Board receives no compensation, but is reimbursed for necessary expenses.

### Board of Trustee Members

*Standing left to right*

**Edward L. Montgomery, Chair**

Columbus Police, term began on June 4, 2012, expires on June 5, 2016.

**David J. Owsiany**

Investment Expert Member, appointed by the Ohio Treasurer of State, term began on Jan. 6, 2011, expires on Jan. 6, 2015.

**David A. Witner, Chair-Elect**

Cuyahoga Falls Fire, term began on June 7, 2010, expires on June 1, 2014.

**Scott W. Huff**

Cleveland Police, term began on June 6, 2011, expires on May 31, 2015.

**J. David Heller**

Investment Expert Member, appointed by the Ohio Senate and the Ohio House of Representatives, term began on Dec. 16, 2008, expired on Dec. 4, 2012. Re-appointed to a new four-year term expiring on Nov. 6, 2016.

**John L. Wainscott**

Retired, Cincinnati Police, term began on June 4, 2012, expires on June 5, 2016.

*Seated left to right*

**Lawrence G. Petrick, Jr.**

Shaker Heights Fire, term began on June 4, 2012, expires on June 5, 2016.

**William E. Deighton**

Retired, Cleveland Fire, term began on June 6, 2011, expires on May 31, 2015.

**Scott D. Roulston**

Investment Expert Member, appointed by the Governor of Ohio, term began on March 6, 2013, expires on Sept. 27, 2016.



## Administrative Staff

---



### Executive Staff

*left to right*

**John J. Gallagher Jr.**  
Executive Director

**Mark A. Jordan**  
Internal Auditor/Privacy and  
Ethics Officer

**Theodore G. Hall**  
Chief Investment Officer

**Scott K. Miller**  
Financial Services Director

**Jennifer L. Harville**  
Member Services Director

**J. Keith Byrd**  
Deputy Executive Director

**Mary Beth Foley**  
General Counsel

### Professional Consultants

*Not pictured*

**Actuary**  
Buck Consultants

### Independent Accountants

Clark Schaefer Hackett  
(Under contract with the Ohio Auditor  
of State)

### Legal Counsel

Ohio Attorney General  
The Honorable Mike DeWine

### Investment Consultants and Money Managers

See page 46

## Awards

### Certificate of Achievement for Excellence in Financial Reporting



### Distinguished Budget Presentation Award



## Awards

OP&F has been recognized by financial experts for their commitment to the highest possible fiscal standards. OP&F is honored to have been recognized with the following:

### 2011 Certificate of Achievement for Excellence in Financial Reporting

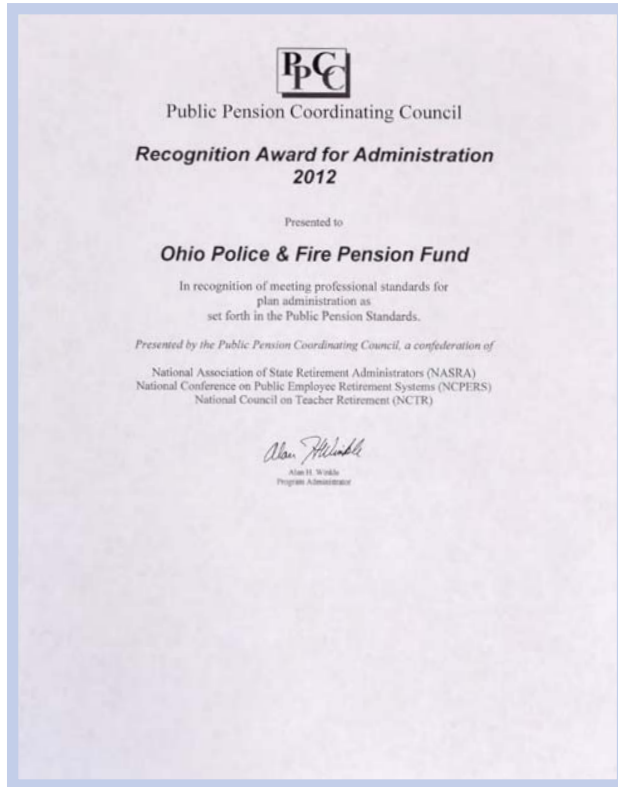
For 23 years, the Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to OP&F for its Comprehensive Annual Financial Report. In order to be awarded a Certificate of Achievement, a government must publish an easily readable and efficiently organized comprehensive annual financial report that satisfies both generally accepted accounting principles and applicable legal requirements.

### 2012 Distinguished Budget Presentation Award

OP&F was again recognized by GFOA's Distinguished Budget Presentation Award in 2012. OP&F has received the award annually since 2002. The GFOA established the Distinguished Budget Presentation Awards Program (Budget Awards Program) in 1984 to encourage and assist state and local governments to prepare budget documents of the very highest quality that reflect both the guidelines established by the National Advisory Council on State and Local Budgeting and the GFOA's best practices on budgeting and then to recognize individual governments that succeed in achieving that goal.

## Awards

### Public Pension Standards Award for Administration 2012



**2012 Public Pension Standards Award**  
Awarded to OP&F by the Public Pension Coordinating Council. This award recognizes OP&F's professional standards attained for administration.

### Award for Outstanding Achievement in Popular Annual Financial Reporting



**2011 Award for Outstanding Achievement in Popular Annual Financial Reporting**  
For 11 years, the GFOA has awarded a Certificate of Outstanding Achievement in Popular Annual Financial Reporting to OP&F for its Popular Annual Financial Report. This award is a prestigious national award recognizing conformance with the highest standards of creativity, presentation, understandability, and reader appeal for preparation of governmental popular reports.

## Letter of Transmittal



140 East Town Street / Columbus, Ohio 43215-5164 / Tel. (614) 228-2975 / www.op-f.org

June 18, 2013

Dear Chair and Members of the Board of Trustees:

We are pleased to submit to you the Comprehensive Annual Financial Report (CAFR) of the Ohio Police & Fire Pension Fund (OP&F) for the year ending Dec. 31, 2012. This CAFR was prepared to aid interested parties in assessing OP&F's financial status on Dec. 31, 2012, and its results for the year then ended.

### **Accounting System and Internal Controls**

The financial statements were prepared in accordance with accounting principles generally accepted in the United States of America (U.S.) applicable to governmental units, including the pronouncements of the Governmental Accounting Standards Board (GASB). Additional information on OP&F's significant accounting policies is contained in the Notes to the Basic Financial Statements in the Financial Section.

Management is responsible for establishing and maintaining an effective internal control structure designed to ensure that the assets of OP&F are protected from loss, theft, or misuse; and to ensure that adequate accounting data is compiled to allow for the preparation of Basic Financial Statements in conformity with accounting principles generally accepted in the U.S. The internal control structure is designed to provide reasonable, but not absolute, assurance that these objectives are met. The concept of reasonable assurance recognizes that:

- (1) the cost of a control should not exceed the benefits likely to be derived; and
- (2) the valuation of costs and benefits requires estimates and judgments by management.

Management believes its internal control structure meets these objectives.

### **OP&F History and Overview**

OP&F is a cost sharing multiple-employer public employee retirement system and was created by the Ohio General Assembly in 1965, replacing 454 separate local police and firefighter relief and pension funds in Ohio. OP&F began operating as a statewide Retirement Fund on Jan. 1, 1967. On that date, the local pension funds transferred their assets and liabilities to OP&F. Assets transferred to OP&F totaled approximately \$75 million, while OP&F's actuary computed the liabilities accrued up to 1966 at approximately \$490 million. Employers are paying the remaining unfunded accrued liability, which began in 1969, over a 67 year period. As of Dec. 31, 2012, the balance totaled nearly \$26.9 million.

OP&F provides pension, disability, Deferred Retirement Option Plan (DROP), and survivor benefits to qualified members and survivors. OP&F also provides access to health care coverage for qualified members, spouses, children and dependent parents. Please refer to the Plan Summary - Summary of Benefit and Contribution Provisions in the Actuarial Section for further information on plan benefits.

Membership in OP&F is mandatory under Ohio law for all full-time police officers employed by Ohio municipalities and appointed under the required statutory provisions. Membership is also mandatory for all full-time firefighters employed by municipalities, townships, villages, joint fire districts or other political subdivisions. In order to become members of OP&F, full-time firefighters are required to satisfactorily complete or have satisfactorily completed a firefighter training course approved under former Section 3303.07, Section 4765.55, or conducted under Section 3737.33 of the Ohio Revised Code (ORC). The table below is a tabulation of current participating employers at Dec. 31, 2012:

### Participating Employers

	Police	Fire	Total
Municipalities	249	225	474
Townships	–	122	122
Villages	288	33	321
<b>TOTAL</b>	<b>537</b>	<b>380</b>	<b>917</b>

### Financial Overview

OP&F receives virtually all of its funds from the following sources: investment earnings, employer contributions, member contributions, benefit recipient health care premiums, state subsidies and reimbursements. Additions to net position were \$2.3 billion in 2012 due to a positive return on investments of 14.9 percent.

Contributions increased by 2 percent in 2012. This increase is mainly due to the increase in average annual salary for active members. The statutory contribution rates for 2012 were 10 percent for members, 19.5 percent for police employers and 24 percent for fire employers, and remained unchanged from the prior year. In 2012, member contributions were due monthly and employer contributions were billed quarterly. Statutory penalties are assessed if payments are received late. Penalties decreased by 56 percent in 2012 mainly due to OP&F's initiatives to help employers avoid penalty situations. Just before each due date, OP&F sends out an automated voice mail message to all employers who have not yet submitted a payment or report before the due date. This reminder along with OP&F's online Automated Clearing House (ACH) payment options has significantly helped employers to avoid penalty situations.

Additions to Net Position (dollars in thousands)	2012		2011	
	Amount	Percent	Amount	Percent
Net Investment Income	\$1,657,937	71%	\$229,577	25%
Contributions	660,219	28%	647,453	71%
Interest on Local Funds Receivable	1,276	0%	1,338	0%
Other Additions	28,826	1%	38,568	4%
<b>TOTAL ADDITIONS</b>	<b>\$2,348,258</b>	<b>100%</b>	<b>\$916,936</b>	<b>100%</b>

Deductions to Net Position (dollars in thousands)	2012		2011	
	Amount	Percent	Amount	Percent
Benefits	\$1,236,409	97%	\$1,204,223	97%
Refund of Member Contributions	26,448	2%	21,991	2%
Administrative Expenses	15,462	1%	15,452	1%
<b>TOTAL DEDUCTIONS</b>	<b>\$1,278,319</b>	<b>100%</b>	<b>\$1,241,666</b>	<b>100%</b>

Benefit payments represent the largest usage of the additions to net position. In 2012, OP&F experienced an 8.1 percent increase in retirement benefits. This increase is slightly above the normal annual retirement increases which included a 3 percent cost-of-living allowance (COLA) for eligible benefit recipients and the expectations of the baby boomer generation retiring. Part of this increase in pension benefits is due to members reaching their eight-year maximum participation date in DROP. Another part of this increase is due to pension legislation that was passed in September 2012 that will help OP&F's long-term funding. Active members who were eligible to retire found that it was to their advantage to do so before these changes take effect in 2013.

There was also a 6.3 percent increase in the amount of health care benefit payments. This increase is also largely due to DROP participants reaching their eight year maximum participation date and the increase in retirements due to the new pension legislation. There was a 12 percent decrease in DROP benefits mainly due to the changes made to the DROP interest rate now being used. Since Jan. 19, 2003, the DROP interest rate was a flat 5 percent. Since April 2, 2012 the DROP interest now has a cap of 5 percent and the active interest rate has been updated quarterly to equal the 10-year U.S. Treasury Note as of the last business day of the preceding quarter. The DROP interest rate as of Dec. 31, 2012 was 1.7 percent. Survivor and disability benefits increased at normal levels of 3.6 and 3.5 percent, respectively. This increase is mainly due to the annual 3 percent COLA.

Administrative expenses are slightly higher this year. This slight increase of .1 percent is the direct result of the Executive Director's continued diligence to minimize increases. Years of cost saving efforts have helped achieve the results of 2012. Refunds of member contributions are higher than the prior year due to an increased amount of withdrawals. Other deductions to the net position returned to normal levels in 2012 and represent only a minor amount.

Please refer to the Management's Discussion and Analysis for additional financial details.

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

Funds are derived from the excess of additions over deductions and are accumulated by OP&F in order to meet current and future benefit obligations to retirees and other beneficiaries. OP&F experienced a \$1 billion increase in the 2012 net position due to the increase in market values of domestic and international stocks from 2011 to 2012. Health care currently operates on a pay-as-you-go basis. A portion of employer contributions and a portion of investment income are both set aside to operate the health care program.

The OP&F investment portfolio achieved a return of 14.89 percent in 2012. By adhering to the sound principles and strategies that are in place, OP&F is strategically positioned to weather market fluctuations. As of Dec. 31, 2012, total investments at fair value stood at \$12.8 billion.

OP&F continues to work towards complying with the state's 30-year funding requirement. In September of 2012, new pension legislation was signed into law. OP&F now has the legislation needed to aid in reaching the state's mandated 30-year funding requirement. Under the new pension legislation, there will be increases in member contributions along with changes to the minimum retirement age, modifications to COLAs, changes in the DROP interest rate, minimum enrollment period for DROP, changing the formula to calculate final average salary and continued alterations to the sponsored health care plan for retirees.

While OP&F does not currently meet the 30-year funding requirement for pensions, the annual actuarial valuation completed by Buck Consultants, shows that OP&F's pension funding ratio as of Jan. 1, 2012 was 63.1 percent based on the actuarial value of assets. The report confirms that OP&F continues to be able to meet its current and future pension obligations. As of the same date, OP&F's health care funding ratio was 21.1 percent with a solvency period until the year 2043, or 30 more years, which currently exceeds the goal of at least 15 years. Now with pension legislation changes, OP&F anticipates that when combined with a reduction in the Health Care Stabilization Fund (HCSF) contribution 15-year HCSF solvency may also be achieved based on the Jan. 1, 2012 valuation.

A report by Milliman, an independent actuarial firm, that was presented to the Ohio Retirement Study Council (ORSC) on returns as of Dec. 31, 2012, showed that OP&F's investment portfolio continues its exceptional performance. In a comparison with more than 3,000 other institutional investors, OP&F's portfolio returns ranked in the top one percent in both the three year and 10 year periods. In the three year period, OP&F realized a 10.9 percent return on investments while the 10 year period was 8.9 percent. OP&F ranked in the top two percent for performance in 2012, with a 14.9 percent return. Each of these investment periods outpaced OP&F's assumed rate of return of 8.25 percent.

Please see the Notes to the Basic Financial Statements, the Statistical Section and the Required Supplementary Information (RSI) Sections of this report for more detailed information.

### **Investment Policy**

OP&F invests all available funds in order to maximize both current income and long-term appreciation. The primary objective of OP&F's investment policy is to ensure that OP&F meets its responsibilities for providing retirement and other benefits. The investment portfolio is diversified to provide adequate cash flow and to provide the highest possible total return for OP&F's assets while maintaining an acceptable level of risk. Over the past two years, OP&F's total rate of return on its investment portfolio was favorable with a gain of 14.9 percent in 2012 and a gain of 2.6 percent in 2011.

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

### **Material Plan Amendments**

On April 2, 2012, the DROP interest rate changed from a flat 5 percent to the 10-year U.S. Treasury Note rate with a 5 percent cap. This change had an immediate impact on the amount of interest that accrued in the member DROP accounts.

On Sept. 26, 2012, Ohio signed into law new pension legislation that will pave the way for improved long-term funding for OP&F. OP&F fully supported the legislation and believes that the provisions will help secure the pension benefits for future retirees and active members. This is not only groundbreaking in Ohio, but significant nationally as many states continue to deal with the unfunded liabilities of their public retirement systems.

The changes are long-term and will decrease OP&F's unfunded accrued liabilities by an estimated \$3.2 billion on an actuarial basis. While the effective date of the pension legislation is Jan. 7, 2013, the provisions that affect OP&F members will begin in July 2013.

Highlights include:

- Increase the active member contribution rate from 10 percent to 12.25 percent, in annual increments of 0.75 percent each year beginning on July 1, 2013;
- Raise normal service retirement age from 48 to 52 for new members hired after July 1, 2013 and provide a reduced benefit option for those who still desire to retire at age 48 with 25 years of service;
- Adjust COLAs to the lesser of the Consumer Price Index or 3 percent for those members who have less than 15 years of service credit as of July 1, 2013;
- Delay COLAs until age 55 for all benefit recipients effective July 1, 2013, excluding statutory survivors and members receiving permanent and total disability benefits;
- Redefine average annual salary as the highest five years of contributions for those members who have less than 15 years of service credit as of July 1, 2013;
- Change the minimum DROP participation period from three years to five years for members who become DROP participants after July 1, 2013;
- Eliminate COLAs during DROP for members who become DROP participants after July 1, 2013. Members already in DROP prior to that date will receive COLAs while in DROP if they are at least age 55 and have participated in the plan for 12 months;
- Reduce the percentage of the member contribution that gets credited to DROP accruals for members who become DROP participants after July 1, 2013;
- Provides a “salary benchmark” under which certain increases are excluded from salary for the purpose of determining average annual salary for members who have 15 or more years of service on or before July 1, 2013;
- Authorizes the Board of Trustees to adjust the age and service credit requirements and member contribution rate (higher or lower) beginning Nov. 1, 2017, and every five years thereafter, provided the actuary recommends the change;
- Make the payments of employer contributions due monthly rather than quarterly.

See the Actuarial Section for the assumptions used within this report.

### **Independent Audit**

Clark Schaefer Hackett, independent certified public accountants, audited the financial statements of OP&F for the year ended Dec. 31, 2012, and their opinion thereon is included in the Financial Section.

### **Notes to Basic Financial Statements**

The Notes to the Basic Financial Statements, which follow the Basic Financial Statements, contain additional information and are an integral part of such statements.



### **Certificate of Achievement**

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to OP&F for its CAFR for the fiscal year ended Dec. 31, 2011. The Certificate of Achievement is the highest form of recognition for excellence in state and local government financial reporting.

In order to be awarded a Certificate of Achievement, a government unit must publish an easily readable and efficiently organized CAFR, whose contents conform to program standards. Such reports must satisfy both accounting principles generally accepted in the U.S. and applicable legal requirements. A Certificate of Achievement is valid for a period of one year only. OP&F believes the current report continues to conform to the Certificate of Achievement Program requirements and is submitting it to the GFOA to determine its eligibility for another certificate.

### **Acknowledgments**

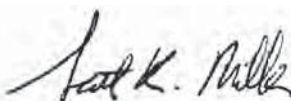
The preparation and contents of this report reflect the combined efforts of OP&F's staff under the direction of the Board of Trustees and are the responsibility of OP&F's management staff. It is intended to provide complete and reliable information as a basis for making management decisions, to disclose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

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

Respectfully submitted,



John J. Gallagher, Jr.  
Executive Director



Scott K. Miller  
Financial Services Director



2012 Comprehensive Annual Financial Report

# Financial Section

Ohio Police & Fire Pension Fund

- Independent Auditors' Report
- Management's Discussion and Analysis (Unaudited)
- Basic Financial Statements
  - Statements of Net Position
  - Statements of Changes in Net Position
  - Notes to Basic Financial Statements
- Required Supplementary Information (Unaudited)
  - Schedule of Funding Progress
  - Schedule of Contributions from Employers and Other Contributing Entities
  - Notes to Required Supplementary Information
- Additional Information
  - Schedule of Administrative Expenses
  - Schedule of Investment Expenses
  - Combining Statement of Changes in Assets and Liabilities
    - Public Safety Officers Death Benefit Fund



140 East Town Street • Columbus, Ohio 43215  
www.op-f.org • 1-888-864-8363

## Independent Auditors' Report

---



### INDEPENDENT AUDITORS' REPORT

To the Board of Trustees  
Ohio Police and Fire Pension Fund  
Columbus, Ohio

#### Report of the Financial Statements

We have audited the statements of net position of the Ohio Police and Fire Pension Fund (the Fund) as of December 31, 2012 and 2011, and the related statements of changes in net position for the years then ended, and the related notes to the financial statements.

#### Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

#### Auditors' Responsibility

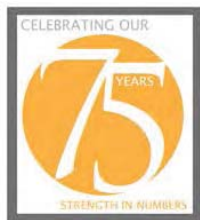
Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

#### Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Ohio Police and Fire Pension Fund, as of December 31, 2012 and 2011, and the changes in financial positions, for the years then ended in accordance with accounting principles generally accepted in the United States of America.



2525 north limestone street, ste.103  
springfield, oh 45503

www.cshco.com  
p. 937.399.2000  
f. 937.399.5433

cincinnati | cleveland | columbus | miami valley | springfield | toledo

## Emphasis of Matters

### *Change in Accounting Principles*

As described in Note 1, during the year ended December 31, 2012, the Fund adopted the provisions of Governmental Accounting Standards Board (GASB) Statements No. 62, *Codification of Accounting and Financial Reporting Guidance Contained in the Pre-November 30, 1989 FASB and AICPA Pronouncements* and No. 63, *Financial Reporting of Deferred Outflows of Resources, Deferred Inflows of Resources, and Net Position*.

## Other Matters

### *Required Supplementary Information*

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis and required supplementary information on pages 4 through 7 and 30 through 32 be presented to supplement the financial statements. Such information, although not a part of the financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the financial statements, and other knowledge we obtained during our audit of the financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

### *Other Information*

Our audit was conducted for the purpose of forming an opinion on the Fund's financial statements. The introductory section, the schedule of administrative expenses, the schedule of investment expenses, the combining statement of changes in assets and liabilities - public safety officers' death benefit fund, investment section, actuarial section, and statistical section are presented for purposes of additional analysis and are not a required part of the financial statements.

The schedule of administrative expenses, the schedule of investment expenses, and the combining statement of changes in assets and liabilities - public safety officers' death benefit fund are the responsibility of management and were derived from and relates directly to the underlying accounting and other records used to prepare the financial statements. Such information has been subjected to the auditing procedures applied in the audit of the financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the financial statements or to the financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the schedule of administrative expenses, the schedule of investment expenses and the combining statement of changes in assets and liabilities - public safety officers' death benefit fund are fairly stated, in all material respects, in relation to the financial statements as a whole.

The introductory section, investment section, actuarial section and statistical section have not been subjected to the auditing procedures applied in the audit of the financial statements, and accordingly, we do not express an opinion or provide any assurance on them.

## Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated June 18, 2013, on our consideration of the Fund's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Fund's internal control over financial reporting and compliance.

**CLARK, SCHAEFER, HACKETT & CO.**

Springfield, Ohio  
June 18, 2013

## Management’s Discussion and Analysis (Unaudited)

This Management Discussion and Analysis (MD&A) of OP&F’s financial performance provides a narrative overview of financial activities for the fiscal year ended Dec. 31, 2012. The MD&A is designed to focus on the current year’s activities, resulting changes, and currently known facts. OP&F encourages you to read it in conjunction with the Basic Financial Statements, Notes to the Basic Financial Statements, and the Letter of Transmittal included in the Introductory Section of this CAFR.

### FINANCIAL HIGHLIGHTS

Additions are received primarily from investment income, employer and member pension contributions. For fiscal year 2012, these additions totaled \$2,348.2 million and were \$917 million in 2011, which is a 156 percent increase. Investment income fluctuates dramatically because it includes realized and unrealized investment gains and losses based on performance of global capital markets.

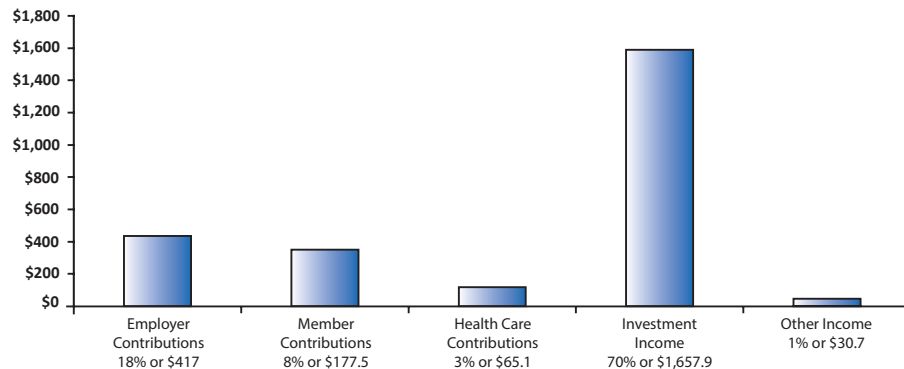
The employer and member contribution rates during 2012 remained unchanged from the prior year. Member contributions are 10 percent for all members, while employer contributions are 19.5 percent and 24 percent for police and fire, respectively.

Deductions are incurred primarily for the purpose for which OP&F was created, the payment of pension, disability and survivor benefits to qualified members and survivors.

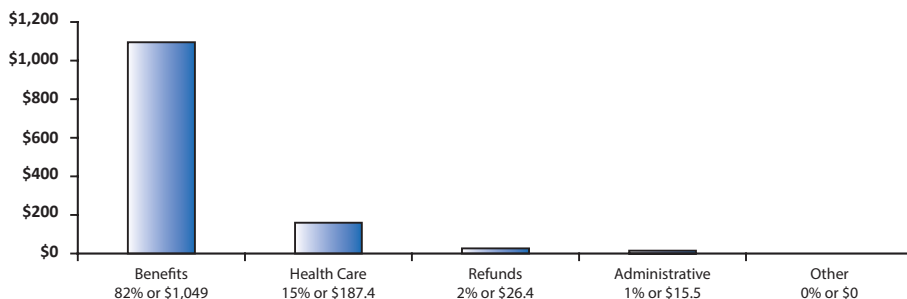
Included in the deductions from OP&F’s net position for 2012 were benefits for retirement, DROP, disability, health care, and survivors. Also included were contribution refunds, administrative and other expenses. Pension benefits are funded through a combination of investment earnings, employer and member contributions. Health care expenses are funded on a pay-as-you-go-basis through a portion of employer contributions, health care premiums, and investment income. Deductions totaled \$1,278.3 million in 2012 and were \$1,241.7 million in 2011, which is a 3 percent increase over 2011. Please refer to the Plan Summary – Summary of Benefit and Contribution Provisions in the Actuarial Section for further information on plan benefits.

OP&F administers the State of Ohio Public Safety Officers Death Benefit Fund. This program was established by the State of Ohio to provide monthly benefit payments to eligible surviving family members of Ohio public safety officers who have been killed in the line of duty or die of a duty-related injury or illness. Funds are disbursed to OP&F on a quarterly basis, are paid monthly by OP&F to eligible recipients and annually the unused balance is returned to the State. The Public Safety Officers Death Benefit Fund is considered to be an agency fund administered by OP&F and, accordingly, its assets of \$456,661 and \$248,492 and the related liability for unpaid benefits are included in the accompanying financial statements as of Dec. 31, 2012 and 2011.

**2012 Additions (dollars in millions) \$2,348.2**



**2012 Deductions (dollars in millions) \$1,278.3**



## OVERVIEW OF FINANCIAL STATEMENTS

Following the MD&A are the Statements of Net Position and the Statements of Changes in Net Position. OP&F's financial statements are prepared using the accrual basis of accounting and are in compliance with applicable GASB Statements.

The Statement of Net Position provides a snap-shot view at year-end for the amount OP&F has accumulated in assets to pay for benefits. The Statement of Changes in Net Position reflects what has happened to OP&F's assets during the fiscal year. If the net position increased, then additions were greater than the deductions. If the net position decreased, then additions to OP&F were less than the deductions from OP&F.

In addition to the Basic Financial Statements and accompanying Notes to the Basic Financial Statements, certain Required Supplementary Information (RSI) is provided. The Schedule of Funding Progress shows on an actuarial basis whether OP&F's ability to pay for benefits is improving or deteriorating over time. Also included in the RSI is a Schedule of Contributions from Employers and Other Contributing Entities and Notes to the RSI. Both schedules provide data over the past ten-years. Following the RSI are Schedules of Administrative Expenses and Schedule of Investment Expenses.

A condensed version of OP&F's financial information is being provided as part of this discussion.

### Condensed Net Position Information (dollars in millions)

	2012	2011	2010	2012 Change		2011 Change	
				Amount	Percent	Amount	Percent
Cash and Short-term							
Investments	\$1,255.6	\$726.2	\$618.4	\$529.4	72.9%	\$107.8	17.4%
Receivables	289.0	247.3	240.8	41.7	16.9%	6.5	2.7%
Investments, at Fair Value	13,772.2	13,585.0	13,357.3	187.2	1.4%	227.7	1.7%
Capital Assets, Net of Depreciation	20.3	21.1	22.4	(.8)	(3.8)%	(1.3)	(5.8)%
Other Assets	0.3	0.3	0.2	0.0	0.0%	0.1	50.0%
<b>Total Assets</b>	<b>15,337.4</b>	<b>14,579.9</b>	<b>14,239.1</b>	<b>757.5</b>	<b>5.2%</b>	<b>340.8</b>	<b>2.4%</b>
Benefits and Accounts Payable	1,290.7	1,336.6	1,232.0	(45.9)	(3.4%)	104.6	8.5%
Investments Payable	2,508.3	2,774.8	2,213.9	(266.5)	(9.6%)	560.9	25.3%
<b>Total Liabilities</b>	<b>3,799.0</b>	<b>4,111.4</b>	<b>3,445.9</b>	<b>(312.4)</b>	<b>(7.6%)</b>	<b>665.5</b>	<b>19.3%</b>
<b>NET POSITION, END OF YEAR</b>	<b>\$11,538.4</b>	<b>\$10,468.5</b>	<b>\$10,793.2</b>	<b>\$ 1,069.9</b>	<b>10.2%</b>	<b>\$ (324.7)</b>	<b>(3.0)%</b>

### Condensed Changes In Net Position Information (dollars in millions)

	2012	2011	2010	2012 Change		2011 Change	
				Amount	Percent	Amount	Percent
Contributions	\$659.6	\$647.5	\$649.1	\$12.1	1.9%	\$(1.6)	(0.2)%
Net Investment Gain/(Loss)	1,657.9	229.6	1,651.8	1,428.3	622.1%	(1,422.2)	(86.1)%
Other Additions	30.7	39.9	25.1	(9.2)	(23.1)%	14.8	59.0%
<b>Total Additions</b>	<b>2,348.2</b>	<b>917.0</b>	<b>2,326.0</b>	<b>1,431.2</b>	<b>156.1%</b>	<b>(1,409.0)</b>	<b>(60.6)%</b>
Benefits	1,236.4	1,204.2	1,132.2	32.2	2.7%	72.0	6.4%
Refunds	26.4	22.0	15.8	4.4	20.0%	6.2	39.2%
Administrative Expenses and Other	15.5	15.5	15.0	0.0	0.0%	0.5	3.3%
<b>Total Deductions</b>	<b>1,278.3</b>	<b>1,241.7</b>	<b>1,163.0</b>	<b>36.6</b>	<b>2.9%</b>	<b>78.7</b>	<b>6.8%</b>
<b>Net Increase/(Decrease)</b>	<b>1,069.9</b>	<b>(324.7)</b>	<b>1,163.0</b>	<b>1,394.6</b>	<b>429.5%</b>	<b>(1,487.7)</b>	<b>(127.9)%</b>
<b>Net Position, Beginning of Year</b>	<b>10,468.5</b>	<b>10,793.2</b>	<b>9,630.2</b>	<b>(324.7)</b>	<b>(3.0)%</b>	<b>1,163.0</b>	<b>12.1%</b>
<b>NET POSITION, END OF YEAR</b>	<b>\$11,538.4</b>	<b>\$10,468.5</b>	<b>\$10,793.2</b>	<b>\$ 1,069.9</b>	<b>10.2%</b>	<b>\$ (324.7)</b>	<b>(3.0)%</b>

## FINANCIAL ANALYSIS

### Net Position

The net position available for benefits and expenses in 2012 was \$11,538.4 million versus \$10,468.5 million in 2011, which represents a 10.2 percent net increase. The overall net increase in 2012 can be primarily attributed to net appreciation on the fair value of investments, a slight increase in employer contributions received, and a slight increase in member contributions received. Please refer to the Investment Section for additional information on OP&F's investment activities in 2012.

### Revenue Additions to Net Position

Based on the rounded numbers found on page 5, overall contributions received by OP&F in 2012 increased 1.9 percent or \$12.1 million. Pension contributions from employers increased \$9.6 million, or 2.3 percent, in 2012 due to an increase in the average annual salary and participation in the DROP program. OP&F receives employer contributions for everyone actively contributing to DROP, and the employer contributions associated with DROP participation are not allocated to the individual DROP accounts.

Pension contributions from members increased \$0.7 million, or 0.4 percent, in 2012 due to an increase in the average annual salary. While the active member population, or contributing members, decreased by 610 to 27,463, or by 2.2 percent, the average annual salary increased by 1.9 percent, from \$66,526 to \$67,821.

Overall contributions were down in 2011, as compared to 2010, by 0.2 percent, or \$1.6 million. The decrease seen in 2011 was mainly due to the decrease in the number of active members contributing to OP&F.

Contributions paid by members and beneficiaries for their share of the health care costs increased by 4.1 percent from \$62.5 million to \$65.1 million in 2012. Part of this increase is due to an expansion in the number of members and beneficiaries selecting to participate in the OP&F program. The other part of this increase is due to active members being required to retire from service because they reached their eight year maximum participation in DROP.

Health care contributions increased in 2011 over 2010 by 6.1 percent. This increase was due to the first group of active members being required to retire from service because they reached their eight year maximum participation in DROP.

In 2012, contributions received through the state-subsidy decreased 9.1 percent, or \$58 thousand, from \$639 thousand to \$581 thousand. The state-subsidized contributions also declined in 2011 by 7.7 percent and declined in 2010 by 11.4 percent. This trend is due to a normal decline in the population of survivors receiving this subsidized benefit.

Investment net appreciation totaled \$1,412.9 million in 2012. The net appreciation of 2012 can be directly attributed to the overall positive return on OP&F investments of 14.9 percent. Investment net depreciation totaled \$3.2 million in 2011. The net depreciation of 2011 can be attributed to the decrease in market values of domestic and international stocks. Due to these soft markets, OP&F's investment return was only 2.6 percent in 2011. Investment net appreciation totaled \$1,444.2 million in 2010. The appreciation of 2010 can be attributed to the overall positive return on OP&F investments of 15.8 percent. The increase in 2010 is also due to the U.S. and international markets rebounding strongly as global stimulus and signs of economic recovery impacted the financial markets.

### Expense Deductions from Net Position

Benefit deductions for retirement, DROP, disability and survivors increased \$21.1 million, or 2.1 percent in 2012, increased \$55.6 million, or 5.7 percent in 2011, and increased \$56 million, or 6.1 percent in 2010. Part of the increase in pension benefits in 2012 is due to members reaching their eight year maximum participation date in DROP. Another part of this increase is due to the new pension legislation changes that will help to ensure that OP&F will eventually be solvent over an amortization period of 30 years. Active members who were eligible to retire found that it was to their advantage to do so in 2012 before these changes take effect in 2013. The majority of the increase in 2011 was also due to active members in OP&F's DROP program being required to retire from service because they reached their eight year maximum participation. The majority of the increase in 2010 was due to OP&F's DROP program having better than expected participation, and an increasing scale upon which contributions are allocated to the actual accounts, which allows active members to accrue pension benefits, contributions and interest in a separate account. Also contributing are the increases in the retirees and beneficiaries rolls. These rolls increased by 1,004 individuals, or 3.9 percent in 2012, increased by 362, or 1.4 percent in 2011 and increased by 395, or 1.6 percent in 2010.



---

Each year, there was also a 3 percent COLA for eligible recipients.

Health care benefits increased by 6.3 percent in 2012. Gross health care payments totaled \$187.4 million in 2012 and represented 14.7 percent of all plan deductions. The 2012 increase in health care benefits can be attributed to increasing trends in health care costs and due to active members participating in DROP being required to retire because they reached their eight year maximum participation.

Health care benefits increased by 10.3 percent in 2011. Gross health care payments totaled \$176.3 million in 2011 and represented 14.2 percent of all plan deductions. The 2011 increase in health care benefits can again be attributed to active members participating in DROP being required to retire because they reached their eight year maximum participation.

Health care benefits decreased by 5.2 percent in 2010. Gross health care payments totaled \$159.9 million in 2010 and represented nearly 13.7 percent of all plan deductions. The savings experienced in 2010 can be directly attributed to a shift of the OP&F population into the Medicare Supplement fully-insured plan, which has Medicare as the primary payer and OP&F as secondary, as the mix of OP&F's population moved over age 65. This shift has helped to reduce the health care costs for which members and beneficiaries are responsible.

Refunds to members increased by 20.3 percent in 2012, increased by 39.3 percent in 2011 and increased by 0.4 percent in 2010. Refunds to members include actual refunds of pension contributions and liabilities incurred for inactive members and who have accumulated contributions on deposit with OP&F.

## Statement of Net Position as of Dec. 31, 2012

	Pensions	Post-employment Health Care	2012 Total	Death Benefit Agency Fund
<b>Assets:</b>				
Cash and Short-term Investments	\$1,163,623,801	\$91,996,719	\$1,255,620,520	\$456,661
<b>Receivables:</b>				
Employers' Contributions	62,883,239	28,558,110	91,441,349	–
Members' Contributions	18,742,754	–	18,742,754	–
Accrued Investment Income	37,034,545	2,927,970	39,962,515	–
Investment Sales Proceeds	103,736,630	8,201,473	111,938,103	–
Local Funds Receivable	26,856,898	–	26,856,898	–
<b>Total Receivables</b>	<b>249,254,066</b>	<b>39,687,553</b>	<b>288,941,619</b>	<b>–</b>
<b>Investments, at fair value:</b>				
Bonds	2,405,375,775	190,170,293	2,595,546,068	–
Mortgage and Asset-Backed Securities	587,242,696	46,427,721	633,670,417	–
Stocks	3,077,500,985	243,308,871	3,320,809,856	–
Real Estate	1,211,982,491	95,819,983	1,307,802,474	–
Commercial Mortgage Funds	35,155,731	2,779,431	37,935,162	–
Private Equity	502,463,257	39,725,013	542,188,270	–
International Securities	3,771,177,436	298,151,301	4,069,328,737	–
Timber	70,543,267	5,577,188	76,120,455	–
Master Limited Partnerships	158,353,705	12,519,528	170,873,233	–
<b>Total Investments</b>	<b>11,819,795,343</b>	<b>934,479,329</b>	<b>12,754,274,672</b>	<b>–</b>
<b>Collateral on Loaned Securities</b>	<b>943,349,535</b>	<b>74,581,718</b>	<b>1,017,931,253</b>	<b>–</b>
<b>Capital Assets, net of accumulated depreciation, where applicable:</b>				
Land	3,200,000	–	3,200,000	–
Building and Improvements	14,091,103	–	14,091,103	–
Furniture and Equipment	112,418	–	112,418	–
Computer Software and Hardware	2,916,893	–	2,916,893	–
<b>Total Capital Assets, Net</b>	<b>20,320,414</b>	<b>–</b>	<b>20,320,414</b>	<b>–</b>
Prepaid Expenses and Other	344,145	–	344,145	–
<b>Total Assets</b>	<b>14,196,687,304</b>	<b>1,140,745,319</b>	<b>15,337,432,623</b>	<b>456,661</b>
<b>Liabilities:</b>				
Health Care Payable	–	21,363,831	21,363,831	–
Investment Commitments Payable	209,489,556	16,562,356	226,051,912	–
Accrued Administrative Expenses	12,114,125	–	12,114,125	–
Other Liabilities	19,377,033	–	19,377,033	–
Due to State of Ohio	–	–	–	456,661
DROP Liabilities	1,237,864,342	–	1,237,864,342	–
Reverse Repurchase Agreements	1,171,658,716	92,631,963	1,264,290,679	–
Obligations Under Securities Lending	943,349,535	74,581,718	1,017,931,253	–
<b>Total Liabilities</b>	<b>3,593,853,307</b>	<b>205,139,868</b>	<b>3,798,993,175</b>	<b>456,661</b>
<b>NET POSITION HELD IN TRUST FOR PENSION AND POST-EMPLOYMENT HEALTH CARE BENEFITS</b>	<b>\$10,602,833,997</b>	<b>\$935,605,451</b>	<b>\$11,538,439,448</b>	<b>\$ –</b>

See Notes to Basic Financial Statements.

## Statement of Net Position as of Dec. 31, 2011

	Pensions	Post-employment Health Care	2011 Total	Death Benefit Agency Fund
<b>Assets:</b>				
Cash and Short-term Investments	\$678,166,621	\$48,082,306	\$726,248,927	\$248,492
<b>Receivables:</b>				
Employers' Contributions	62,643,386	28,415,728	91,059,114	–
Members' Contributions	16,434,681	–	16,434,681	–
Accrued Investment Income	41,906,377	2,971,180	44,877,557	–
Investment Sales Proceeds	59,795,909	4,239,556	64,035,465	–
Local Funds Receivable	30,877,358	–	30,877,358	–
<b>Total Receivables</b>	<b>211,657,711</b>	<b>35,626,464</b>	<b>247,284,175</b>	<b>–</b>
<b>Investments, at fair value:</b>				
Bonds	2,147,705,833	152,273,269	2,299,979,102	–
Mortgage and Asset-Backed Securities	590,680,142	41,879,477	632,559,619	–
Stocks	3,879,425,933	275,052,970	4,154,478,903	–
Real Estate	1,031,030,650	73,100,517	1,104,131,167	–
Commercial Mortgage Funds	35,660,717	2,528,360	38,189,077	–
Private Equity	430,438,886	30,518,302	460,957,188	–
International Securities	3,198,454,270	226,771,786	3,425,226,056	–
Timber	–	–	–	–
Master Limited Partnerships	–	–	–	–
<b>Total Investments</b>	<b>11,313,396,431</b>	<b>802,124,681</b>	<b>12,115,521,112</b>	<b>–</b>
<b>Collateral on Loaned Securities</b>	<b>1,372,198,252</b>	<b>97,289,447</b>	<b>1,469,487,699</b>	<b>–</b>
<b>Capital Assets, net of accumulated depreciation, where applicable:</b>				
Land	3,200,000	–	3,200,000	–
Building and Improvements	14,596,038	–	14,596,038	–
Furniture and Equipment	145,190	–	145,190	–
Computer Software and Hardware	3,159,551	–	3,159,551	–
<b>Total Capital Assets, Net</b>	<b>21,100,779</b>	<b>–</b>	<b>21,100,779</b>	<b>–</b>
Prepaid Expenses and Other	294,283	–	294,283	–
<b>Total Assets</b>	<b>13,596,814,077</b>	<b>983,122,898</b>	<b>14,579,936,975</b>	<b>248,492</b>
<b>Liabilities:</b>				
Health Care Payable	–	19,270,927	19,270,927	–
Investment Commitments Payable	172,864,367	12,256,158	185,120,525	–
Accrued Administrative Expenses	11,416,930	–	11,416,930	–
Other Liabilities	18,079,675	–	18,079,675	–
Due to State of Ohio	–	–	–	248,492
DROP Liabilities	1,287,856,017	–	1,287,856,017	–
Reverse Repurchase Agreements	1,046,040,693	74,164,736	1,120,205,429	–
Obligations Under Securities Lending	1,372,198,252	97,289,447	1,469,487,699	–
<b>Total Liabilities</b>	<b>3,908,455,934</b>	<b>202,981,268</b>	<b>4,111,437,202</b>	<b>248,492</b>
<b>NET POSITION HELD IN TRUST FOR PENSION AND POST-EMPLOYMENT HEALTH CARE BENEFITS</b>	<b>\$9,688,358,143</b>	<b>\$780,141,630</b>	<b>\$10,468,499,773</b>	<b>\$ –</b>

See Notes to Basic Financial Statements.

## Statement of Changes in Net Position Year Ended Dec. 31, 2012

	Pensions	Post-employment Health Care	2012 Total
<b>Additions:</b>			
<b>From Contributions:</b>			
Employers'	\$286,752,750	\$130,285,935	\$417,038,685
Members'	177,533,755	–	177,533,755
State of Ohio–Subsidies	580,657	–	580,657
Health Care	–	65,066,253	65,066,253
<b>Total Contributions</b>	<b>464,867,162</b>	<b>195,352,188</b>	<b>660,219,350</b>
<b>From Investment Income:</b>			
Net Appreciation (Depreciation)			
Value of Investments	1,304,809,735	108,143,762	1,412,953,497
Bond Interest	136,152,249	11,284,416	147,436,665
Dividends	93,053,384	7,712,345	100,765,729
Alternative Investment Income	30,373,377	2,517,372	32,890,749
Repurchase Agreement Interest	(1,838,312)	(152,361)	(1,990,673)
Master Limited Partnerships Income	8,804	730	9,534
Other Investment Income	1,709,969	141,724	1,851,693
Less Investment Expenses	(36,158,279)	(2,996,829)	(39,155,108)
<b>Net Investment Income</b>	<b>1,528,110,927</b>	<b>126,651,159</b>	<b>1,654,762,086</b>
<b>From Securities Lending Activities:</b>			
Securities Lending Income	4,969,190	411,851	5,381,041
Securities Lending Expense	(2,037,639)	(168,881)	(2,206,520)
<b>Net Income from Securities Lending</b>	<b>2,931,551</b>	<b>242,970</b>	<b>3,174,521</b>
Interest on Local Funds Receivable	1,276,330	–	1,276,330
Other Income	7,599,881	21,226,179	28,826,060
<b>Total Additions</b>	<b>2,004,785,851</b>	<b>343,472,496</b>	<b>2,348,258,347</b>
<b>Deductions:</b>			
Retirement Benefits	529,864,440	–	529,864,440
DROP Benefits	212,092,447	–	212,092,447
Disability Benefits	232,832,996	–	232,832,996
Health Care Benefits	–	187,445,986	187,445,986
Survivor Benefits	74,173,583	–	74,173,583
Contribution Refunds	26,447,804	–	26,447,804
Administrative Expenses	14,887,116	562,689	15,449,805
Other Expenses	11,611	–	11,611
<b>Total Deductions</b>	<b>1,090,309,997</b>	<b>188,008,675</b>	<b>1,278,318,672</b>
Change in Net Position	914,475,854	155,463,821	1,069,939,675
<b>NET POSITION - BEGINNING OF YEAR</b>	<b>9,688,358,143</b>	<b>780,141,630</b>	<b>10,468,499,773</b>
<b>NET POSITION - END OF YEAR</b>	<b>\$10,602,833,997</b>	<b>\$935,605,451</b>	<b>\$11,538,439,448</b>

See Notes to Basic Financial Statements.

## Statement of Changes in Net Position Year Ended Dec. 31, 2011

	Pensions	Post-employment Health Care	2011 Total
<b>Additions:</b>			
<b>From Contributions:</b>			
Employers'	\$278,175,108	\$129,297,720	\$407,472,828
Members'	176,812,961	–	176,812,961
State of Ohio–Subsidies	639,099	–	639,099
Health Care	–	62,528,377	62,528,377
<b>Total Contributions</b>	<b>455,627,168</b>	<b>191,826,097</b>	<b>647,453,265</b>
<b>From Investment Income:</b>			
Net Appreciation (Depreciation)			
Value of Investments	(2,897,616)	(261,370)	(3,158,986)
Bond Interest	134,105,738	12,096,563	146,202,301
Dividends	84,876,641	7,656,015	92,532,656
Alternative Investment Income	26,124,792	2,356,500	28,481,292
Repurchase Agreement Interest	(3,188,461)	(287,605)	(3,476,066)
Master Limited Partnerships Income	–	–	–
Other Investment Income	1,913,144	172,569	2,085,713
Less Investment Expenses	(33,703,601)	(3,040,121)	(36,743,722)
<b>Net Investment Income</b>	<b>207,230,637</b>	<b>18,692,551</b>	<b>225,923,188</b>
<b>From Securities Lending Activities:</b>			
Securities Lending Income	5,173,347	466,645	5,639,992
Securities Lending Expense	(1,822,345)	(164,379)	(1,986,724)
<b>Net Income from Securities Lending</b>	<b>3,351,002</b>	<b>302,266</b>	<b>3,653,268</b>
Interest on Local Funds Receivable	1,337,967	–	1,337,967
Other Income	9,921,166	28,647,013	38,568,179
<b>Total Additions</b>	<b>677,467,940</b>	<b>239,467,927</b>	<b>916,935,867</b>
<b>Deductions:</b>			
Retirement Benefits	490,182,582	–	490,182,582
DROP Benefits	241,048,734	–	241,048,734
Disability Benefits	225,044,299	–	225,044,299
Health Care Benefits	–	176,340,482	176,340,482
Survivor Benefits	71,607,186	–	71,607,186
Contribution Refunds	21,990,673	–	21,990,673
Administrative Expenses	14,711,481	715,756	15,427,237
Other Expenses	24,846	–	24,846
<b>Total Deductions</b>	<b>1,064,609,801</b>	<b>177,056,238</b>	<b>1,241,666,039</b>
Change in Net Position	(387,141,861)	62,411,689	(324,730,172)
<b>NET POSITION - BEGINNING OF YEAR</b>	<b>10,075,500,004</b>	<b>717,729,941</b>	<b>10,793,229,945</b>
<b>NET POSITION - END OF YEAR</b>	<b>\$9,688,358,143</b>	<b>\$780,141,630</b>	<b>\$10,468,499,773</b>

See Notes to Basic Financial Statements.

## Notes to Basic Financial Statements Dec. 31, 2012 and 2011

### 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The following are the significant accounting policies followed by the Ohio Police & Fire Pension Fund (OP&F).

#### Basis of Accounting

OP&F's financial statements have been prepared using the accrual basis of accounting. Revenues are recognized when earned and expenses are recorded when a liability is incurred. Contributions are earned based on statutory requirements under Chapter 742 of the ORC.

#### New Accounting Pronouncement

During the year ended Dec. 31, 2012, OP&F adopted the provisions of GASB Statement No. 64 Derivative Instruments: Application of Hedge Accounting Termination Provisions – an amendment of GASB Statement No. 53, GASB Statement No. 63 Financial Reporting of Deferred Outflows of Resources, Deferred Inflows of Resources, and Net Position, GASB Statement No. 62 Codification of Accounting and Financial Reporting Guidance Contained in Pre-November 30, 1989 FASB and AICPA Pronouncements, GASB Statement No. 60 Accounting and Financial Reporting for Service Concession Arrangements, GASB Statement No. 57 OPEB Measurements by Agent Employers and Agent Multiple-Employer Plans.

During the year ended Dec. 31, 2011, OP&F adopted the provisions of GASB Statement No. 59 Financial Instruments Omnibus and GASB Statement No. 54 Fund Balance Reporting and Governmental Fund Type Definitions.

#### Management Use of Estimates

The preparation of the financial statements requires management to make a number of estimates and assumptions relating to the reported amounts of assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the period. Significant items subject to estimates and assumptions include the market value of certain investments, carrying amount of capital assets, and assets and obligations related to employee and member benefits. Actual results could differ from those estimates.

#### Reclassifications

Any reclassifications are done on a comparative basis for each year displayed.

#### Investments

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

Investments are reported at fair value. Securities traded on a national or international exchange, including master limited partnerships, are valued at the last reported sales price at the then current exchange rates. Mortgages are valued on the basis of future principal payments discounted at prevailing interest rates for similar instruments. The fair value of real estate and timber are based on independent appraisals and internal valuations. Investments that do not have an established market are reported at estimated fair value. Private equity limited partnership interest is based on values established by each partnership's valuation committee.

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

#### Federal Income Tax Status

OP&F was determined to be a qualified trust under section 401(a) of the Internal Revenue Code that is exempt from Federal income taxes under Section 501(a) of the Internal Revenue Code. OP&F's DROP plan was also determined to be part of the 401(a) trust. A separate trust accrual account is maintained for health care benefits under Internal Revenue Service (IRS) Code Section 115 trust. An IRS Code Section 401 (h) account is maintained for Medicare Plan B.

#### Administrative Costs

The cost of administering the plan is financed by investment income.

#### Contributions, Benefits, and Refunds

Employer and member contributions are recognized when due or in the period the related member salaries are earned. Benefits and refunds are recognized when due and payable in accordance with the terms of the plan.

## Property and Equipment

Property and equipment are recorded at cost. Depreciation is computed using the straight-line method over the estimated useful lives of the related assets. The range of estimated useful lives is as follows:

Buildings and improvements:	40 years
Furniture and equipment:	3 to 10 years
Computer software and hardware:	2 to 10 years

## Changes in Capital Assets Year Ended Dec. 31, 2012

Non-Depreciable Capital Assets	Jan. 1, 2012	Increases	Decreases	Dec. 31, 2012
Land	\$3,200,000	\$-	\$-	\$3,200,000
<b>Depreciable Capital Assets</b>				
Building and Improvements	21,317,155	-	-	21,317,155
Furniture and Equipment	3,800,343	48,239	(516,911)	3,331,671
Computer Software and Hardware	13,436,484	2,141,409	(1,365,073)	14,212,820
<b>Depreciable Capital Assets</b>	<b>38,553,982</b>	<b>2,189,648</b>	<b>(1,881,984)</b>	<b>38,861,646</b>
<b>Accumulated Depreciation</b>				
Building and Improvements	6,721,117	504,935	-	7,226,052
Furniture and Equipment	3,655,153	47,705	(483,605)	3,219,253
Computer Software and Hardware	10,276,933	1,249,734	(230,740)	11,295,927
<b>Total Accumulated Depreciation</b>	<b>20,653,203</b>	<b>1,802,374</b>	<b>(714,345)</b>	<b>21,741,232</b>
<b>TOTAL DEPRECIABLE CAPITAL ASSETS, NET</b>	<b>\$17,900,779</b>	<b>\$387,274</b>	<b>\$(1,167,639)</b>	<b>\$17,120,414</b>

## 2 – DESCRIPTION OF THE SYSTEM

### Organization

OP&F is a cost-sharing, multiple-employer public employee retirement system established by Chapter 742 of the ORC in 1965 to consolidate the various individual local police and firefighter's relief and pension funds into one statewide plan. OP&F is administered by a nine member Board of Trustees, consisting of two active representatives of police departments, two active representatives of fire departments, one retired police officer and one retired firefighter. The Board of Trustees also includes three statutory members. Each statutory member—one appointed by the Governor of Ohio, one by the Ohio Treasurer of State, and one appointed jointly by the Ohio Senate President and Ohio Speaker of the House of Representatives—must have professional investment expertise.

OP&F administers pension, disability and health care benefits to qualified members. In addition, OP&F administers survivor benefits, death benefits and sponsors health care programs for eligible survivors, spouses, children and dependent parents. OP&F is a separate financial reporting entity in accordance with criteria established by

Governmental Accounting Standards Board Statement No.14. Because OP&F is a legally separate entity, a voting majority of the governing board is not appointed by the State and it is fiscally independent of other state and local governments. OP&F also has a variety of professional consultants and money managers as listed on page iii and page 46.

### Plan Membership

Employer and member data as of Jan. 1, 2012 and 2011, based on the most recent actuarial valuation, is as follows:

Employee Members	2012			2011		
	Police	Fire	Total	Police	Fire	Total
<b>Retirees and Beneficiaries</b>						
Currently receiving benefits	15,572	11,506	27,078	15,013	11,061	26,074
Terminated employees entitled to benefits but not yet receiving them	67	39	106	104	47	151
<b>TOTAL BENEFIT MEMBERS</b>	<b>15,639</b>	<b>11,545</b>	<b>27,184</b>	<b>15,117</b>	<b>11,108</b>	<b>26,225</b>
<b>Current Members</b>						
Vested*	7,421	6,347	13,768	7,475	6,363	13,838
Non-vested	7,433	6,422	13,855	7,818	6,566	14,384
Total Current Members	14,854	12,769	27,623	15,293	12,929	28,222
<b>TOTAL EMPLOYEE MEMBERS</b>	<b>30,493</b>	<b>24,314</b>	<b>54,807</b>	<b>30,410</b>	<b>24,037</b>	<b>54,447</b>
<b>Employer Members</b>						
Municipalities	249	225	474	250	227	477
Townships	0	122	122	0	123	123
Villages	288	33	321	283	34	317
<b>TOTAL EMPLOYER MEMBERS</b>	<b>537</b>	<b>380</b>	<b>917</b>	<b>533</b>	<b>384</b>	<b>917</b>

\* Includes Rehired Retirees.

### Benefits

Plan benefits are established under ORC Chapter 742. OP&F members hired on or before July 1, 2013 are eligible for a normal retirement benefit at age 48 with 25 years of service credit. The normal retirement benefit is equal to 2.5 percent of annual earnings for each of the first 20 years of service, 2.0 percent for each of the next five years of service and 1.5 percent for each year of service thereafter. However, this normal retirement benefit is not to exceed 72 percent of the member’s “average annual salary,” or “recalculated average salary” as the case may be, for the three 12 consecutive months during which the total “salary” was greatest. With 15 years of service credit, retirement with reduced benefits is available upon reaching age 48, and 25 years have elapsed from the date the member became a qualified employee in a police or fire department, whichever date is later. An age/service commuted benefit is available to members age 62 with at least 15 years of service. This benefit is equal to 1.5 percent of average annual salary.

In addition to retirement benefits, OP&F also provides disability, survivor, and Death Benefit Fund (DBF) benefits. Disability benefits are available to all members and vary by length of service and type of disability. Statutory survivor benefits are specified dollar amounts paid to eligible surviving spouse, children and dependent parents upon the death of an active member or retiree. A one-time lump sum death benefit of \$1,000 is payable to the surviving spouse, designated beneficiary or estate, as applicable, of each deceased retired member.

OP&F also administers the Ohio Public Safety Officers DBF, which is funded by the State of Ohio and provides

special benefits to eligible survivors of public safety officers who are killed in the line of duty or who die from injuries or disease incurred in the performance of official duties. If the public safety officer had not qualified for age and service retirement these eligible survivors are entitled to receive the member’s full base pay, which will be reduced at the member’s retirement eligibility date. If the public safety officer would have qualified for age and service retirement, the survivors are eligible for a transitional benefit equal to 50 percent of the monthly base pay. The transitional benefit is paid in addition to any optional payment that may have been selected.

### Deferred Retirement Option Plan

Effective January 2003, DROP is an optional benefit that allows eligible police officers and firefighters to accumulate a lump sum of money for retirement, subject to the member meeting certain criteria.

OP&F members hired before July 2, 2013 who are eligible for a normal service retirement (48 years of age or older with 25 years or more of service credit) can enter the DROP program by delaying retirement and continuing to work as police officers or firefighters. Upon the DROP effective date, a member’s service pension is calculated as if that were the date of retirement. While the member continues to work and draw their normal salary, the amount they would have received in retirement benefits, plus annual COLAs to eligible members, accumulate tax-deferred at OP&F on their behalf. As the DROP participant continues to work, a portion of their OP&F member contribution, plus interest, also accumulates into DROP.



To receive the benefit of DROP, without penalty, members must work at least three more years in an OP&F-covered position and they must terminate employment and retire within eight years of their DROP effective date. When members end their active employment and retire within the required period, which terminates their DROP participation, they begin to receive their monthly service pension that was determined on their DROP effective date (plus COLAs if applicable) and will be eligible for health care benefits based on the eligibility guidelines in place at the time of their retirement. Members enrolled in DROP on or before July 1, 2013 who have terminated employment can begin to withdraw funds from their DROP accrual in a lump-sum payment or installments, as long as three full years have elapsed from their DROP effective date. For active members who enroll in DROP on or after July 2, 2013, they must participate in DROP for five full years from their DROP effective date.

**Health Care**

OP&F sponsors a comprehensive health care program for eligible benefit recipients and their eligible dependents. This program is not guaranteed and the benefits are administered by third party providers and are subject to change at any time upon action of the Board of Trustees. The program includes prescription drugs and reimburse-

ment of Medicare Part B premiums. Benefit recipients pay a portion of the health care cost through a monthly contribution.

Under Ohio law, health care costs paid from the funds of the plan are included in the employer contribution rates, which are currently 19.5 percent and 24 percent of salaries for police and fire employers, respectively. The Board of Trustees allocated employer contributions equal to 6.75 percent of annual covered payroll to the Health Care Stabilization Fund, which was part of the Pension Reserve Fund for 2012 and allocated 6.75 percent in 2011.

OP&F maintains funds for health care in two separate accounts. There is one account for health care benefits and one account for Medicare Part B reimbursements. A separate trust accrual account is maintained for health care benefits under an IRS Code Section 115 trust. An IRS Code Section 401(h) is maintained for Medicare Plan B.

**Refunds**

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

**Pension and Health Care Plans**

The funded status of the Pension and Health Care plans as of Jan. 1, 2012, the most recent actuarial valuation date, is as follows:

**Schedule of Funding Status (Unaudited)\*  
For the valuation year ending Jan. 1, 2012**

**Pension Trust (dollars in millions)**

Valuation Year Jan. 1	Valuation Assets	Actuarial Accrued Liabilities (AAL)	Unfunded Actuarial Accrued Liabilities (UAAL)	Ratio of Assets to AAL	Active Member Payroll	UAAL as Percentage of Active Member Payroll
2012	\$10,309	\$16,347	\$6,038	63.1%	\$1,897	318.2%

The amounts reported in this schedule do not include assets or liabilities for post-employment health care benefits.

**Retiree Health Care Trust (dollars in millions)**

Valuation Year Jan. 1	Valuation Assets	Actuarial Accrued Liabilities (AAL)	Unfunded Actuarial Accrued Liabilities (UAAL)	Ratio of Assets to AAL	Active Member Payroll	UAAL as Percentage of Active Member Payroll
2012	\$780	\$3,699	\$2,919	21.09%	\$1,897	153.8%

\* See page 30 for multi-year trend information.

Actuarial valuations of an ongoing plan involve estimates of the value of reported amounts and assumptions about the probability of occurrence of events far into the future. Examples include assumptions about future employment, mortality, and cost trends. Actuarially determined amounts are subject to continual review as actual results are compared with past expectations and new estimates are made about the future. The Schedule of Funding Progress, presented as required supplementary information following the notes to the financial statements, present multi-year trend information about whether the actuarial values of plan assets are increasing or decreasing over time relative to the actuarial accrued liabilities for benefits.

The accompany schedules of employer contributions present trend information about the amounts contributed to the plan by employers in comparison to the Actuarial Required Contribution rate (ARC), an amount that is actuarially determined in accordance with the parameters of GASB Statement 43. The ARC represents a level of funding that, if paid on an ongoing basis, is projected to cover normal cost for each year and amortized any unfunded actuarial liability (or funding excess) over a period not to exceed 30 years.

Projections of benefits for financial reporting purposes are based on the substantive plan (the plan as understood by the employer and plan members) and include the types of benefits provided at the time of each valuation and the historical pattern of sharing of benefit costs between the employer and plan members to that point. The actuarial methods and assumptions used include techniques that are designed to reduce the effects of short-term volatility in actuarial accrued liabilities and the actuarial value of assets, consistent with the long-term perspective of the calculations. Additional information as of the latest actuarial valuation follows:

### Defined Benefit Plan - Pension Trust

Valuation date: Jan. 1, 2012  
 Actuarial cost method: Entry Age  
 Amortization method: Level percent of payroll, open  
 Remaining amortization period: Infinite\*  
 Funding Ratio: 63.1%  
 Asset valuation method: 5-year adjusted fair value with a corridor of 20% of the fair value

#### Actuarial assumptions:

Investment rate of return	8.25%
Projected salary increases	4.25%–11.0%
Payroll increases	3.75%
Inflation assumption	3.25%
Cost-of-living adjustments	3.0% simple

\* The Annual Required Contributions for 2003-2006 were based on 40-year amortization. Years 2007 and later use a 30-year amortization basis. The amounts contributed for 2003-2011 equate to an infinite amortization period.

### Retiree Health Care Benefits – Health Care Trust

Valuation date: Jan. 1, 2012  
 Actuarial cost method: Entry Age  
 Amortization method: Level percent of payroll, open  
 Remaining amortization period: 30 years  
 Funding Ratio: 21.09%  
 Asset valuation method: Fair Value

#### Actuarial assumptions:

Investment return (discount rate)	6.00%
Projected salary increases	4.25%–11.0%
Payroll increases	3.75%
Inflation assumption	3.25%

Health Care Cost Trends	Initial Rate 3 years			Ultimate Rate	Ultimate Year
	2012 to 2013	2013 to 2014	2014 to 2015		
Non-Medicare	6.00%	9.19%	6.50%	5.00%	2017
Non-AARP	6.00%	9.19%	6.50%	5.00%	2017
AARP	6.50%	6.25%	6.00%	5.00%	2018
Rx Drug	0.00%	7.00%	6.50%	5.00%	2017
Medicare Part B	5.70%	5.60%	5.50%	5.00%	2019

### 3 - CONTRIBUTIONS AND RESERVES

#### Contributions

Chapter 742 of the ORC requires contributions by active members and their employers. Contribution rates are subject to annual review by the ORSC. Additionally, an actuary is used to determine the actuarial implications of the requirement. The adequacy of contribution rates is determined annually using the entry age normal actuarial cost method. Rates are at the statutory maximums and the maximum rates have been taken into consideration in the projection of pension benefits for financial accounting measurement purposes.

Rates established by the ORC at Dec. 31, 2012 and 2011:

Percent of active member payroll	Police	Fire
Employer	19.50	24.00
Member	10.00	10.00
<b>TOTAL STATUTORY RATE</b>	<b>29.50</b>	<b>34.00</b>

The ORC establishes the length of the amortization period for unfunded pension liability as the primary measure of OP&F's financial status, with a period of 30 years or less being considered satisfactory. This 30-year target was to be attained by Dec. 31, 2006 and maintained thereafter. As of Jan. 1, 2012, the amortization period under the current statutory rates is infinite. In September 2012, the plan OP&F submitted to ORSC was signed into law.

Combined employer and member contributions as a percentage of the total active member payroll required and made for 2012 and 2011 represented 29.5 percent for police and 34 percent for firefighters. The chart below summarizes the member and employer Contributions for 2012 and 2011:

#### Summary of Member and Employer Contributions

Year Ending Dec. 31	Police Member Contributions	Police Employer Contributions	Percent Contributed	Fire Member Contributions	Fire Employer Contributions	Percent Contributed
2012	\$96,061,964	\$200,235,028	100%	\$81,471,791	\$216,803,657	100%
2011	95,201,088	195,688,308	100%	81,611,873	211,784,520	100%

In accordance with the ORC, the State of Ohio is required to contribute additional amounts to finance the cost of certain state-legislated benefit improvements. The total amounts contributed by the State of Ohio were \$580,657 and \$639,099 for the years ended Dec. 31, 2012 and 2011, respectively.

#### Local Funds Receivable

Local governments are required by state statute to pay the unfunded portion of the actuarially-determined liability of the local police and firefighter's relief and pension funds that were merged to form OP&F in 1967. The ORC designates this obligation of the local governments the "Employers' Accrued Liability." Interest on the outstanding balance is being accrued at the rate of 4.25 percent, compounded semi-annually. Local governments began repayment in 1969 and payments are required to be made until 2035. Between 1969 and 1973, payments of principal and interest were received at incremental semi-annual rates ranging from 2 percent to 4 percent of the original receivable balance. Between 1973 and 2035, semi-annual payments of principal and interest are required to be made by the local governments at a rate of 5 percent of the original receivable balance. The underpaid balance due at Dec. 31, 2012 and 2011, respectively, includes \$91,514 and \$93,677 due from local governments, which had previously underpaid their semi-annual payment and from local governments that joined OP&F subsequent to 1967 according to a 20 year payment plan.

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

Year ending December 2013	\$1,876,628
Year ending December 2014	1,876,540
Year ending December 2015	1,874,405
Year ending December 2016	1,874,405
Year ending December 2017	1,874,405
Thereafter	32,245,002
<b>Total projected payments</b>	<b>41,621,385</b>
Less future interest portion	(14,764,487)
<b>BALANCE AT DEC. 31, 2012</b>	<b>\$26,856,898</b>

**Reserves**

As required by the ORC, the following accounts have been established for the reserves held for current and future benefits and are separated between police and fire:

*The Police Officers' and Firefighters' Contribution Fund* accumulates the contributions deducted from the salaries of members. Upon retirement, a member's accumulated contributions are transferred to the Police Officers' or Firefighters' Pension Reserve Fund.

*The Police Officers' and Firefighters' Employers' Contribution Fund* is the depository for employer contributions. Based on actuarial valuations, amounts are transferred from this account to the Police Officers' and Firefighters' Pension Reserve Fund.

*The Police Officers' and Firefighters' Pension Reserve Fund* is the account from which all retirement, disability, DROP, health care and survivor benefits are paid. Included in this Fund is the Health Care Stabilization Fund from which payments for the health care benefits are made. Amounts are transferred into the Pension Reserve Fund from the Contribution Funds and the Guarantee Fund.

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

Ohio law provides that any deficit occurring in any other fund that will not be covered by payments to that fund, as otherwise provided by sections 742.01 to 742.61 of the ORC, must be paid by transfers of amounts from

the Guarantee Fund to such fund or funds. Should the amount in the Guarantee Fund be insufficient at any time to meet that amounts payable there from, the amount of such deficiency, with regular interest, must be paid by an additional employer rate of current contributions as determined by the actuary and must be approved by the Board of Trustees of OP&F, and the amount of such additional employer contribution will be credited to the Guarantee Fund.

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

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

	2012	2011
Members' Contribution	\$2,106,026,506	\$2,065,743,825
Employers' Contribution	890,561,942	901,575,948
Pension Reserve	8,541,851,000	7,501,180,000
<b>TOTAL</b>	<b>\$11,538,439,448</b>	<b>\$10,468,499,773</b>

## 4 – CASH AND INVESTMENTS

### Cash and Investments

A summary of cash and short-term securities and investments held at Dec. 31, 2012 and 2011 is as follows:

Category	2012 Fair Value	2011 Fair Value
Cash and cash equivalent*	\$1,254,896,443	\$724,903,190
U.S. Government Obligations	930,099,422	804,979,188
U.S. Government Agencies	54,342,051	92,559,754
U.S. Government Treasury STRIPS	92,416,456	87,187,021
Municipal Bond Obligations	5,054,630	10,598,283
Corporate Bonds and Obligations	1,513,633,509	1,304,654,856
Mortgage and Asset-Backed Obligations	633,670,417	632,559,619
Domestic Stocks	1,631,180,325	1,512,154,416
Domestic Pooled Stocks	1,689,629,531	2,642,324,487
International Securities	4,069,328,737	3,425,226,056
Real Estate	1,307,802,474	1,104,131,167
Commercial Mortgage Funds	37,935,162	38,189,077
Private Equity	542,188,270	460,957,188
Timber	76,120,455	–
Master Limited Partnerships	170,873,233	–
<b>GRAND TOTAL</b>	<b>\$14,009,171,115</b>	<b>\$12,840,424,302</b>

The investment type classification is based on the characteristics of the individual securities.

\*Cash and cash equivalents are included in cash and short-term investments on the Statement of Net Position.

### Custodial Credit Risk

The custodial credit risk for **deposits** is the risk that, in the event of the failure of a depository financial institution, an organization will not be able to recover deposits or will not be able to recover collateral securities that are in the possession of an outside party. The custodial credit risk for **investments** is the risk that, in the failure of the counterparty to a transaction, an organization will not be able to recover the value of investment or collateral securities that are in the possession of an outside party.

In accordance with ORC 135.18, the Ohio Treasurer of State, the statutory custodian for OP&F, requires that the amount in any demand deposit account not covered by federal deposit insurance be collateralized with securities permitted under ORC 135.18 at 102 percent of the value of the cash. Collateral is held in the Ohio Treasurer of State's name by a third party trustee for the benefit of OP&F. All of OP&F's depository-eligible securities are held in the custodial bank or its agent's nominee, for the benefit of OP&F. Any physical securities are held in the vaults of the custodial bank, or its agent. The custodial bank provides book entry accounting for OP&F's real estate and private equity assets. The custody agreement between the custodial bank and the Ohio Treasurer of State has historically restricted the right of the custodial bank or

its agents from putting any right, charge, security interest, lien or claim of any kind on the securities they hold. Despite OP&F objections, the Ohio Treasurer of State allowed language in the custody agreement that grants a security interest in OP&F assets. The cash held in foreign local banks for immediate settlement of pending trade transactions are not collateralized.

### Deposits exposed to Custodial Credit Risk as of Dec. 31, 2012

Uninsured deposits collateralized with securities held by the pledging financial institution:	\$3,217,541
Uninsured and uncollateralized deposits:	\$12,764,390

### Credit Risk

Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligation to the holder of the investment. This risk is measured by the assignment of a rating by a nationally recognized statistical rating organization. OP&F's risk management policy over credit risk is based on the type of fixed income instruments. For credit risk purposes, OP&F classifies its fixed income securities into three main types: core, high yield and short-term fixed income. The credit risk policies related to these types are as follows:

## Core Fixed Income

OP&F's three core fixed income portfolios, all managed externally, contain government, mortgage and asset-backed securities, U.S. Agency and corporate bonds. These external managers invest in securities based on guidelines provided by the OP&F Board of Trustees. It is the policy of OP&F that a security in the core fixed income portfolio shall be rated BBB- or better by two standard rating services at the time of purchase. OP&F allows some of its investment managers to purchase securities that are "not rated" as long as they deem these securities to be at least equivalent to the minimum ratings at the time of purchase.

- Government instruments include those issued by the U.S. Treasury as well as fixed income instruments, other than mortgage-backed securities, of an agency or instrumentality of the U.S. government.
- Mortgage-backed instruments include collateralized mortgage obligations and Real Estate Mortgage Investment Conduits (REMIC's), whose payment of principal and interest is insured by the full faith and credit of the U.S. government, or an agency or instrumentality thereof. Also included in this category are secured assets issued by Government National Mortgage Association (GNMA) project loans, pools and participation certificates, Federal National Mortgage Association (FNMA) and Federal Home Loan Mortgage Corporation (FHLMC).
- U.S. Agency debt instruments include unsecured or uncollateralized securities issued by U.S. government agencies and government sponsored enterprises.
- Corporate bonds consist of debt instruments issued by domestic corporations or U.S. dollar-denominated debt issued by foreign entities and managed by a U.S. based investment manager.

## High Yield Fixed Income

OP&F has three high yield fixed-income portfolios, all managed externally. The high yield bond asset class consists of the portion of the U.S. corporate bond market that is rated below BBB- by Standard & Poor's 500 (S&P) or below Baa3 by Moody's. Accordingly, credit risks associated with these bonds are greater than with core fixed income bonds. OP&F's policy is to invest in high yield bonds issued by U.S. Corporations with a minimum credit rating of CCC or equivalent. OP&F allows some of its investment

managers to purchase securities that are "not rated" as long as they deem these securities to be at least equivalent to the minimum ratings at the time of purchase. It is possible after purchase that the security is downgraded. In the event of an investment guideline violation and in the event of a security downgrade, such that the ratings (Moody's, S&P, or Fitch Investor's Service) are below the allowable minimum security quality, the Manager will inform OP&F in writing within five business days of such violation. Such notice will include the action the Manager intends to take with regard to the violation and over what time period that action will be taken. Both the method and timing of the violation resolution must be agreeable to OP&F.

The following tables show ratings by asset class in OP&F's fixed income portfolio as of Dec. 31, 2012 and 2011:

### Ratings By Asset Class – 2012

Moody's Ratings	A3 and Above	Baa3 to A3	B3 to Baa3	C to B3	Full Faith and Credit	Not Rated	
S&P Ratings	A- and Above	BBB- to A-	B- to BBB-	C to B-	Full Faith and Credit	Not Rated	GRAND TOTAL
Corporate Bond Obligations	\$ 230,432,364	\$203,167,964	\$881,122,488	\$177,822,735	\$ -	\$21,087,958	\$1,513,633,509
Mortgage and Asset-Backed Securities	509,316,226	14,301,912	23,385,391	48,232,864	37,300,613	1,133,411	633,670,417
Municipal Bond Obligations	5,054,630	-	-	-	-	-	5,054,630
Non-U.S. Government Bonds	1,176,738,282	-	-	-	-	-	1,176,738,282
U.S. Government Agencies	54,342,051	-	-	-	-	-	54,342,051
U.S. Government Treasury STRIPS	-	-	-	-	92,416,456	-	92,416,456
U.S. Government Obligations	685,829,405	-	-	-	244,270,017	-	930,099,422
<b>GRAND TOTAL</b>	<b>\$2,661,712,958</b>	<b>\$217,469,876</b>	<b>\$904,507,879</b>	<b>\$226,055,599</b>	<b>\$373,987,086</b>	<b>\$22,221,369</b>	<b>\$4,405,954,767</b>

### Ratings By Asset Class – 2011

Moody's Ratings	A3 and Above	Baa3 to A3	B3 to Baa3	C to B3	Full Faith and Credit	Not Rated	
S&P Ratings	A- and Above	BBB- to A-	B- to BBB-	C to B-	Full Faith and Credit	Not Rated	GRAND TOTAL
Corporate Bond Obligations	\$195,962,403	\$180,745,966	\$773,763,829	\$136,914,128	\$ -	\$17,268,530	\$1,304,654,856
Mortgage and Asset-Backed Securities	481,472,778	12,409,482	32,612,508	60,811,036	42,895,433	2,358,382	632,559,619
Municipal Bond Obligations	10,598,283	-	-	-	-	-	10,598,283
Non-U.S. Government Bonds	1,006,705,454	-	-	-	-	-	1,006,705,454
U.S. Government Agencies	92,559,754	-	-	-	-	-	92,559,754
U.S. Government Treasury STRIPS	-	-	-	-	87,187,021	-	87,187,021
U.S. Government Obligations	656,417,380	-	-	-	148,561,808	-	804,979,188
<b>GRAND TOTAL</b>	<b>\$2,443,716,052</b>	<b>\$193,155,448</b>	<b>\$806,376,337</b>	<b>\$197,725,164</b>	<b>\$278,644,262</b>	<b>\$19,626,912</b>	<b>\$3,939,244,175</b>

### Short-Term Investments

The short-term investment portfolio consists mainly of commercial paper. OP&F's policy is that, at the time of purchase, the short-term instrument must be rated within the two highest classifications established by two standard rating services. However, it is possible that after the purchase the ratings could change. The following table lists the commercial paper ratings as of Dec. 31, 2012 and 2011.

S&P/Moody's Rating	Fair Value 2012	Percent 2012	Fair Value 2011	Percent 2011
A-1/P-1	\$476,602,731	50.58%	\$22,999,436	4.47%
A-1/P-2	-	-	-	-
A-2/P-1	59,190,739	6.28%	51,789,536	10.07%
A-2/P-2	406,543,566	43.14%	439,565,511	85.46%
<b>GRAND TOTAL</b>	<b>\$942,337,036</b>	<b>100.00%</b>	<b>\$514,354,483</b>	<b>100.00%</b>

### Interest Rate Risk

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of fixed income investments. OP&F primarily uses the measurement of effective duration to mitigate the interest rate risk of the core fixed income portfolio. Each investment manager is required to monitor and report the effective duration on a monthly basis. The effective duration of the portfolio is required to be +/- a certain percentage of the benchmark's duration. The benchmark for the U.S. fixed income portfolio (the Barclays Capital U.S. Aggregate Bond Index) had 5.08 years and 5.18 years effective duration as of Dec. 31, 2012 and 2011, respectively. The benchmark for the Non-U.S. fixed income portfolio (which is a custom weighted-average mix of the Barclays country indexes within the Global Inflation-Linked Bond Index) had 14.72 years and 13.91 years effective duration as of Dec. 31, 2012 and 2011, respectively.

Duration is a measure of a fixed income security's cash flows using present values, weighted for cash flows as a percentage of the investment's full price. The duration measurement used is "effective duration" and is provided for each core fixed income portfolio and for the composite of all portfolios. All core fixed income managers are given a range of permissible durations around the duration of their benchmark index. Since portfolio level duration is the best measure of interest rate risk, OP&F does not require its managers to measure or report on the duration of each security sector. OP&F does not measure the duration

of their high yield portfolios because interest rate risk is a very small part of the total risk of high yield securities. The major risks for high yield bonds are credit risk and interest rate spread risk. The table below lists the effective duration for OP&F's fixed-income portfolio as of Dec. 31, 2012 and 2011.

### Collateralized Mortgage Obligations

In general, mortgage-backed securities entitle their holders to receive both principal and interest payments from the payments made by the borrowers of the underlying mortgages over the lives of those loans. The life of the mortgage that underlies a mortgage-backed security can be shortened by several economic events, including borrower refinancing. When interest rates fall and remain very low, a growing number of borrowers will refinance their existing loans causing mortgage-backed security holders to be repaid more quickly than anticipated. This early repayment is a form of market risk assumed by OP&F and other owners of mortgage-backed securities.

To the contrary, when interest rates begin to rise, the refinancing of existing mortgages begins to slow. If the rates remain high for long periods of time, fewer borrowers refinance their mortgages. This causes mortgage-backed security holders to be repaid over longer periods of time. This prolonged repayment is known as extension risk and is another form of market risk assumed by OP&F and other owners of mortgage-backed securities.

Investment Type	Fair Value 2012	Effective Duration 2012	Fair Value 2011	Effective Duration 2011
U.S. Government Obligations	\$930,099,422	8.63	\$804,979,188	8.58
U.S. Government STRIPS	92,416,456	6.88	87,187,021	7.52
U.S. Government Agencies	54,342,051	3.84	92,559,754	2.27
Mortgage and Asset-Backed Securities	633,670,417	2.89	632,559,619	2.49
Municipal Bond Obligations	5,054,630	4.64	10,598,283	4.24
Corporate Bond Obligations*	376,514,335	4.35	325,474,744	4.79
<b>U.S. FIXED INCOME EFFECTIVE DURATION</b>	<b>\$2,092,097,311</b>	<b>3.78</b>	<b>\$1,953,358,609</b>	<b>3.70</b>
Non-U.S. Government Bond	1,176,738,282	12.22	1,006,705,454	11.76
<b>TOTAL FIXED INCOME EFFECTIVE DURATION</b>	<b>\$3,268,835,593</b>	<b>8.18</b>	<b>\$2,960,064,063</b>	<b>7.70</b>

\* High yield is not included in duration.



These securities are based on cash flows from interest payments on underlying loans. Therefore, they are sensitive to prepayments by the debtor, which may result from a decline in interest rates.

### Variable Rate Securities

OP&F's core fixed income and high yield managers are permitted to hold variable-rate coupons whose rates may vary directly or inversely with changes in a related interest rate. As of Dec. 31, 2012 and 2011, OP&F did not hold any security with a variable-rate coupon that had a multiplier greater than one or any security with an inverse variable rate.

### Concentration of Credit Risk

Concentration of credit risk is the risk of loss attributed to the magnitude of an entity's investment in a single issuer. OP&F does not permit more than 10 percent of the core fixed income portfolio to be invested in the securities of any one issuer, and no more than 5 percent in any one issue on a dollar duration basis, with the exception of United States Government or Agency securities. For the high yield portfolio, no more than 10 percent of the entire portfolio at market shall be invested in securities of a single issue or issuer, unless otherwise approved by the Board of Trustees. At Dec. 31, 2012 and 2011, OP&F did not hold investments in any one issuer that represented 5 percent or more of OP&F's net assets.

### Securities Lending

OP&F participates in domestic and international securities lending programs, as authorized by the Board of Trustees. Securities are loaned to investment broker/dealers (borrower). Securities loaned are collateralized by the borrower at 102 percent of the domestic and 105 percent of the international loaned securities' fair value. OP&F has minimized its exposure to credit risk due to borrower default by having the lending agent bank determine daily that required collateral meets the specified collateral requirements. There are no restrictions on the amount of the securities that can be loaned. Contracts with lending agents require them to indemnify OP&F if the borrowers fail to return the securities or fail to pay OP&F for income distributions by the securities' issuer while the securities are on loan. All securities loans can be terminated on demand and the maturities of the investments made with an acceptable form of the collateral generally matches the maturities of the securities loans.

At year end, OP&F has no credit risk exposure to borrowers because the amounts that OP&F owes the borrowers exceed the amounts the borrowers owe OP&F.

OP&F has not experienced any losses due to credit or market risk on securities lending activity since implementation of the program. OP&F does have the ability to pledge or sell collateral securities in case of a borrower default.

The following represents the balances relating to the securities lending transactions at Dec. 31, 2012 and 2011:

#### Securities Lent as of Dec. 31, 2012

Securities Lent	Underlying Security	Collateral Received	Collateral Fair Value	Type of Collateral
U.S. Government and Treasuries	\$207,371,360	\$211,896,657	\$211,896,657	Cash
Domestic Corporate Fixed Income	401,965,687	411,407,673	411,407,673	Cash
Domestic Equities	375,656,193	394,626,923	394,626,923	Cash
International Equities	-	-	-	Cash
International Equities	-	-	-	Securities
<b>TOTAL SECURITIES LENT</b>	<b>\$984,993,240</b>	<b>\$1,017,931,253</b>	<b>\$1,017,931,253</b>	

#### Securities Lent as of Dec. 31, 2011

Securities Lent	Underlying Security	Collateral Received	Collateral Fair Value	Type of Collateral
U.S. Government and Treasuries	\$202,926,539	\$206,483,885	\$206,483,885	Cash
Domestic Corporate Fixed Income	428,740,456	438,628,073	438,628,073	Cash
Domestic Equities	447,812,849	469,876,125	469,876,125	Cash
International Equities	321,464,602	338,923,898	338,923,898	Cash
International Equities	15,194,385	15,575,718	15,575,718	Securities
<b>TOTAL SECURITIES LENT</b>	<b>\$1,416,138,831</b>	<b>\$1,469,487,699</b>	<b>\$1,469,487,699</b>	

## Foreign Currency Risk

Foreign currency risk is the risk that changes in exchange rates will adversely affect the fair value of an investment or a deposit. OP&F's target allocation to international equity holdings was an interim allocation of 21.7 percent as of Dec. 31, 2012 with an ultimate long-term target of 18.5 percent of the total investment assets. While OP&F has no specific policy regarding the international custodial credit risk, OP&F limits its international investment managers to hold 5 percent or less of their total portfolio in cash. Apart from cash needed for immediate settlement of pending trade transactions, (local cash awaiting repatriation earns interest), any excess cash received in OP&F's trust accounts is invested in a U.S. Dollar denominated Short Term Investment Fund (STIF). For the years ending Dec. 31, 2012 and 2011, OP&F's exposure to foreign currency risk is as follows:

### 2012 Exposure To Foreign Currency Risk

Currency	Fair Value (Cash Deposits)	Fair Value (Currency Contracts)	Fair Value (Equities)	Fair Value (Bonds)	Fair Value (Private Equities)	Fair Value (Repurchase Agreements)	Total Fair Value (Cash Deposits and Securities)
Australian Dollar	\$ 483,760	\$( 109,349)	\$ 39,950,213	\$ -	\$ -	\$ -	\$ 40,324,624
Brazilian Real	39,021	(941)	25,049,526	-	-	-	25,087,606
British Pound	1,028,185	(1,183,128)	442,787,175	296,121,917	-	(229,660,377)	509,093,772
Canadian Dollar	191,024	(367,358)	95,347,692	195,662,543	-	(170,902,286)	119,931,615
Chilean Peso	4,603	-	642,423	-	-	-	647,026
Danish Kroner	-	597	34,164,260	-	-	-	34,164,857
Euro	1,440,880	(8,382,511)	670,410,448	586,831,584	43,286,866	(175,714,174)	1,117,873,093
Hong Kong Dollar	155,493	(18)	139,435,905	-	-	-	139,591,380
Indonesian Rupiah	1	-	1,796,674	-	-	-	1,796,675
Japanese Yen	1,321,708	(1,051,854)	291,612,703	-	-	-	291,882,557
Malaysian Ringgit	54,890	-	3,726,280	-	-	-	3,781,170
Mexican Peso	(69,000)	-	15,797,877	-	-	-	15,728,877
New Turkish Lira	-	-	6,637,693	-	-	-	6,637,693
New Zealand Dollar	40,654	(131,937)	670,322	-	-	-	579,039
Norwegian Krone	345	231,626	2,803,224	-	-	-	3,035,195
Philippian Peso	-	-	470,183	-	-	-	470,183
Polish Zloty	594,383	-	2,501,096	-	-	-	3,095,479
Singapore Dollar	26,590	35	26,733,164	-	-	-	26,759,789
South African Rand	92,331	(3,434)	11,528,342	-	-	-	11,617,239
South Korean Won	155	-	39,242,086	-	-	-	39,242,241
Swedish Krona	61	(1,525,863)	35,248,289	98,122,238	-	-	131,844,725
Swiss Franc	99,431	37	171,815,422	-	-	-	171,914,890
Taiwanese New Dollar	6,188,810	-	10,582,377	-	-	-	16,771,187
Thailand Baht	-	-	6,574,251	-	-	-	6,574,251
<b>GRAND TOTAL</b>	<b>\$11,693,325</b>	<b>\$(12,524,098)</b>	<b>\$2,075,527,625</b>	<b>\$1,176,738,282</b>	<b>\$43,286,866</b>	<b>\$(576,276,837)</b>	<b>\$2,718,445,163</b>

## 2011 Exposure To Foreign Currency Risk

Currency	Fair Value (Cash Deposits)	Fair Value (Currency Contracts)	Fair Value (Equities)	Fair Value (Bonds)	Fair Value (Private Equities)	Fair Value (Repurchase Agreements)	Total Fair Value (Cash Deposits and Securities)
Australian Dollar	\$ 1,069,535	\$ 642,080	\$ 96,473,758	\$ –	\$ –	\$ –	\$ 98,185,373
Brazilian Real	336	–	26,993,764	–	–	–	26,994,100
British Pound	394,102	321,735	407,248,412	258,079,584	–	(248,207,130)	417,836,703
Canadian Dollar	79,270	(1,741,005)	118,730,341	171,707,488	–	–	288,776,094
Chilean Peso	–	–	615,229	–	–	–	615,229
Czech Koruna	273,429	–	–	–	–	–	273,429
Danish Kroner	10,922	–	21,215,447	–	–	–	21,226,369
Euro	519,023	9,848,213	537,275,625	490,595,078	39,750,427	(274,343,487)	803,644,879
Hong Kong Dollar	195,766	(24)	139,545,811	–	–	–	139,741,553
Hungarian Forint	196	–	275,245	–	–	–	275,441
Indian Rupee	811	–	6,667,854	–	–	–	6,668,665
Indonesian Rupiah	115,496	–	6,584,349	–	–	–	6,699,845
Israeli Shekel	2	–	2,556,675	–	–	–	2,556,677
Japanese Yen	526,533	244,072	349,899,281	–	–	–	350,669,886
Malaysian Ringgit	73,885	–	8,314,489	–	–	–	8,388,374
Mexican Peso	7,878	–	15,777,242	–	–	–	15,785,120
New Turkish Lira	723,062	–	17,928,812	–	–	–	18,651,874
New Zealand Dollar	2,496	(37,791)	1,183,909	–	–	–	1,148,614
Norwegian Krone	414	70,079	3,990,857	–	–	–	4,061,350
Pakistan Rupee	51,559	–	76,423	–	–	–	127,982
Philippian Peso	16,635	–	885,656	–	–	–	902,291
Polish Zloty	41,280	–	13,656,033	–	–	–	13,697,313
Singapore Dollar	153,484	–	20,010,597	–	–	–	20,164,081
South African Rand	35,931	–	11,229,962	–	–	–	11,265,893
South Korean Won	595	–	67,896,104	–	–	–	67,896,699
Swedish Krona	113,651	(1,062,322)	37,235,183	86,323,304	–	–	122,609,816
Swiss Franc	97,429	(108,024)	148,058,334	–	–	–	148,047,739
Taiwanese New Dollar	4,145,071	–	41,901,940	–	–	–	46,047,011
Thailand Baht	1	–	28,363,507	–	–	–	28,363,508
<b>GRAND TOTAL</b>	<b>\$8,648,792</b>	<b>\$8,177,013</b>	<b>\$2,130,590,839</b>	<b>\$1,006,705,454</b>	<b>\$39,750,427</b>	<b>\$(522,550,617)</b>	<b>\$2,671,321,908</b>

## Derivatives

Derivatives are generally defined as investment instruments whose value depends on, or is derived from, the value of an underlying asset, reference rate, or index.

OP&F has classified the following as derivatives:

- **Mortgage and Asset-Backed Securities:** OP&F invested in Planned Amortization Class and Sequential Pay Real Estate Mortgage Investment Conduit bonds issued by GNMA, FHLMC, and FNMA. Planned Amortization Class bonds are retired according to a payment schedule so as to have a stable average life and yield even if expected prepayment rates change within a specified broad range of prepayment possibilities. Sequential pay bonds begin to pay principal when classes with an earlier priority have paid to a zero balance. Such bonds enjoy uninterrupted payment of principal until paid to a zero balance. In terms of credit risk, the U.S. government explicitly backs GNMA mortgage securities programs and is viewed by the market as implicitly backing FHLMC and FNMA mortgage securities programs.
- **Futures Contracts:** Futures contracts are contracts to buy or sell units of an index or financial instrument on a specified future date at a price agreed upon when the contract is originated. OP&F invested in the Russell 1000 Stock Index Fund managed by State Street Global Advisors (SSGA). This fund, to a minor extent, utilized stock index futures contracts to equitize cash balances. In addition, OP&F through its portable alpha program, used five external investment managers who utilize futures to gain market exposure. OP&F had \$1.13 billion and \$389 million notional value exposure in future contracts as of Dec. 31, 2012 and 2011, respectively. These amounts represented 8.9 percent and 3.4 percent, respectively, of the total portfolio in both years. The change in the exposure was due to two main reasons.

- o Interim market exposure as OP&F transitioned equity exposure to Master Limited Partnerships investments, and

- o Additional notional exposure given a change in the structure of two underlying managers of OP&F's portable alpha program.

- **Forward-Currency Contracts:** Forward currency contracts are legal agreements between two parties to purchase and sell a foreign currency, for a price specified at the contract date, with delivery and settlement in the future. OP&F, through its external investment managers, enters into forward currency contracts to hedge underlying foreign currency exposure in its non-U.S. equity portfolios back to the U.S. dollar or to provide the quantity of foreign currency needed to settle trades. In addition, OP&F employs two external currency managers, in its portable alpha program, to manage assets in an active currency strategy that attempts to add alpha and does not function merely as a hedging vehicle. This strategy seeks to add value by entering into long and short positions in both developed and emerging markets' currencies. The risks associated with such contracts include changes in the value of foreign currency relative to the U.S. dollar and the risk of default by the counterparty. To manage counterparty risk, investment managers utilize various financially sound counterparties.

All the contracts are valued at the spot foreign exchange rate at Dec. 31, 2012 and 2011. The changes in the value of the open contracts are recognized as unrealized appreciation/depreciation. A realized gain or loss is recorded at the time of the delivery/closing of the contract. The realized gain or loss is the difference between the value of the original contract and the closing/delivery value of such contracts. Both realized and unrealized gains and losses are included in the Statement of Changes in Net Position as net appreciation/depreciation. The following tables represents the balances of the outstanding currency transactions as of Dec. 31, 2012 and 2011:

### Open Currency Contracts as of Dec. 31, 2012

Purpose	Fair Value (Outstanding Purchases)	Fair Value (Outstanding Sales)	Unrealized Appreciation/ (Depreciation)
Trade Settlement	\$13,466,307	\$13,475,229	\$(8,922)
Position Hedging	723,313,477	733,415,356	(10,101,879)
Currency Management	334,713,074	337,126,370	(2,413,296)
<b>GRAND TOTAL</b>	<b>\$1,071,492,858</b>	<b>\$1,084,016,955</b>	<b>\$(12,524,097)</b>

**Open Currency Contracts as of Dec. 31, 2011**

<b>Purpose</b>	<b>Fair Value (Outstanding Purchases)</b>	<b>Fair Value (Outstanding Sales)</b>	<b>Unrealized Appreciation/ (Depreciation)</b>
Trade Settlement	\$27,852,421	\$27,678,773	\$173,648
Position Hedging	744,482,726	739,539,009	4,943,717
Currency Management	309,352,206	306,292,558	3,059,648
<b>GRAND TOTAL</b>	<b>\$1,081,687,353</b>	<b>\$1,073,510,340</b>	<b>\$ 8,177,013</b>

On delivered/closed currency contracts OP&F had a realized loss of \$6,399,991 in 2012 as compared to a realized gain of \$6,144,802 in 2011.

- Options: An option is the right, but not the obligation, to buy or sell a specific amount of a given stock or commodity at a specified price during a specified period of time. OP&F invests in options as part of its portable alpha program. OP&F did not have any exposure in options at Dec. 31, 2012.

OP&F has not violated any legal, regulatory, or contractual provisions by its participation in these types of derivative instruments and there is no known undue credit, market, or legal risk. These instruments were purchased in order to enhance OP&F's overall rate of return.

**5 – DEFERRED COMPENSATION PLAN**

OP&F does not sponsor a deferred compensation program. OP&F 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 is available to all OP&F employees and 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 IRC Section 457 benefits from the claims of an employer's general creditors. Accordingly, OP&F does not include the deferred compensation assets or liabilities of the Ohio Deferred Compensation Plan in its financial statements.

**6 – DEFINED BENEFIT PENSION PLAN**

OP&F contributes to the Ohio Public Employees Retirement System (OPERS), a cost-sharing, multiple-employer plan for all staff. OPERS administers three separate pension plans, provides retirement, disability, and survivor

benefits to qualified plan members and beneficiaries. Benefit provisions and contribution requirements are established by the Ohio legislature and are codified in Chapter 145 of the ORC. OPERS issues a publicly available financial report that includes financial information and required supplementary information for the plan. That report may be obtained by writing to OPERS, 277 East Town Street, Columbus, Ohio 43215-4642 or by calling (614) 222-5601 or 800-222-7377.

For 2012, plan members contributed 10 percent of their annual covered salary, while employers are required to contribute 14 percent. OP&F's contributions to OPERS for the years ending Dec. 31, 2012, 2011, and 2010, were \$1,174,837, \$1,171,799, and \$1,197,016, respectively, equal to the required contributions for each year.

**7 – OTHER POST-EMPLOYMENT BENEFITS (OPEB)**

In addition to the pension benefits described in note 6, OPERS also provides post-retirement health care coverage to age and service retirees with qualifying Ohio service credit. OPERS administers a cost-sharing, multiple-employer defined benefit post-employment healthcare plan. OPERS provides medical benefits to retired public employees of public employers who are subject to coverage under Chapter 145 of the ORC. Chapter 145 of the ORC assigns the authority to establish and amend benefit provisions to the OPERS Board of Trustees. OPERS issues a publicly available financial report that includes financial statements and required supplementary information for OPERS. That report may be obtained by writing to OPERS, 277 East Town Street, Columbus, OH 43215-4642, or by calling (614) 222-5601 or 800-222-7377.

Chapter 145 of the ORC provides that contribution requirements of the participating employers and of plan members to the OPERS (defined benefit pension plan) are established and may be amended by the OPERS Board of Trustees. Participating employers and active pension plan members are required to contribute to the pension plan at rates expressed as percentages of the payroll of active pension plan members, currently 14 percent and 10 percent of payroll, respectively. Chapter 145 of the ORC states that

the employer contribution rate may not exceed 14 percent of payroll and that the employee contribution rate may not exceed 10 percent.

The OPERS retiree health plan was established and is administered as an IRC Section 401(h) account within the defined benefit pension plan, under the authority granted by the state of Ohio to the OPERS Board of Trustees. The Board of Trustees is authorized to allocate a portion of the total employer contributions made into the pension plan to the 401(h) account as the employer contribution for retiree healthcare benefits. For the year ended Dec. 31, 2012, the employer contribution allocated to the retiree healthcare plan was 4.0 percent of employer contributions. The amount of employer contributions allocated to the healthcare plan each year is subject to the Trustees' primary responsibility to ensure that pension benefits are adequately funded and also is limited by the provisions of Section 401(h).

The OPERS Board of Trustees is also authorized to establish requirements for contributions to the retiree healthcare plan by retirees or their surviving beneficiaries. Payment amounts vary depending on the number of covered dependents and the coverage selected.

The chart below lists OP&F's employer contributions and the amounts allocated to health care.

## 8 – COMMITMENTS AND CONTINGENCIES

OP&F is a defendant in a number of lawsuits pertaining to matters that are incidental to performing routine business functions. OP&F management is of the opinion that ultimate resolution of such claims will not result in a material, adverse effect on OP&F's financial position as of Dec. 31, 2012.

OP&F is committed to making additional capital contributions of \$555,388,094 and €35,267,500 (\$46,496,671 U.S.D.) toward our private equity program. The private equity program had \$542,188,270 and \$460,957,188 in fair value at Dec. 31, 2012, and 2011, respectively.

## 9 – STATE OF OHIO PUBLIC SAFETY

### Annual Required Pension and Health Care Contributions

Year Ended	Pension	Pension	Health Care	Health Care
	Annual Required Contributions		Annual Required Contributions	
		Percent Contributed		Percent Contributed
2012	\$1,174,837	100%	\$335,668	100%
2011	1,171,799	100%	334,800	100%
2010	1,197,016	100%	433,769	100%

## OFFICERS DEATH BENEFIT FUND

Pursuant to ORC Section 742.62, the Board of Trustees of the Ohio Police & Fire Pension Fund administers the State of Ohio Public Safety Officers Death Benefit Fund. This program was established by the State of Ohio to provide monthly benefit payments to eligible surviving family members of Ohio public safety officers who have been killed in the line of duty or die of a duty-related injury or illness. Funds are disbursed to OP&F on a quarterly basis each state fiscal year (July 1-June 30) and are paid monthly by OP&F to eligible recipients. The unused balance at June 30 is returned to the State. The Public Safety Officers Death Benefit Fund is considered to be an agency fund administered by OP&F and, accordingly, its assets of \$456,661 and \$248,492 and the related liability for unpaid benefits are included in the accompanying financial statements as of Dec. 31, 2012 and 2011, respectively.

## 10 – ADDITIONAL DISCLOSURES

On Sept. 26, 2012, Ohio signed into law new pension legislation that will pave the way for improved long-term funding for OP&F. OP&F fully supported the legislation and believes that the provisions will help secure the pension benefits for future retirees and active members. This is not only groundbreaking in Ohio, but significant nationally as many states continue to deal with the unfunded liabilities of their public retirement systems.

The changes are long-term and will decrease OP&F's unfunded accrued liabilities by an estimated \$3.2 billion on an actuarial basis. While the effective date of the pension legislation is Jan. 7, 2013, the provisions that affect OP&F members will begin in July 2013.

- Increase the active member contribution rate from 10 percent to 12.25 percent, in annual increments of 0.75 percent each year beginning on July 1, 2013;
- Raise normal service retirement age from 48 to 52 for new members hired after July 1, 2013 and provides a reduced benefit option for those who still desire to retire at age 48 with 25 years of service;
- Adjust COLAs to the lesser of the Consumer Price Index or 3 percent for those members who have less than 15 years of service credit as of July 1, 2013;
- Delay COLAs until age 55 for all benefit recipients effective July 1, 2013, excluding statutory survivors and members receiving permanent and total disability benefits;
- Redefine average annual salary as the highest five years of contributions for those members who have less than 15 years of service credit as of July 1, 2013;
- Change the minimum DROP participation period from three years to five years for members who become DROP participants after July 1, 2013;
- Eliminate COLAs during DROP for members who become DROP participants after July 1, 2013. Members already in DROP prior to that date will receive COLAs while in DROP if they are at least age 55 and have participated in the plan for 12 months;
- Reduce the percentage of the member contribution that gets credited to DROP accruals for members who become DROP participants after July 1, 2013;
- Provides a “salary benchmark” under which certain increases are excluded from salary for the purpose of determining average annual salary for members who have 15 or more years of service on or before July 1, 2013;
- Authorizes the Board of Trustees to adjust the age and service credit requirements and member contribution rate (higher or lower) beginning Nov. 1, 2017, and every five years afterwards, provided the actuary recommends the change;
- Make the payments of employer contributions due monthly rather than quarterly.

## Required Supplementary Information (Unaudited)

### Schedule of Funding Progress

For the valuation year ending Jan. 1, 2012

#### Pension Trust (dollars in millions)

Valuation Year Jan. 1	Valuation Assets	Actuarial Accrued Liabilities (AAL)	Unfunded Actuarial Accrued Liabilities (UAAL)	Ratio of Assets to AAL	Active Member Payroll	UAAL as Percentage of Active Member Payroll
2012	\$10,309	\$16,347	\$6,038	63.1%	\$1,897	318.2%
2011	10,681	15,384	4,703	69.4%	1,869	251.7%
2010	10,794	14,831	4,037	72.8%	1,895	213.0%
2009	9,309	14,307	4,998	65.1%	1,901	262.9%
2008	11,213	13,728	2,515	81.7%	1,831	137.3%
2007	10,158	12,988	2,830	78.2%	1,783	158.7%
2006	9,551	12,190	2,639	78.3%	1,756	150.3%
2005	9,337	11,545	2,208	80.9%	1,684	131.1%
2004	9,337	10,798	1,461	86.5%	1,644	88.9%
2003	8,683	10,508	1,825	82.6%	1,606	113.7%

The amounts reported in this schedule do not include assets or liabilities for post-employment health care benefits.

#### Retiree Health Care Trust (dollars in millions)

Valuation Year Jan. 1	Valuation Assets	Actuarial Accrued Liabilities (AAL)	Unfunded Actuarial Accrued Liabilities (UAAL)	Ratio of Assets to AAL	Active Member Payroll	UAAL as Percentage of Active Member Payroll
2012	\$780	\$3,699	\$2,919	21.09%	\$1,897	153.8%
2011	718	3,295	2,577	21.78%	1,869	137.9%
2010	573	3,232	2,659	17.74%	1,895	140.3%
2009	439	3,164	2,725	13.87%	1,901	143.3%
2008	527	3,623	3,096	14.54%	1,831	169.1%
2007	437	3,274	2,837	13.34%	1,783	159.1%
2006	343	3,335	2,992	10.29%	1,756	170.4%

### Schedule of Contributions From Employers and Other Contributing Entities

#### Pension Trust (dollars in thousands)

	Annual Required Contributions*	Percentage Contributed
Year ended Dec. 31, 2011	\$492,650	57.00%
Year ended Dec. 31, 2010	459,798	62.00%
Year ended Dec. 31, 2009	506,496	55.00%
Year ended Dec. 31, 2008	370,765	75.00%
Year ended Dec. 31, 2007	363,661	77.00%
Year ended Dec. 31, 2006	321,712	73.00%
Year ended Dec. 31, 2005	292,455	79.00%
Year ended Dec. 31, 2004	257,851	88.00%
Year ended Dec. 31, 2003	277,725	79.00%
Year ended Dec. 31, 2002	205,993	100.00%

\* The amounts reported in this schedule do not include contributions for post-employment health care coverage. The GASB required disclosure of the ARC using a maximum amortization period of 30 years. Years 2003-2006 were based on 40 years. Amounts shown as the ARC for each year may be different from the contributions required by state statute. The information here was determined as part of the actuarial valuations for the date indicated. Additional information as of the latest actuarial valuations is shown in the table that follows.



## Required Supplementary Information (unaudited)

### Retiree Health Care Trust (dollars in thousands)

	Annual Required Contributions**	Percentage Contributed
Year ended Dec. 31, 2011	\$241,539	57.15%
Year ended Dec. 31, 2010	248,912	54.32%
Year ended Dec. 31, 2009	256,297	52.08%
Year ended Dec. 31, 2008	285,844	48.84%
Year ended Dec. 31, 2007	250,163	51.62%
Year ended Dec. 31, 2006	264,137	52.60%

\*\* The ARC for 2012 as a percentage of payroll is 12.81 percent. The expected contribution is 6.75 percent of payroll, or about 57 percent of the ARC rate. The ARC amount (dollars) is equal to the ARC rate times the 2012 payroll. The ARC amount and the actual percentage contributed will be determined after 2012 has ended and will be reported in the Jan. 1, 2013 valuation report.

### NOTES TO REQUIRED SUPPLEMENTARY INFORMATION

#### Description of Schedule of Funding Progress

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

The Schedule of Funding Progress includes two ratios that provide information about whether the financial strength of OP&F is improving or deteriorating over time. An improvement is indicated when the funded ratio (assets expressed as a percentage of the actuarial accrued liability) is increasing and the ratio of the unfunded actuarial liability to payroll is decreasing.

The information presented in the required supplementary schedules was determined as part of the actuarial valuation at the date indicated.

Additional information as of the latest actuarial valuation follows:

#### Defined Benefit Plan – Pension Trust

Valuation date: Jan. 1, 2012  
 Actuarial cost method: Entry Age  
 Amortization method: Level percent of payroll, open  
 Remaining amortization period: Infinite\*  
 Funding Ratio: 63.1%  
 Asset valuation method: 5-year adjusted fair value with a corridor of 20% of the fair value

#### Actuarial assumptions:

Investment rate of return	8.25%
Projected salary increases	4.25–11.0%
Payroll increases	3.75%
Inflation assumption	3.25%
Cost-of-living adjustments	3.0% simple

\*The Annual Required Contributions for 2003–2006 were based on 40-year amortization. Years 2007 and later use a 30-year amortization basis. The amounts contributed for 2003–2011 equate to an infinite amortization period.

## Required Supplementary Information (unaudited)

### Retiree Health Care Benefits – Health Care Trust

Valuation date: Jan. 1, 2012

Actuarial cost method: Entry Age

Amortization method: Level percent of payroll, open

Remaining amortization period: 30 years

Funding Ratio: 21.09%

Asset valuation method: Fair Value

#### Actuarial assumptions:

Investment return (discount rate)	6.00%
Projected salary increases	4.25–11.0%
Payroll increases	3.75%
Inflation assumption	3.25%

Health Care Cost Trends	Initial Rate 3 years			Ultimate Rate	Ultimate Year
	2012 to 2013	2013 to 2014	2014 to 2015		
Non-Medicare	6.00%	9.19%	6.50%	5.00%	2017
Non-AARP	6.00%	9.19%	6.50%	5.00%	2017
AARP	6.50%	6.25%	6.00%	5.00%	2018
Rx Drug	0.00%	7.00%	6.50%	5.00%	2017
Medicare Part B	5.70%	5.60%	5.50%	5.00%	2019

## Additional Information

### Schedule of Administrative Expenses \*

For the year ended Dec. 31,		2012	2011
<b>Personnel Services</b>	Salaries and Wages	\$8,756,908	\$8,807,925
	OPERS Contributions	1,174,837	1,171,799
	Insurance	1,882,237	1,955,222
	Fringe Benefits/Employee Recognition	23,188	12,025
	Tuition Reimbursement	22,674	22,517
	<b>Total Personnel Services</b>	<b>11,859,844</b>	<b>11,969,488</b>
<b>Professional Services</b>	Actuarial	381,071	268,185
	Audit	97,496	94,712
	Custodial Banking Fees	610,383	434,161
	Investment Fees and Consulting	35,701,218	33,477,214
	Other Consulting (Disability, Software, Legal, and Health Care)	924,294	826,651
	Banking Expense	80,020	69,313
	<b>Total Professional Services</b>	<b>37,794,482</b>	<b>35,170,236</b>
<b>Communications Expense</b>	Printing and Postage	306,617	320,159
	Telephone	99,220	99,346
	Member/Employer Education	9,229	8,558
	Other Communications	84,000	84,000
	<b>Total Communications Expense</b>	<b>499,066</b>	<b>512,063</b>
<b>Other Operating Expense</b>	Conferences and Education	59,285	48,931
	Travel	94,056	89,193
	Computer Technology	777,787	700,014
	Other Operating	514,649	501,126
	Warrant Clearing	1,185	1,098
	ORSC Expense	40,764	37,238
	Depreciation Expense - Capital	1,798,968	1,878,024
	<b>Total Other Operating Expenses</b>	<b>3,286,694</b>	<b>3,255,624</b>
<b>Net Building Expense</b> (includes rent)		<b>1,164,827</b>	<b>1,263,548</b>
<b>Total Operating Expenses</b>		<b>54,604,913</b>	<b>52,170,959</b>
<b>Investment Expenses</b>		<b>(39,155,108)</b>	<b>(36,743,722)</b>
<b>NET ADMINISTRATIVE EXPENSES</b>		<b>\$15,449,805</b>	<b>\$15,427,237</b>

\* Includes investment related administrative expenses.

### Schedule of Investment Expenses\*\*

Category	2012	2011
Investment Manager Services	\$34,539,245	\$32,366,539
Custodial Banking Fees	610,383	434,161
Other Professional Services	1,161,973	1,110,675
Other Direct Investment Expenses	1,508,970	1,556,853
Allocation of Other Administrative Expenses	1,334,537	1,275,494
<b>INVESTMENT EXPENSES</b>	<b>\$39,155,108</b>	<b>\$36,743,722</b>

\*\* A portion of the non-Investment Department administrative expenses is allocated to Investment Expense based on the ratio of investment staff to Total Fund staff.

## Additional Information

### Combining Statement of Changes in Assets and Liabilities - Public Safety Officers Death Benefit Fund

#### Public Safety Officers Death Benefit Fund for the year ending Dec. 31, 2012

	Balance Dec. 31, 2011	Additions	Subtractions	Balance Dec. 31, 2012
Assets:				
Cash and Short-term Investments	\$248,492	\$20,000,000	\$19,791,831	\$456,661
<b>TOTAL ASSETS</b>	<b>\$248,492</b>	<b>\$20,000,000</b>	<b>\$19,791,831</b>	<b>\$456,661</b>
Liabilities:				
Due to State of Ohio	248,492	20,000,000	19,791,831	456,661
<b>TOTAL LIABILITIES</b>	<b>\$248,492</b>	<b>\$20,000,000</b>	<b>\$19,791,831</b>	<b>\$456,661</b>

#### Public Safety Officers Death Benefit Fund for the year ending Dec. 31, 2011

	Balance Dec. 31, 2010	Additions	Subtractions	Balance Dec. 31, 2011
Assets:				
Cash and Short-term Investments	\$238,235	\$20,000,000	\$19,989,743	\$248,492
<b>TOTAL ASSETS</b>	<b>\$238,235</b>	<b>\$20,000,000</b>	<b>\$19,989,743</b>	<b>\$248,492</b>
Liabilities:				
Due to State of Ohio	\$238,235	\$20,000,000	\$19,989,743	\$248,492
<b>TOTAL LIABILITIES</b>	<b>\$238,235</b>	<b>\$20,000,000</b>	<b>\$19,989,743</b>	<b>\$248,492</b>

2012 Comprehensive Annual Financial Report

# Investment Section

Ohio Police & Fire Pension Fund

Investment Report  
Investment Portfolio Summary  
Schedule of Investment Results  
Investment Consultants and Money Managers  
Schedule of Brokers' Fees Paid  
Investment Policy and Guidelines



140 East Town Street • Columbus, Ohio 43215  
[www.op-f.org](http://www.op-f.org) • 1-888-864-8363

## Investment Report Prepared through a combined effort of the Investment Department.

### INTRODUCTION

The investment authority of OP&F is specified in Section 742 of the ORC. Importantly, the ORC requires that the Board of Trustees and other fiduciaries discharge their duties solely in the interest of the members and beneficiaries, for the exclusive purpose of providing benefits to members and their beneficiaries and defraying reasonable expenses of administering OP&F. Within the guidelines of the ORC, OP&F has developed an internal Investment Policy that provides for appropriate diversification of assets, and an acceptable expected return on investments after consideration of investment risks. Investment performance returns are prepared by Wilshire Associates. Investment activities are presented on a trade date basis and measurements are calculated using time weighted rates of return consistent with investment industry standards.

### SIGNIFICANT DEVELOPMENTS IN 2012

Given the critically important and dominant role that asset allocation plays in determining a portfolio's risk and return levels over time, OP&F spent a considerable amount of time in 2012 working through a new asset liability study in order to formulate a more efficient long-term asset allocation policy. The need for this latest study arose largely from welcomed and long sought pension legislation that reshaped the liability structures of all five of Ohio's pension systems. In the early stages of the asset liability study, Wilshire Associates, OP&F's investment consultant, identified a number of asset allocation policies that increased return or decreased risk (or both) and improved the overall risk balance of the total portfolio versus OP&F's former long-term asset allocation policy. Importantly, continuing the risk parity theme adopted by the Board of Trustees in 2010, the study's results projected that OP&F could achieve a better risk balance, with equal or better expected returns and with lower levels of total portfolio leverage than previously targeted. At the conclusion of the study, OP&F adopted a long-term asset allocation policy that had a higher expected return, lower expected volatility and an improved risk balance relative to the former asset allocation policy. The new targeted asset mix dropped levered long duration bonds in favor of levered core fixed income. Commodities also fell by the wayside partly to make way for the addition of master limited partnerships to the asset mix. It should be noted that neither long duration bonds nor commodities were ever implemented. Targets for equities, both U.S. and international, were cut by over 3 percent each while targets for private markets and the recently added timber allocation both got slight bumps higher. This newly

adopted long-term asset allocation policy is projected to do a more efficient and effective job of improving the financial status of the plan, thus lowering costs and making benefits more secure. With that said, a number of significant and noteworthy investment accomplishments and issues were addressed last year including the following:

- Completed a new Asset Liability Study.
- Commenced a search for master limited partnerships managers.
- Began implementation toward a target allocation in master limited partnerships.
- Amended OP&F's Proxy Voting Policy.
- Amended OP&F's Investment Policy and Guidelines.
- Approved investment manager guidelines for Franklin Templeton, one of OP&F's new international small cap managers.
- Transitioned assets from the Acadian Asset Management All Country World ex-U.S. Index (ACWI ex-U.S. Index) mandate to the Dimensional Fund Advisors, Franklin Templeton and Pyramid international small-cap mandates.
- Approved investment manager guidelines for MacKay Shields – High Yield Active Core mandate and Penn Capital, two new high yield mandates.
- Completed the annual evaluation of OP&F's real estate strategic portfolio for possible rebalancing.
- Transitioned the beta management of certain mandates in our portable alpha program to Russell Implementation Services Inc. and transitioned an alpha mandate with Investcorp from a commingled fund to a customized managed account.
- Approved the 2012 Private Markets Investment Plan.
- Continued to work toward target allocation in private markets with commitments to:
  - Advent International GPE VII,
  - Collier International Partners VI,
  - Harvest Partners VI,
  - Northgate V – Small Market PE Series,
  - Northgate Venture Partners VI,
  - Riverside Capital Appreciation Fund VI, and
  - Warburg Pincus Private Equity XI.

- Continued to work toward target allocation in real estate with commitments to:
  - Blackstone VII, Fortress Japan Opportunity Fund II, Lion Industrial Trust, and TriGate Property Partners II.
- Began work toward target allocation in timber with commitments to:
  - Brookfield Timberlands Fund V, Brookfield Brazil Timber Fund II, Hancock Natural Resource Group, Inc. and engaged Forest Investment Associates LP, and as an investment manager for timber.
- Amended OP&F's Real Estate Strategic Plan.
- Approved the 2013 Real Estate Investment Plan.
- Began work toward implementation of newly acquired risk measurement tool.
- Continued progress toward long-term allocation targets by rebalancing between overweight/underweight asset classes and using overweight classes as a source of funds, which steadily reduced equity's contribution to total portfolio risk.

## ECONOMIC ENVIRONMENT

The U.S. economy continued its recovery from the “Great Recession” as 2012 was another year of slow, uneven growth. Early positive data releases again gave way to a second quarter swoon based at least in part on renewed concerns about developments in Europe and growing fears concerning the direction of U.S. fiscal policy, especially given the heated rhetoric of a presidential election year. The U.S. economy managed to grow 2.0 percent as measured by quarterly real gross domestic product (GDP) in the first quarter of 2012. A second quarter slowdown was confirmed as real GDP came in at 1.3 percent before bouncing back to register a stronger 3.1 percent rate of growth in the third quarter. Mounting concern over the approaching “fiscal cliff”, the biggest decline in military spending in several decades and a reduction in the rate of inventory building led to real GDP slipping to a 0.4 percent rate in the fourth quarter. For all of 2012, real GDP rose 2.2 percent, versus an increase of 1.8 percent the prior year. Underlying this was a continued improvement in the employment picture as the unbroken string of job gains in 2011 persisted throughout 2012 and at a higher rate as an

average of nearly 183,000 people found jobs each month over the course of the year. Meanwhile, the unemployment rate, which ended 2011 at 8.5 percent, fell to 8.2 percent in March 2012 where it was essentially stable until dropping to 7.8 percent in September. Unemployment bounced to 7.9 percent in October before settling back in November and December to end the year at 7.8 percent. A continued improving trend in job growth has helped bring down the latest reading in March 2013 to 7.6 percent. Consumer confidence, while choppy, continued its slowly improving trend, but remained well below its much healthier pre-2008 range. As for inflation, the Consumer Price Index (CPI), on a year over year basis, began at its high point for the year of 2.9 percent but steadily fell each month to a low point of 1.4 percent in July before rising to 2.2 percent in October. From there, the CPI dropped a bit to end the calendar year at 1.7 percent rate for all of 2012. That rate has fallen to 1.5 percent in March 2013. As usual energy prices played a significant role in the level of inflation with oil prices trending lower over the course of last year and remaining well behaved early in 2013 as well. Importantly, in a very encouraging sign for the U.S. economy, the housing industry appeared to be gaining some strength whether measured by starts, permits, sales or even prices. Other positive news emerged during the year, such as healthy corporate earnings and strengthening balance sheets, and growth in auto sales and manufacturing.

The Federal Reserve maintained its federal funds rate target at the historically low range of 0 percent to 0.25 percent for all of 2012 and so far in 2013. Early in 2012, the Federal Reserve stated that economic conditions were likely to warrant an exceptionally low federal funds rate through late 2014. By September, they modified that statement by extending the expected timeframe through mid-2015. The Federal Reserve also decided to continue its program of increasing the average maturity of its Treasury holdings through purchases of long-term Treasury securities and sales of short-term Treasuries (aka Operation Twist). Significant actions that occurred late in the year included the Federal Reserve's September initiation of a third round of quantitative easing (QE3) that called for monthly purchases of \$40 billion agency mortgage-backed securities and a December Federal Open Market Committee (FOMC) announcement that added another \$45 billion of long-term U.S. Treasury bond purchases to that monthly total. Finally, the FOMC changed its forward interest rate guidance by stating that it would hold its benchmark interest rate near zero as long as unemployment stayed above 6.5 percent and the outlook for inflation was below 2.5 percent.

Problems in the euro zone took center stage again last year as early on the region's leaders agreed to boost the size of their rescue facilities and approved an aid package for Greece helping to reduce financial strains. However, concern flared again in the spring as uncertainty arose about the potential for a messy Greek exit from euro area. At the same time, Spain's and, to a lesser extent, Italy's sovereign debt came under pressure causing their yield levels to spike toward new highs. Economic weakness and their absolute debt levels raised concern about the sustainability of that debt. In July, the European Central Bank (ECB) finally rode to the rescue as ECB President Draghi made a powerful statement that the ECB would take any necessary action to preserve the euro, which marked a significant positive for the region and for global market perception. Meanwhile, China's economy registered its slowest growth in thirteen years in 2012. The People's Bank of China cut interest rates twice in mid-2012 after cutting banks' reserve ratios three times since late 2011, but has been concerned about exacerbating price pressures or creating a bubble in property prices. Another significant event involves Japan's election of Shinzo Abe as prime minister and the beginning of what has become known as "Abenomics," or his espoused policies involving massive increases in fiscal and monetary stimulus and other reforms aimed at improving the Japanese economy.

The start of a new year brought new challenges, some progress and continued stalemates. Equity markets in the U.S. and especially Japan roared off to strong double-digit starts while European markets have turned in varying degrees of single-digit gains and Chinese A-shares are actually down year-to-date. In the U.S., Congress agreed to a two percentage-point increase in payroll taxes back to their 2010 level at the start of the year. Their inaction on a larger budget deal also allowed automatic across-the-board spending cuts, known as sequestration, to begin on March 1. The effects of these blunt cuts are likely to create a headwind for an economy that is already growing at a rate below its historic trend. Continued economic growth has led to speculation about whether the Federal Reserve will decrease their QE3 purchases earlier than planned, which has caused temporary market jitters. Hopefully, rational heads will prevail at the Federal Reserve and QE3 will sail along as planned. Likewise, the aforementioned "Abenomics" will lead to Japan's own version of an even proportionally larger QE program, which has certainly impacted their financial markets. In China, the National People's Congress selected its new leadership, which occurs once every ten years. The new regime will have the difficult task of walking a fine line between encouraging growth and keeping inflation from accelerating. In Eu-

rope, the Italian elections did not go well from a financial market perspective as a coalition government did not emerge and more than half the voters supported anti-austerity campaigns. This result was reminiscent of last year's Greek elections. This uncertainty, combined with Cyprus needing a bailout, temporarily increased risk aversion in global markets.

For the third year in a row markets are spooked about a possible springtime swoon. Commodity prices have dropped substantially recently, with both industrial and precious metals' prices falling. This has raised concerns about whether commodity prices are reflecting the possibility that the Federal Reserve may cut or end QE3 before the market had expected and/or if China's weaker growth may be more prolonged than expected. In Europe, growth has been deteriorating for months, and the ECB has been reluctant so far to take even the most basic easing moves. Recent economic releases in the U.S. have been on the weaker side, which could suggest that the payroll tax increase and sequestration may be impacting the economy more than previously expected. However, if the Federal Reserve maintains its outlined QE3 program and Japan's own QE kicks in, and if the ECB finally awakens to the fact that the euro zone needs help, odds favor continuation of global risk assets doing well.

## TOTAL FUND

Strong returns in U.S. and international equity, high yield and global inflation protected bonds combined with solid results for real estate and private markets (both real estate and private markets returns are lagged by one quarter) and respectable core bond returns to lift OP&F's overall investment portfolio to a very good absolute result for 2012. However, depending on the yardstick used, relative returns painted different pictures. The total portfolio's results last year placed it in the top seven percent of Wilshire's Total Fund Portfolios Universe. However, this seemingly sterling result disappointingly fell short of the total portfolio's policy index return by 5 basis points (bps). The bulk of the credit for this peer ranking goes to OP&F's managers as the core fixed income, high yield and global inflation protected bond managers along with the non-U.S. equity and real estate managers collectively provided outperformance relative to their respective asset class benchmarks. At the allocation level, the positive impact of overweights to U.S. and international equity and global inflation protected bonds was more than offset by an underweight to high yield bonds, which ultimately hurt the total portfolio's relative performance versus its benchmark. The total portfolio, on a trade date basis, was valued at \$11.6 billion



at the start of 2012 and ended the year at \$12.63 billion. This rise led to a healthy 2012 investment return of 14.89 percent gross of fees compared to a policy index return of 14.94 percent. With 2012's result, OP&F's three-year annualized gross of fees return now stands at 10.93 percent, while the five-year annualized gross of fees return is 3.46 percent and the 10-year gross of fees return is 8.90 percent. The slight 2012 underperformance versus our policy index kept the three-year relative return above the policy index return of 9.86 percent for the same period, while the five-year return also beat the policy return of 2.75 percent and the 10-year return bested the policy return of 8.42 percent. As mentioned earlier, the total portfolio's 2012 results ranked in the top decile of Wilshire's Total Fund Portfolios Universe, while the three-year, five-year and 10-year results ranked in the 4th, 31st and 7th percentiles, respectively, of that same peer universe. While results similar to 2012 may be hard to achieve in 2013, this new year is off to a reasonably good start with double-digit master limited partnerships and U.S. equity returns leading the way.

A well-diversified portfolio will serve OP&F well over the long-term. As mentioned in prior reports, the Board of Trustee's 2010 adoption of and recent reaffirmation of risk parity and the ongoing implementation of that strategy should demonstrate that OP&F's approach to creating a well-diversified portfolio has changed over the years. A combination of lower long-term equity targets inherent in risk parity and a generally rising stock market over the past few years has kept the equity portfolio near the upper end of its allocation band. This makes it easier to select a source of funds to diversify into growing fixed income and alternatives exposures and a new master limited partnerships allocation. An ongoing shift out of equities has kept OP&F from any forced rebalancing efforts over the past year. However, OP&F continues to closely monitor its portfolio status relative to asset class allocation ranges. In addition to forcing OP&F to sell high and buy low, a disciplined rebalancing policy removes human emotion from the decision making process. As evident in the Board of Trustee's recent asset allocation and prior structural decisions, OP&F has and will continue to evaluate non-correlated, non-traditional strategies and asset classes in search for optimal risk-adjusted returns.

## EQUITIES

U.S. equities turned in strong performance in 2012 as both the large-cap Russell 1000 and small-cap Russell 2000 Indexes both closed out the year with more than 16 percent returns. Equity markets benefited from solid corporate earnings reports and a continued U.S. economic

recovery. Two notable drivers to the economy were modest job growth and a resurgent housing recovery. Record S&P earnings, a growing U.S. economy, attractive equity valuations and U.S. interest rates at record lows, meant that equity investors enjoyed good returns in 2012.

Even though 2012 was a strong year, a longer-term view notes there was only a single-digit gain for the S&P 500 and negative returns for most global equity markets in 2011. As such, the three-year annualized returns, while respectable for U.S. stocks, remained on the low side for global equities. Of course, the five-year returns are also unimpressive since the measurement period commences at the end of 2007, only a few months after the S&P 500 last achieved record high prices. 10-year results are much more respectable, especially considering that they include the impact of the 2008-2009 global financial crisis. Moreover, as shown by the Russell Mid-Cap and the Morgan Stanley Capital International (MSCI) Emerging Markets Indices, small and mid-cap U.S. stocks, and emerging market equities have outperformed the S&P 500 over the past decade. While the returns posted over the past decade may not compare to the mid-teens or higher returns of the 1980s and 1990s, many long-term investors may consider these results respectable given the long list of global economic challenges and the current low inflation environment.

While the S&P 500 Index posted a slightly negative fourth-quarter return, the Index's 15.98 percent return for all of 2012 was notable in the face of a long list of global fundamental concerns. Mid-cap and small-cap stocks performed better during the final three months of the year, posting gains of roughly 2.0 to 3.0 percent. The fourth quarter outperformance of smaller stocks was enough to overtake the S&P 500 for the year, but just fractionally. In fact, U.S. investors were rewarded for patience regardless of positioning across market capitalization or style spectrums.

The broad U.S. equity market as measured by the Wilshire 5000 had a return of 16.06 percent for 2012, while another broad measure, the Russell 1000 Index, finished the year with a gain of 16.42 percent. OP&F's 2012 U.S. equity composite return was 15.88 percent gross of fees, which trailed its benchmark, the aforementioned Wilshire 5000, by 18 bps for the year.

Global indices also performed well for the year, particularly in the second half. The MSCI World Index returned 16.54 percent in 2012, surpassing the S&P 500 fractionally due to better fourth quarter performance. Emerging market stocks, after lagging the past three years, posted

among the strongest returns in the quarter. For the year, emerging markets were up nearly 19 percent. Global equity markets performed well in the second half of the year, following a negative second quarter, as illustrated by the MSCI Indices. At mid-year, investors held renewed fears over financial conditions within the euro zone. Signs of slowing in China coupled with concerns as to the vitality of the U.S. expansion also weighed on stocks. Fortunately, equities bottomed out in the June–July time frame, and currency-related fears subsided as well. European Central Bank President Mario Draghi’s speech of July 26, in which he said that “...the ECB is ready to do whatever it takes to preserve the euro,” proved to be a major turning point for global financial markets.

Total return for the MSCI ACWI ex-U.S. Index, representing both developed and emerging international markets, was 16.83 percent for 2012. The OP&F Policy Index also registered a 16.83 percent return and the MSCI ACWI ex-U.S. Iran and Sudan Free Investable Market Index showed a 16.92 percent result. Even as the returns from international equity markets outperformed U.S. stocks, OP&F’s international managers (composite) returned 19.96 percent gross of fees easily exceeding the international equity policy benchmark by 313 bps.

## FIXED INCOME

With markets appearing to discount aggressive policy easing for some time to come, assets across the credit spectrum enjoyed very good performance during the last three months of the year. Largely buoyed by the improved situation in Europe, risk premiums shrank across the U.S. and European corporate markets. European corporate markets outperformed their U.S. counterparts primarily as investors grew more comfortable moving into the region. In the U.S., issuers took advantage of low borrowing rates and supply was heavy. However, demand for yield was strong, with investment grade mutual funds taking in approximately \$131 billion (per Lipper) in 2012 versus \$75 billion in 2011. Spreads narrowed, with the option-adjusted spread on the U.S. Investment Grade Corporate Index falling from 155 bps to 141 bps in the fourth quarter, generating a return of 1.06 percent. The Index began 2012 at 234 bps, and the move to 141 bps led to a healthy 9.82 percent gain. Lower quality outperformed higher quality for the fourth quarter and year. The financial sector in both the U.S. and Europe was the big contributor for both periods as well, after lagging in 2011.

OP&F’s core fixed income composite returned 6.31 percent gross of fees versus its benchmark, the Barclays Aggregate Index, return of 4.22 percent for 2012 providing a healthy

cushion of 209 bps. The Inflation Linked Policy return was 13.49 percent for the year, while OP&F’s Global Inflation Protected Securities (GIPS) manager’s return of 14.93 percent gross of fees outperformed by 145 bps.

## HIGH YIELD

The high yield market benefited from many of the same drivers as did investment grade bonds, with diminished tail risk leading to tighter spreads and to the Pan-Euro market outperforming the U.S. market. With corporate balance sheets in good shape, defaults low and profits still strong, investors flocked to the sector. Record supply was readily absorbed by new cash in search of higher yields. U.S. high yield mutual funds took in \$30.1 billion in 2012 or roughly twice the 2011 pace (per Lipper). In the U.S., single-Bs slightly outperformed triple-Cs for the quarter, but the latter posted better returns for the full year. Homebuilders had both a strong fourth quarter and year based on early signs of a housing turnaround and, as in investment grade, financials posted strong gains. Once again, high yield bank loans generated an attractive return; albeit one lower than the performance of high yield bonds. Investors were drawn to loans given their senior position in the capital structure yet ample yield relative to other sectors. The recovery in Collateralized Loan Obligations (CLO) issuance added to the strong bid for loans and was a key driver during the fourth quarter and year.

OP&F’s composite high yield return was 15.64 percent gross of fees in 2012, while the benchmark, the Credit Suisse Developed Countries High Yield Index, had a return of 14.77 percent, resulting in OP&F’s high yield portfolio outperforming by 87 bps.

## REAL ESTATE

Real estate markets continued their recovery in 2012, driven by both favorable capital market conditions and a fairly steady improvement in demand-side fundamentals. Aside from multifamily in some U.S. markets, new supply generally remained subdued.

During 2012 (real estate returns are lagged by one quarter), the total real estate portfolio delivered a 13.1 percent return gross of fees, consisting of a 4.6 percent income return and an 8.3 percent appreciation return. Net of fees, the portfolio delivered a return of 11.5 percent, exceeding the Open End Diversified Core Equity (ODCE) fund index by over 100 bps. This outperformance equated to approximately \$12 million.

OP&F’s real estate portfolio continues to perform well

over the long-term. The total real estate portfolio delivered a net return of 7 percent over the past 10 years, outperforming the ODCE index by over 130 bps per year.

Over the past several years, value was added through allocation decisions, through investment selection, and by participating in exclusive opportunities. For example, OP&F's conscious overweight to the Strategic Portfolio added 80 bps to the total return over the past three years, as investors in search of security drove values higher for the types of high-quality, well-located, well-leased assets that dominate OP&F's Strategic Portfolio. In late 2011, OP&F also participated in seeding a new open-end fund for the third time in five years, obtaining unique benefits and very strong initial returns in 2012 in exchange for its efforts and commitment.

Looking forward, OP&F seeks to lessen its overweight to the lower-risk Strategic Portfolio, as the broad-based appreciation that drove core asset values higher appears to be subsiding. Generally speaking, good opportunities do appear to remain in core real estate, particularly relative to other asset classes. Accordingly, OP&F will seek to maintain its target weighting to the Strategic Portfolio, while controlling exposure to trophy-type assets that have become fully priced.

Opportunities also remain in non-core. Since the investor universe as a whole remains fairly risk-averse, those investors that are willing to assume leasing and other similar risks can capture attractive premiums if they are able to access deal flow and partner with managers who can operate assets efficiently. OP&F continued to take advantage of those opportunities in 2012, committing \$180 million to non-core strategies in its Tactical Portfolio.

In addition to seeking to achieve its return target, OP&F remains focused on risk management within its real estate portfolio, as well as on the strategic objectives of diversifying OP&F's broader portfolio and serving as a partial inflation hedge. Each investment is selected based on its risk/return profile and on its perceived ability to achieve other strategic objectives.

OP&F's total real estate exposure increased during the year from 9.5 percent to 10.4 percent due to appreciation and new commitments. If unfunded commitments are included, the total exposure at the end of the year increased to 12.2 percent. This compares to target exposure for real estate of 12.0 percent and a range of 10.0 percent to 14.0 percent.

## PRIVATE MARKETS

For the year ended Sept. 30, 2012 (private market returns are lagged by one quarter), OP&F's private markets portfolio provided a return of 9.58 percent versus its policy benchmark (Wilshire 5000 + three percent) return of 33.76 percent. In terms of the two most prominent private markets subclasses, venture capital and private equity, the one-year pooled return, net to limited partners, for the Cambridge Associates LLC U.S. Private Equity Index was 15.18 percent as of Sept. 30, 2012, while the Cambridge Associates LLC U.S. Venture Capital Index returned 7.69 percent. Looking beyond the U.S., in dollar terms, the one-year pooled return, net to limited partners, for the Cambridge Associates LLC Global ex-U.S. Developed Markets Private Equity and Venture Capital Index was 8.96 percent while the Cambridge Associates LLC Global Emerging Markets Private Equity and Venture Capital Index returned 7.13 percent.

Although capital markets faced many headwinds in 2012, such as the European debt crisis, the U.S. fiscal cliff and a slowdown in China, risk-based assets, such as private markets, had a solid year helped in part by the continued injection of liquidity being provided by global central banks. Other positives for the private markets industry are the continued economic recovery, albeit muted, the availability of cheap debt particularly for the buyout industry and the fact that many strategic buyers continue to have large amounts of cash on their balance sheets, which bodes well for Mergers and Acquisitions (M&A) activity. In addition to the aforementioned headwinds and the possibility of their continuation, other challenges for the private markets industry include the overhang of capital looking to be put to work by previously raised funds as well as the overhang of unsold companies within these funds.

As for the state of private markets, assessing conditions on a global basis across metrics such as fundraising, investment activity and exit environments provide insights on the health of the industry as a whole. With respect to fundraising, private markets funds on a worldwide basis raised a slightly higher amount of capital in 2012 when compared to the prior year. While the U.S. experienced an increase, regions elsewhere experienced year-over-year declines. Fundraising has been hindered by the previously mentioned overhang issues within the industry but has been helped by the "denominator effect", where rising public equity prices have made investors underweight to other asset classes such as private markets. Another observation related to fundraising and the industry in general is the

bifurcation between the “haves” and “have nots”. Funds that have a proven strategy and a solid track record have the ability to raise their targeted amounts of capital in an adequate time period whereas groups on the other end of the spectrum are experiencing protracted fundraising periods, are having to lower their targeted amounts or are abandoning the process altogether. Similar to fundraising conditions, global buyout investment activity declined from prior year levels; however, the U.S. experienced an increase while regions such as Europe and Asia-Pacific saw declines. Seeing that the venture capital industry is U.S. centric given the industry is less developed in other parts of the world, assessing investment activity levels in only the U.S. provides an adequate proxy for worldwide investment activity levels. With that said, U.S. venture capital investment activity levels were down in 2012 versus prior year levels. Lastly, in assessing exit environments, initial public offering (IPO) and M&A activity is tracked and evaluated. In 2012, global IPO issuance fell from the prior year with each region experiencing a decline in proceeds except the U.S., which was helped by Facebook, the largest venture capital-backed IPO in history. Global M&A exits were strong in 2012 due to both strategic and financial buyers putting some of their capital to work.

OP&F continues to work prudently toward its new eight percent target allocation to the private markets asset class. On an invested basis, private markets comprised approximately four percent of OP&F’s total assets as of year-end. Total committed capital since inception of OP&F’s private markets program through Dec. 31, 2012, was \$1,383.5 million, of which \$555.4 million has yet to be called. In addition, OP&F had €80.5 million in Euro commitments, of which €35.3 million has yet to be called. Distributions since inception of the program have totaled \$596.7 million and €26.3 million.

In the future, OP&F will continue to work toward its eight percent target by reviewing existing relationships for further investment and by looking at a number of new managers. In addition, OP&F will be evaluating several implementation options for the private markets program to determine the optimal operating approach for the future. As always, OP&F continues to look for ways to diversify its private markets program in order to achieve the highest risk-adjusted returns while keeping the private markets portfolio in compliance with its policy objectives and guidelines.

## TIMBER

Timber was approved as a new asset class for OP&F in 2010. After many months of education and analysis of the asset class and timberland investment management organizations, OP&F hired its first timber investment managers in 2012. After approval, the managers spent the remainder of 2012 looking for opportunities. By the end of the year, OP&F had committed a total of \$275 million to the asset class, of which \$71.96 million had been called. Distributions since the program’s recent inception have totaled \$0.51 million. Given the young age of the investments made to date, returns are not yet meaningful.

The timber market continues on its road to recovery as measured across several dimensions. From valuation and return perspectives, the National Council of Real Estate Investment Fiduciaries (NCREIF) Timberland Index finished 2012 with its highest value in five years and had a total return of 4.14 percent. Within timber markets, several characteristics or factors continue to improve. With respect to pricing, log and lumber prices continued to rise across North American markets with the one exception being U.S. South log prices which remain at pre-recession lows. On the supply front, lumber production across North America also continued to rise but less so in Canada versus the U.S. Lastly, demand continued to rebound given the mild economic recovery and the positive developments occurring in the U.S. housing industry. Also, with respect to demand, although volatile over the past couple of years, log and lumber exports to China continued to become a bigger driver of demand, especially for the West Coast markets of North America and several international timber markets. On the transaction front, due in large part to one significant transaction, the value of U.S. timberland transactions more than doubled in 2012 versus 2011, with nearly \$4 billion in value and three million acres changing ownership. In 2012, U.S. timberland transaction markets were characterized by compressing discount rates, rising values, increased opportunities and increased deal sizes. On the international transaction front, activity remained strong with more than \$2.3 billion in value changing hands. Prospects for the timber market continue to look bright given several structural changes occurring in the market, which could have a significant impact across several of the aforementioned characteristics, three of which are the Mountain Pine Beetle epidemic, the previously mentioned China demand factor and the continued U.S. housing recovery.

On an invested basis, timber comprised approximately 0.6 percent of OP&F’s total assets as of year-end. In the future,

OP&F will continue to work toward achieving the five percent target to timber by reviewing existing relationships for further investment and by looking at a number of new managers. As always, OP&F continues to look for ways to diversify its timber portfolio in order to achieve the highest risk-adjusted returns while complying with the timber program's policy objectives and guidelines.

## 2013 DEVELOPMENTS AND CHALLENGES AHEAD

As indicated in other sections of this Investment Report, OP&F recently adopted a new long-term asset allocation policy. Subsequently, OP&F adopted an asset allocation implementation plan as well as changes to the total portfolio's policy benchmark that provide a road map to steadily shift the total portfolio's assets from their current mix to the new asset allocation policy targets. The approach seeks to substantially move the total portfolio's risk profile within twelve months to one that more closely matches the adopted policy's risk profile, taking into account practical issues such as liquidity, any required manager searches, and leverage implementation. OP&F also adopted new asset class rebalancing ranges tied to the new asset class targets. As a follow-up to the new asset allocation policy, OP&F continues discussions on how to best construct the new levered core fixed income allocation given current market conditions. OP&F expects to adopt a new fixed income investment structure in coming months as well as a new U.S. equity investment structure. Also, as mentioned elsewhere in this report, as to the new allocation to master limited partnerships (MLP), OP&F has fully funded its new 5 percent target allocation and will soon transition these MLP holdings to three firms hired as a result of its manager search. Below are some of the other items already addressed in 2013 and a number that still lie ahead:

- Adopted a Total Fund Policy Implementation Plan.
- Adopted new asset class rebalancing ranges.
- Amended and adopted the Investment Policy and Guidelines.
- Amended and adopted the Proxy Voting Policy.
- Approved the 2013 Private Markets Investment Plan.
- Approved amended investment manager guidelines for Investcorp customized managed account.
- Shift toward total portfolio policy benchmark exposure targets under Total Fund Policy Implementation Plan.
- Complete investment structure analysis for levered Core Fixed Income and U.S. Equity allocations.
- Transition current master limited partnerships exposure to Harvest Fund Advisors, Salient Partners and Tortoise Capital Advisors.
- Complete implementation of MacKay Shields – High Yield Active Core and Penn Capital high yield mandates.
- Complete implementation of recently acquired risk management tool.
- Complete execution of 2012 Real Estate Strategic Portfolio rebalancing initiatives.
- Implement 2013 Private Markets Investment Plan.
- Evaluate and determine private markets implementation approach.
- Implement 2013 Real Estate Investment Plan.
- Evaluate composition of Real Estate Strategic Portfolio for possible rebalancing.
- Continue due diligence on timberland investment managers and make progress toward targeted timber allocation.
- Evaluate OP&F's securities lending agents.

As mentioned above, OP&F expects to dedicate a significant amount of time over the remainder of this year conducting investment structure analyses for both the levered Core Fixed Income and U.S. Equity asset classes and conducting any resultant manager searches indicated by the analyses. From an operational standpoint, OP&F will continue to look for ways to improve the efficiency of and reduce the costs of operations.

## Investment Portfolio Summary

### Investment Portfolio Summary - as of Dec. 31, 2012

Investment Type	Percent of Net Investment Value	Fair Value
Cash and Cash Equivalents	9.94%	\$1,254,896,443
U.S. Government Obligations	7.36%	930,099,422
U.S. Government Treasury STRIPS	0.73%	92,416,456
U.S. Government Agencies	0.43%	54,342,051
Municipal Bond Obligations	0.04%	5,054,630
Corporate Bonds and Obligations	11.98%	1,513,633,509
Mortgage and Asset-Backed Obligations	5.02%	633,670,417
Domestic Stocks	12.91%	1,631,180,325
Domestic Pooled Stocks	13.38%	1,689,629,531
International Securities	32.22%	4,069,328,737
Real Estate	10.35%	1,307,802,474
Commercial Mortgage Funds	0.30%	37,935,162
Private Equity	4.29%	542,188,270
Timber	0.60%	76,120,455
Master Limited Partnerships	1.35%	170,873,233
<b>Total Fair Value - Cash and Securities</b>	<b>110.90%</b>	<b>14,009,171,115</b>
Reverse Repurchase Agreements	-10.00%	(1,264,290,679)
Net Investments Trade Receivable/(Payable)	-0.90%	(114,113,809)
<b>TOTAL INVESTMENT VALUE (TRADE DATE BASIS)</b>	<b>100.00%</b>	<b>\$12,630,766,627</b>

### Ten Largest Common Stocks (by Fair Value)

Stock	Shares	Fair Value
Toyota Motor Corp.	946,177	\$43,826,274
Novartis AG-Reg Shs	583,175	36,601,741
British American Tobacco PLC	693,097	35,162,096
Siemens AG	316,208	34,268,244
Sap AG	406,336	32,512,445
HSBC Holdings	2,980,004	31,257,775
Vodafone Group PLC	11,185,471	28,082,073
Novo Nordisk A/S-B	169,687	27,481,072
Sanofi-Aventis	275,265	25,908,100
Mitsubishi Tokyo Financial	4,834,749	25,777,126

### Ten Largest Bonds and Obligations (by Fair Value)

Description	Coupon	Maturity Date	Par Value	Fair Value
France (Government Of)	2.250	July 25, 2020	62,344,407	\$74,311,461
France (Government Of)	1.000	July 25, 2017	57,944,434	63,601,575
France (Government Of)	1.100	July 25, 2022	44,721,839	49,143,865
Deutschland DB	1.750	April 15, 2020	41,443,230	49,131,925
Deutschland DB	1.500	April 15, 2016	42,295,920	45,983,045
France (Government Of)	1.600	July 25, 2015	40,860,110	43,979,783
France (Government Of)	3.150	July 25, 2032	28,750,517	43,898,983
U.S. Treasury Inflation	3.875	April 15, 2029	25,327,620	41,981,127
U.S. Treasury Note	1.125	Jan. 15, 2021	34,049,568	39,992,651
Canada-Government Real Return	4.000	Dec. 1, 2031	30,071,581	39,543,705

## Ten Largest Real Estate Holdings (by Fair Value)

Description	Fair Value
Invesco Core R.E.	\$ 149,630,238
Morgan Stanley Prime Property Fund	137,939,582
JP Morgan Strategic Property Fund	126,967,459
Prudential PRISA	113,654,155
UBS Trumbull Property Fund	110,502,972
Heitman Core Property Fund	101,488,245
Jamestown Premier Property Fund	87,188,486
Lion Industrial Trust	53,581,194
LaSalle Property Fund, LP	36,342,597
Blackstone Real Estate Partners V	28,840,924

A complete listing of portfolio holdings can be obtained by calling (614) 228-2975.

## Schedule of Investment Results

For the Year Ended Dec. 31, 2012

	1-Year	Annualized Rates of Return 3-Year	5-Year
<b>U.S. Equity</b>			
<b>OP&amp;F</b>	<b>15.88%</b>	<b>12.72%</b>	<b>3.35%</b>
Wilshire 5000	16.06%	11.15%	2.03%
<b>International Equity</b>			
<b>OP&amp;F</b>	<b>19.96%</b>	<b>6.56%</b>	<b>(1.72)%</b>
International Equity Policy Benchmark *	16.92%	3.91%	(2.87)%
<b>Fixed Income</b>			
<b>OP&amp;F - Core</b>	<b>6.31%</b>	<b>7.47%</b>	<b>6.84%</b>
Barclays Aggregate	4.22%	6.19%	5.95%
<b>OP&amp;F - High Yield (HY)</b>	<b>15.64%</b>	<b>12.13%</b>	<b>10.60%</b>
CSFB Developed Countries HY	14.77%	11.46%	9.57%
<b>OP&amp;F - GIPS</b>	<b>14.93%</b>	<b>21.54%</b>	<b>15.01%</b>
Barclays Global Inflation Linked Bond Index	13.49%	14.34%	10.58%
<b>OP&amp;F - Commercial Mortgages **</b>	<b>5.28%</b>	<b>8.83%</b>	<b>5.22%</b>
Barclays Mortgage Index **	3.71%	4.99%	6.35%
<b>Real Estate **</b>			
<b>OP&amp;F</b>	<b>13.06%</b>	<b>11.84%</b>	<b>(2.18)%</b>
NCREIF ODCE Index	10.47%	11.13%	(2.03)%
<b>Private Equity **</b>			
<b>OP&amp;F</b>	<b>9.58%</b>	<b>13.22%</b>	<b>4.62%</b>
Wilshire 5000 + 3%	33.76%	16.62%	4.41%
<b>Total Portfolio</b>			
<b>OP&amp;F</b>	<b>14.89%</b>	<b>10.93%</b>	<b>3.46%</b>
Policy Index***	14.94%	9.86%	2.75%

\* International Equity benchmark is a blend of the MSCI ACWI ex U.S. (Net) through June 30, 2011 and the MSCI ACWI ex U.S. (Net) Iran/Sudan Free from July 1, 2011 forward.

\*\* One quarter in arrears.

\*\*\* Interim Policy Index: 31.6 percent Wilshire 5000, 21.7 percent MSCI ACWI ex-U.S. (Net) Iran/Sudan Free, 10 percent Barclays Aggregate, 15 percent Credit Suisse First Boston (CSFB) Dev. Countries HY, 6.5 percent Global Treasury Inflation Protected Securities (TIPS) Custom, 10 percent NCREIF ODCE Index Lagged, 4 percent Wilshire 5000 + 3% Lagged, 1.3 percent CPI + 5 percent (Net).

- Long Term Policy: 18.5 percent Wilshire 5000, 18.5 percent MSCI ACWI ex-U.S. (Net) Iran/Sudan Free, 23 percent Barclays Aggregate, 15 percent CSFB Dev. Countries HY, 13 percent Global TIPS Custom, 12 percent NCREIF ODCE Index Lagged, 8 percent Wilshire 5000 + 3% Lagged, 5 percent CPI + 5 percent (Net), 5 percent Alerian MLP Index (adds to 118 percent as "Risk Parity" approach uses levered core fixed income and levered Global Inflation-Protected Securities).

Time Weighted methodology, based upon fair values, is used when calculating performance.

## Investment Consultants and Money Managers

For the Year Ended Dec. 31, 2012

---

### Investment Consultants

Wilshire Associates  
The Townsend Group

### Investment Managers – U.S. Equity

AQR Capital Management  
Bridgewater Associates LP  
Columbia Asset Management  
EARNEST Partners, LLC  
Grosvenor Capital Management LP  
FX Concepts, LLC  
Mellon Capital Management  
N.A. Investcorp, LLC  
Russell Implementation Services Inc.  
State Street Global Advisors

### Investment Managers – Real Estate

AEW Capital Management  
The Blackstone Group  
CB Richard Ellis Investors, LLC  
Clarion Partners  
Colony Capital, LLC  
DivcoWest Real Estate Services, LLC  
DLJ Real Estate Capital Partners, Inc.  
Exeter Property Group  
Fortress Japan Opportunity Management LLC  
Fremont Realty Capital, LP  
Greystar Investment Group, LLC  
Heitman Capital Management, LLC  
Hunt Investment Management  
INVESCO Realty Advisors  
Jamestown Premier GP, LP  
JP Morgan Investment Management, Inc.  
LaSalle Investment Management  
Lone Star Funds  
Lubert-Adler Management Co., LLC  
Morgan Stanley Real Estate Advisors, Inc.  
Prudential Real Estate Investors  
RREEF America, LLC  
Savanna Investment Management, LLC  
Starwood Capital Group  
Stockbridge Real Estate Fund  
TA Realty Associates  
Tricon Capital Group, Inc.  
TriGate Capital  
UBS Realty Investors, LLC  
VBI Real Estate  
Walton Street Capital, LLC  
Westbrook Partners, LLC

### Investment Managers – Timber

Forest Investment Associates  
Hancock Timber Resource Group

### Investment Managers – Fixed Income

Bridgewater Associates LP  
JPMorgan Investment Advisors Inc.  
Loomis Sayles & Company, LP  
MacKay Shields, LLC  
Neuberger Berman  
Prima Capital Advisors, LLC  
Quadrant Real Estate Advisors, LLC  
Western Asset Management

### Investment Managers – International Equity

Acadian Asset Management Inc.  
Causeway Capital Management LLC  
Dimensional Fund Advisors  
Franklin Templeton  
Pyramis Global Advisors  
Thornburg Investment Management Inc.

### Investment Managers - Private Equity

Abbott Capital Management, LLC  
Adams Street Partners  
Advent International  
Athenian Venture Partners  
Blue Chip Venture Partners, LP  
Blue Point Capital Partners, LP  
Brantley Venture Partners  
Coller Capital  
Conway MacKenzie  
Francisco Partners  
GTCR LLC  
HarbourVest Partners, LLC  
Harvest Partners  
Horsley Bridge Partners, LLC  
Kirtland Capital Partners  
Landmark Equity Partners  
Leonard Green & Partners, LP  
Lexington Capital Partners  
Linsalata Capital Partners  
MV Economic Development, Ltd.  
Montauk TriGuard Management, Inc.  
Morgenthaler Venture Partners  
Northgate Capital Group  
Park Street Capital  
Peppertree Partners, LLC  
Primus Venture Partners  
Summit Partners  
TA Associates, LP  
The Riverside Company  
Wilshire Private Markets, LLC

### Other Professional Consultants (see page iii)



## Schedule of Brokers' Fees Paid

For the Year Ended Dec. 31, 2012

Broker Name	Fees Paid	Units Traded	Average Cost Per Unit
Merrill Lynch	\$426,020	76,167,445	\$0.0056
Goldman Sachs	421,331	21,030,548	0.0200
Instinet	281,559	84,209,211	0.0033
UBS	230,829	28,146,916	0.0082
Citigroup Global Markets	212,003	67,391,561	0.0031
Credit Suisse	203,714	16,543,719	0.0123
Barclays	191,267	15,988,660	0.0120
Macquarie Capital	177,142	92,673,824	0.0019
Morgan Stanley & Co., Inc.	165,468	16,549,369	0.0100
JP Morgan Securities LLC	151,834	10,194,471	0.0149
Nomura Securities	122,137	70,957,668	0.0017
Weeden & Co. LLC	99,753	7,523,347	0.0133
Investment Technology Group	95,567	9,131,652	0.0105
Deutsche Bank	87,250	6,827,483	0.0128
FBR Capital Markets	84,288	3,080,139	0.0274
Societe Generale	62,999	12,413,759	0.0051
Liquidnet Inc.	56,629	4,338,226	0.0131
Bloomberg Tradebook	46,553	5,665,418	0.0082
RBC Capital Markets	46,483	1,718,528	0.0270
Jefferies & Co., Inc.	45,848	2,667,527	0.0172
Credit Agricole	42,981	2,107,794	0.0204
Robert W. Baird & Co.	37,575	1,163,713	0.0323
Keybanc Capital Markets	35,355	1,064,717	0.0332
Sanford C. Bernstein	35,203	1,092,696	0.0322
Daiwa	34,062	11,343,332	0.0030
TD Bank Group	31,727	968,757	0.0327
BTIG LLC	29,656	1,654,265	0.0179
Keefe Bruyette & Woods Inc.	28,481	847,901	0.0336
Capital Institutional Services	27,374	782,106	0.0350
Jonestrading Institutional Services	25,981	923,335	0.0281
Knight Securities	25,979	2,506,665	0.0104
Raymond James & Associates	25,631	747,627	0.0343
Stifel, Nicolaus & Co.	25,221	743,042	0.0339
CIBC World Markets	23,734	1,761,433	0.0135
Brokers Less Than \$20,000	361,769	39,188,914	0.0092
<b>TOTAL</b>	<b>\$3,999,403</b>	<b>620,115,768</b>	<b>\$0.0064</b>

## Investment Policy and Guidelines

---

*Minor formatting edits have been made to the Board approved investment policy and guidelines in order to provide style consistency throughout the CAFR.*

### OHIO POLICE & FIRE PENSION FUND INVESTMENT POLICY AND GUIDELINES

#### I. INTRODUCTION

The purpose of this Investment Policy and Guidelines (Policy or Statement) is to define the framework for investing the assets (Total Portfolio) of the Ohio Police & Fire Pension Fund (OP&F or Plan). This Statement is intended to provide general principles for establishing the goals of OP&F, the allocation of assets and the employment of outside asset management. The statutory investment authority of the Investment Committee/Board of Trustees (the Board of Trustees or the Board) is set forth in Sections 742.11 to 742.113 and Sections 742.114, 742.116 of the Ohio Revised Code (ORC), as amended from time to time.

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

- To have the ability to pay all benefit and expense obligations when due.
- To maintain the purchasing power of the current assets and all future contributions by maximizing the rate of return on OP&F's assets at a reasonable level of risk.
- To achieve and maintain a fully funded status with regard to the accumulated benefit obligation over a 30-year amortization period.
- To control the costs of administering OP&F and managing the investments.

The investment objectives of the Total Portfolio are:

- Long-term returns on Plan investments, in addition to contributions received from members and employers, should satisfy any current funding obligations of the Plan when and as prescribed by law and, once the Plan is fully funded, should keep pace with the growth of Plan liabilities.
- The investment performance goal for the Total Portfolio is to meet or exceed the return of the Total Portfolio policy benchmark over a full market cycle, generally measured over three to five years,

without taking on additional risk as measured by standard deviation of returns. The Total Portfolio policy benchmark is a weighted average, based on the allocation target defined in Section III below, of each asset class benchmark.

In order to achieve these objectives, the Board of Trustees will conduct itself in accordance with ORC Section 742.11, which provides "The Board and other Fiduciaries shall discharge their duties with respect to OP&F solely in the interest of the participants and beneficiaries." These duties shall also be carried out "with care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with such matters would use in the conduct of an enterprise of a like character and like aims", as referenced in ORC Section 742.11. All aspects of this Statement should be interpreted in a manner consistent with OP&F's objectives. At least annually, the Board shall review and adopt policies, objectives or criteria for the operation of the investment program and make such changes as appropriate.

Investment policies and Investment Manager(s) guidelines referenced in this document are separate policies governing specific aspects of managing the Total Portfolio and are not reproduced in this Statement, but are incorporated by reference as governing documents of the Plan.

#### II. DEFINITION OF RESPONSIBILITIES

##### A. Investment Committee/Board of Trustees

The statutory investment authority of the Board with regard to the Plan is set forth in Chapter 742, as described above, provides that in its capacity as a fiduciary, the Investment Committee/Board of Trustees must discharge its duties in a prudent manner and for the exclusive benefit of the participants and beneficiaries of the Plan.

In discharging its duties, the responsibilities of the Investment Committee/Board of Trustees pursuant to this Policy include the following:

- Establish the strategic investment policy (Asset Allocation Policy) for OP&F in accordance with the above goals, and periodically review Asset Allocation Policy in light of any changes in actuarial variables and/or market conditions.
- Approve the investment structure for applicable asset classes identified in the Asset Allocation Policy.
- Select qualified Investment Consultant(s) and Investment Manager(s) to advise on and manage

OP&F's assets recognizing the goals set forth in ORC Sections 742.11 and 742.116.

- Monitor and review the performance of selected Investment Manager(s) to determine achievement of goals and compliance with policy guidelines.
- Monitor the costs of the investment operations at least annually.
- Review, at least annually, the current investment policies of OP&F and make such changes as appropriate.
- Review applicable annual investment plan(s) prepared by the staff and/or Investment Consultant(s). As conditions warrant, revise the annual investment plan(s) as the year progresses.
- Review and approve or disapprove real estate transactions when required by Board policy.
- Monitor investment activity for compliance with Board policies and adherence by Investment Manager(s) to strategy and direction.
- Review the overall investment performance to determine whether it meets established benchmarks.
- Evaluate and assign all Investment Manager(s) to a rating category as outlined in OP&F's Investment Manager Monitoring and Evaluation Policy.
- Review suggested changes or additions to the functions and operations regarding the investment operations of similar institutional investors.
- Review the proposed investment department annual operating budget and report its recommendations to the Finance Committee.
- Fulfill any other responsibilities as provided in the ORC and Investment Committee Charter.

The Investment Committee/Board of Trustees may authorize others such as OP&F staff, and may utilize the services of external advisors, such as actuaries, auditors, consultants and legal counsel, to implement decisions made by the Board.

### **B. Staff**

Staff will be the primary liaison between the Investment Committee/Board of Trustees and the Investment Consultant(s), the Investment Manager(s), and the custo-

dial bank(s). In doing so, the staff will:

- Manage OP&F assets under its care and/or control in accordance with this Policy's objectives and guidelines set forth herein.
- Implement Board decisions regarding asset allocation, investment structure, Investment Manager(s) selection, and portfolio rebalancing procedures.
- Coordinate the Investment Manager(s) selection, evaluation, and retention decisions for the Plan's investments, consistent with OP&F's Investment Manager Search Policy.
- Monitor both internally and externally managed assets to ensure compliance with guidelines set forth in this Policy.
- Establish a process to promptly vote all proxies and related actions in a manner consistent with OP&F's long-term interests and objectives set forth herein and OP&F's Proxy Voting Policy. Maintain detailed records of said voting of proxies and related actions and comply with all regulatory objectives related thereto.
- Manage the overall liquidity in the Total Portfolio to ensure timely payment of member benefit payments and Plan expenses and the investment of contributions consistent with established asset allocation and portfolio rebalancing policies.
- Report to the Board at least quarterly regarding the status of the Total Portfolio and its performance for various time periods. Meet with the Board at least annually to report on their performance and compliance with goals and objectives.
- Acknowledge and agree in writing to their fiduciary responsibility to fully comply with this Policy set forth herein, and as modified in the future.

### **C. Investment Consultant(s)**

The Investment Committee/Board of Trustees may retain an investment consulting organization or organizations (the Investment Consultant(s)) to assist in the overall strategic investment direction of the Total Portfolio and its implementation. Each such Investment Consultant(s), in recognition of its role as a fiduciary of the Plan, will assume specific duties. These duties shall generally include the following:

- Provide independent and unbiased information.
- Assist in the development of this Policy.
- Monitor compliance with this Policy.
- Assist in the development and recommendation of strategic asset allocation targets, investment structure, and rebalancing procedures.
- Assist in development of performance measurement standards.
- Assist in the Investment Manager(s) search and selection process consistent with OP&F's Investment Manager Search Policy.
- Monitor, evaluate and report to the Board on Total Portfolio and Investment Manager (s) performance on an ongoing basis.
- Conduct due diligence when an Investment Manager(s) fails to meet a standard.
- Establish a procedural due diligence search process.
- Promptly inform the Board and staff in writing regarding all changes of a material nature pertaining to the firm's organization and professional staff.
- If directed, promptly vote all proxies and related actions in a manner consistent with OP&F's long-term interests and objectives set forth herein and OP&F's Proxy Voting Policy. Each Investment Manager(s) designated to vote shall keep detailed records of said voting of proxies and related actions and will comply with all regulatory obligations related thereto.
- Provide reporting to the Board or staff or Investment Consultant(s) quarterly regarding the status of the portion of the Total Portfolio managed by the Investment Manager(s) and its performance for various time periods. Meet with the Board or staff or Investment Consultant(s) annually or as needed to report on their performance and compliance with goals and objectives.
- Acknowledge and agree in writing to their fiduciary responsibility to fully comply with this Policy set forth herein, and as modified in the future.

#### D. Investment Manager(s)

The Investment Committee/Board of Trustees may, from time to time, cause the Plan to retain one or more qualified investment managers (Investment Manager(s)) to manage a portion of the Plan assets. When applicable, the Investment Committee/Board of Trustees shall approve each Investment Manager(s) guidelines, which may set forth the purpose, Investment Manager(s) philosophy and approach, authorized investments, prohibitions, typical portfolio characteristics, performance objectives and evaluation, and Investment Manager(s) communications. The Investment Manager(s) have certain responsibilities that include the following:

- Manage OP&F assets under its care, custody, where applicable, and/or control in accordance with this Policy's objectives and guidelines set forth herein and its governing agreement with OP&F.
- Exercise full investment discretion over the assets in their care within the guidelines set forth in this Policy and, where applicable, the specific guidelines established for the Investment Manager(s) in the governing agreements with OP&F.
- Constructing a portfolio of securities that reflects the execution of a specific investment strategy.

#### E. Office of the Ohio Treasurer/Board of Deposit/Custodian(s)

Per Section 742.11 of the ORC, the Treasurer of the State of Ohio (the Treasurer of State) is designated as custodian of investment assets. As custodian, the Treasurer of State or its designee (as described below) will be responsible for holding and safekeeping Plan assets, settling purchases and sales of securities; and identifying and collecting income which becomes due and payable on assets held. The Treasurer of State may engage a qualified bank or trust company, as authorized agent of the Treasurer of State, to perform certain services on behalf of the Treasurer of State to fulfill its responsibilities as custodian.

### III. ASSET ALLOCATION AND REBALANCING

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

The procedure for determining the allocation will consider the relevant characteristics of the liabilities and potential

assets of OP&F. The liability considerations shall include, but not be limited to, current and expected future values of the benefits, contributions and total assets. These factors are important for identifying the investment horizon of OP&F and its cash flow requirements. The asset characteristics considered shall include, but not be limited to, the potential return relative to the potential risk, and diversification characteristics.

The asset allocation must be consistent with the investment standards specified in ORC Section 742.11.

The risk/return characteristics of OP&F shall be reviewed on a periodic basis (no less than every five years) through a comprehensive asset liability valuation study. The goal of the study shall be to formulate an Asset Allocation Policy which maximizes return while minimizing overall risk through the most efficient combination of acceptable asset classes under the prudent person standard.

Based on an asset liability valuation study, which analyzed the expected returns, risk and correlations of various asset classes, projected liabilities and the risks associated with alternative asset mix strategies, the Board has established the following Asset Allocation Policy:

Asset Class	Long-Term Target Allocation– Notional Exposure	Range
Domestic Equity	18.5%	±5.5%
Non-U.S. Equity	18.5%	±5.5%
<b>Total Equity</b>	<b>37.0%</b>	<b>±5.5%</b>
Core Fixed Income	23.0%	±7.0%
Global Inflation Protected Securities	13.0%	±4.0%
High Yield	15.0%	±4.5%
<b>Total Fixed Income</b>	<b>51.0%</b>	<b>±7.5%</b>
Real Estate	12.0%	±3.5%
Private Markets	8.0%	±2.5%
Timber	5.0%	±2.0%
Master Limited Partnerships (MLP or MLPs)	5.0%	±1.5%
<b>Total Alternatives</b>	<b>30.0%</b>	<b>±6.0%</b>
Cash Equivalents	0.0%	±0.5%
<b>TOTAL</b>	<b>118.0%</b>	

Asset Class	Long-Term Target Allocation–Market Value
Domestic Equity	18.5%
Non-U.S. Equity	18.5%
Core Fixed Income	11.5%
Global Inflation Protected Securities	6.5%
High Yield	15.0%
Real Estate	12.0%
Private Markets	8.0%
Timber	5.0%
MLPs	5.0%
Cash Equivalents	0.0%
<b>TOTAL</b>	<b>100.0%</b>

The most recent study has shown that this is a favorable asset mix for meeting longer-term goals under multiple market conditions. In addition, this study incorporates the “risk parity” concept into OP&F’s asset liability valuation with the goal of reducing equity risk exposure, which reduces overall Total Portfolio risk without sacrificing return, and creating a more risk-balanced portfolio based on the relationship between asset classes and economic environments. From the notional portfolio perspective above, the Total Portfolio shall be levered at 1.18 times due to the application of leverage to certain fixed income asset classes.

The Asset Allocation Policy represents a long-term strategy and thus, the Total Portfolio should strategically meet its performance objectives in the long-term but not necessarily every year.

Short term market shifts may cause the asset mix to drift from the allocation targets. Should the target percentage fall out of the indicated range for a particular asset class, the staff shall direct rebalancing transactions to reallocate assets from the over-allocated asset class to the under-allocated asset class. This rebalancing discipline is intended to encourage “buying low” and “selling high” and to keep the Total Portfolio invested at an appropriate overall risk level. Except when there is a perceived extraordinary downside risk in a particular asset class, movement outside the normal ranges should be avoided. Investments in private markets and private real assets (real estate and timber) are generally less liquid than investments in public markets securities and are typically implemented via periodic commitments to funds with limited partnership structures. As a result, actual allocations to these asset classes may deviate from their strategic targets for extended periods. Actual vs. target deviations for these asset classes shall not be considered in violation of the Asset Allocation Policy. Under/overweights to these asset classes shall be invested in public markets securities with the most similar risk/return characteristics as a short-term proxy for the private asset classes.

To assist in rebalancing, OP&F may retain a derivative overlay Investment Manager(s) which may provide several benefits including: (1) reduce OP&F's tracking error relative to our target allocations; (2) improve Total Portfolio returns; and (3) reduce the administrative burden associated with management of monthly cash flows.

The Board may adopt interim Asset Allocation Policy target allocations to reflect the transition from previous policy target allocations to new policy target allocations. The interim target allocations will reflect dollar cost averaging and/or opportunistic implementation to most prudently reach the new policy target allocations.

#### IV. INVESTMENT IMPLEMENTATION

The implementation of an investment portfolio designed to achieve the Total Portfolio objectives must be consistent with governing statutes as specified in Sections 742.11 to 742.113, 742.114, 742.116 and with the Ohio-Qualified Investment Manager Policy, the Ohio-Qualified Broker Policy, and OP&F's Broker Policy.

Where appropriate, OP&F will invest assets through the use of qualified Investment Manager(s). The allocations to these Investment Manager(s) will be made in accordance with the results of the asset liability valuation study, investment structure analysis, and established procedures.

For a complete description of the selection of Investment Manager(s), please see OP&F's Investment Manager Search Policy.

#### V. ASSET CLASS OBJECTIVES, CHARACTERISTICS AND INVESTMENT STRUCTURE

Investment structure targets will be established within applicable asset classes to address risk and return factors present in the respective asset class. For example, the domestic equity composite portfolio structural targets will be established to ensure style (growth vs. value) and market capitalization neutrality relative to the overall market, and to address active versus passive implementation decisions. External Investment Manager(s) will be hired to implement the structural targets in a diversified manner and will therefore have derived target weightings within the overall investment program. These are set forth below.

##### A. Domestic Equity

###### *Investment Objectives*

Total return of the domestic equity composite portfolio should exceed the return of the Wilshire 5000 Index over a three-year period on an annualized basis. Total return of

each Investment Manager(s) portfolio should rank above the median when compared to their peer group, if applicable, over a three-year period on an annualized basis and should exceed their benchmark return as specified in each Investment Manager(s) guidelines.

###### *Investment Characteristics*

The main focus of investing will be on companies headquartered and/or domiciled in the United States. The domestic equity composite portfolio shall have similar portfolio characteristics as that of the Wilshire 5000 Index, and should not exhibit any size (market capitalization) or style (value vs. growth) bias.

###### *Investment Structure*

The structure of the domestic equity composite portfolio will be diversified among passive and active investment strategies as follows:

##### 1. *Passive Large Capitalization Core Exposure*

The passive large capitalization core component has a target allocation of 45 percent of the domestic equity composite portfolio. This passive portfolio is intended to provide broad market exposure for and diversification to OP&F's domestic equity composite portfolio through holdings in large capitalization equities or futures and is to be constructed so as to match the characteristics and return of the Russell 1000 Index.

##### 2. *Active Large Capitalization Alpha Transfer Exposure*

The active large capitalization alpha transfer component has a target allocation of 30 percent of the domestic equity composite portfolio, comprised of 10 percent to global macro strategies, 10 percent to market neutral strategies, and 10 percent to active currency strategies. The overall objective is to provide risk-adjusted returns greater than the return of the Standard & Poor's (S&P) 500 Index. S&P 500 market exposure, obtained through the use of derivatives and/or physicals, will be combined with strategies that represent diversified sources of alpha with a broad range of risk characteristics. For a complete description of the appropriate use of derivatives, please see OP&F's Derivatives Policy Statement.

##### 3. *Active Small/Mid Capitalization Core Exposure*

The active small/mid capitalization core component has a target allocation of 25 percent of the domestic equity composite portfolio, comprised of 13 percent to active mid capitalization core strategies and 12 percent to active small capitalization core strategies.

## B. Non-U.S. Equity

### *Investment Objectives*

Total return of the Non-U.S. equity composite portfolio should exceed the return of the Morgan Stanley Capital International All Country World ex-U.S. Index – Iran and Sudan Free (MSCI ACWI-ex U.S. I/S Free) over a three-year period on an annualized basis. Total return of each Investment Manager(s) portfolio should rank above the median when compared to their peer group, if applicable, over a three-year period on an annualized basis and should exceed their benchmark return as specified in each Investment Manager(s) guidelines.

### *Investment Characteristics*

The main focus of investing will be on companies headquartered or domiciled in the MSCI ACWI-ex U.S. countries, which includes both developed and emerging markets. The Non-U.S. Equity composite portfolio shall have similar portfolio characteristics as that of the MSCI ACWI-ex U.S. I/S Free.

### *Investment Structure*

Non-U.S. equity assets will be managed solely on an active basis in order to exploit the perceived inefficiencies in the Non-U.S. equity markets. The structure of the Non-U.S. equity composite portfolio will be diversified among active all capitalization ACWI-ex U.S. strategies and dedicated ACWI-ex U.S. small capitalization strategies as follows:

1. *Active All Capitalization ACWI-ex U.S. Exposure*  
The Active All Capitalization ACWI-ex U.S. component has a target allocation of 75 percent of the Non-U.S. equity composite portfolio.
2. *Active ACWI-ex U.S. Small Capitalization Exposure*  
The dedicated Active ACWI-ex U.S. Small Capitalization component has a target allocation of 25 percent of the Non-U.S. equity composite portfolio.

## C. Fixed Income

### 1. Core

The investment objectives, characteristics and structure of this newly adopted class of investments will be established per the Investment Committee/Board of Trustees adoption of an updated fixed income investment structure.

### 2. Global Inflation Protected Securities (GIPS)

#### *Investment Objectives*

Total return of the GIPS composite portfolio should exceed the return of a custom weighted-average mix of the Barclays country indexes within the Global Inflation-

Linked Bond Index over a three-year period on an annualized basis. Total return of each Investment Manager(s) portfolio should exceed their benchmark return as specified in each Investment Manager(s) guidelines. In addition, there is an alpha transfer component to the GIPS composite portfolio whereas the overall objective is to provide risk-adjusted returns greater than the return of the custom weighted-average mix of the Barclays country indexes within the Global Inflation-Linked Bond Index.

#### *Investment Characteristics*

The main focus of investing will be a diversified mix of global inflation-linked securities of the Barclays country index within the Global Inflation-Linked Bond Index. The GIPS composite portfolio, as well as each Investment Manager(s) portfolio, shall have similar portfolio characteristics as that of a custom weighted-average mix of the Barclays country indexes within the Global Inflation-Linked Bond Index.

#### *Investment Structure*

GIPS assets will be managed solely on an active basis in order to exploit the perceived inefficiencies in inflation protected securities markets. Given the long GIPS allocation target set forth in the Asset Allocation Policy above, the GIPS composite portfolio will be levered approximately 2.0x. GIPS exposure, obtained through the use of derivatives and/or physicals, will be combined with a strategy that provides a diversified source of alpha with customized risk tolerances. Implementation of the GIPS composite portfolio will be consistent with OP&F's Derivatives Policy Statement, which provides a complete description of the appropriate use of derivatives in the Plan.

### 3. Investment Grade

The investment grade composite portfolio represents an existing portfolio that will eventually be liquidated and/or converted into the newly adopted Core Fixed Income allocation based on the Asset Allocation and Rebalancing set forth in Section III of this Policy.

#### *Investment Objectives*

While in existence, total return of the investment grade composite portfolio should exceed the return of the Barclays Aggregate Index over a three-year period on an annualized basis. Total return for each Investment Manager(s) portfolio should rank above the median when compared to their peer group, if applicable, over a three-year period on an annualized basis and should exceed their benchmark return as specified in each Investment Manager(s) guidelines.

*Investment Characteristics*

While in existence, the main focus of investing will be on dollar denominated fixed income securities. The investment grade composite portfolio as well as each Investment Manager(s) portfolio shall have similar portfolio characteristics as that of the Barclays Aggregate Index.

*Investment Structure*

While in existence, investment grade assets will be managed solely on an active basis in order to exploit the perceived inefficiencies in the investment grade fixed income markets.

**4. Commercial Mortgages**

The commercial mortgage composite portfolio represents an existing portfolio that is being liquidated over time.

*Investment Objectives*

While in existence, total return of the commercial mortgage composite portfolio should exceed the return of the Barclays Mortgage Index, it being understood that both the return for the Commercial Mortgage composite portfolios and Barclays Mortgage Index are lagged one quarter.

*Investment Characteristics*

While in existence, the main focus of investing will be on commercial mortgage whole loans which provide for fixed income payments derived from underlying property cash flows. Risk shall be controlled through diversification strategies and the retention of qualified Investment Manager(s) with acceptable loan underwriting and/or commercial mortgage acquisition experience.

*Investment Structure*

While in existence, commercial mortgage assets will be managed solely on an active basis in order to exploit the perceived inefficiencies in the commercial mortgage market. OP&F will utilize commingled fund investments to manage its commercial mortgage allocation.

**D. High Yield**

*Investment Objectives*

Total return of the high yield fixed income composite portfolio should exceed the return of the CS First Boston High Yield Index, Developed Countries Only over a three-year period on an annualized basis. Total return of each Investment Manager(s) portfolio should rank above the median when compared to their peer group, if applicable, over a three-year period on an annualized basis and should exceed their benchmark return as specified in each Investment Manager(s) guidelines.

*Investment Characteristics*

The main focus of investing will be on below investment grade fixed income securities, those securities rated below BBB- or equivalent, issued by U.S. corporations. The high yield fixed income composite portfolio shall have similar portfolio characteristics as that of the CS First Boston High Yield Index, Developed Countries Only. Each Investment Manager(s) portfolio shall have similar portfolio characteristics as that of their respective benchmark.

*Investment Structure*

High yield fixed income assets will be managed solely on an active basis in order to exploit the perceived inefficiencies in the high yield fixed income markets and to minimize the probability of exposure to securities in default.

**E. Real Estate**

*Investment Objectives*

The primary role of real estate in the Total Portfolio is to provide: (i) an inflation hedge, (ii) diversify the Total Portfolio by providing a return that has a low or negative correlation with stock and bond returns and (iii) provide a total return that is competitive on a risk-adjusted basis with stocks and bonds and is accretive to OP&F achieving its long-term target rate of return. The return target for the real estate composite portfolio is set forth in OP&F's Real Estate Strategic Plan.

*Investment Characteristics*

Investments will adhere to certain risk management and diversification criteria set forth in OP&F's Real Estate Strategic Plan.

*Investment Structure*

The target allocation of Total Portfolio assets to real estate will be established by OP&F's long-term Asset Allocation Policy. In order to meet this allocation target, it will generally be necessary to make commitments in excess of the target because of the contribution and distribution cash flow characteristics inherent in the underlying real estate investments.

**F. Private Markets**

*Investment Objectives*

The private markets composite portfolio is designed to provide an attractive risk-adjusted rate of return to OP&F. The performance objective for the private markets composite portfolio and for individual investments is set forth in OP&F's Private Markets Investment Policy.

*Investment Characteristics*

Investments will be diversified by certain criteria as set forth in OP&F's Private Markets Investment Policy.



*Investment Structure*

OP&F may utilize any of the following types of vehicles in implementing the private markets composite portfolio: fund-of-funds, partnerships, limited liability companies or group trusts. OP&F may also participate in secondary offerings or purchase private markets placements from other investors on the secondary market. Annual commitment targets to such investments will be established by OP&F's Private Markets Investment Plan. As stated in OP&F's Private Markets Investment Policy, in order to meet the target allocation of Total Portfolio assets to private markets investments, it will generally be necessary to make commitments in excess of the target because of the contribution and distribution cash flow characteristics inherent in the underlying individual private markets investments.

**G. Timber***Investment Objectives*

The primary performance objective, along with the strategic objectives, of the timber composite portfolio will be set forth in OP&F's Timberland Investment Policy.

*Investment Characteristics*

Investments will be diversified by certain criteria as set forth in OP&F's Timberland Investment Policy.

*Investment Structure*

The target allocation of Total Portfolio assets to timber will be established by OP&F's long-term Asset Allocation Policy. In order to meet this allocation target, it will generally be necessary to make commitments in excess of the target because of the contribution and distribution cash flow characteristics inherent in the individual timberland investments, with the exception of investments in timberland-focused public Real Estate Investment Trusts (REITs) or exchange traded funds.

**H. Master Limited Partnerships (MLPs)***Investment Objectives*

Total return of the MLP composite portfolio should exceed the return of the Alerian MLP Index over a three-year period on an annualized basis. Total return of each Investment Manager(s) portfolio should rank above the median when compared to their peer group, if applicable, over a three-year period on an annualized basis and should exceed their benchmark return as specified in each Investment Manager(s) guidelines.

*Investment Characteristics*

The main focus of investing will be on publicly traded partnership units of energy-focused MLP companies. The MLP composite portfolio as well as each Investment Manager(s) portfolio shall have similar portfolio characteristics as that of the Alerian MLP Index.

*Investment Structure*

MLP assets will be managed solely on an active basis in order to exploit the perceived inefficiencies in the MLP publicly-traded partnership markets.

**I. Cash Equivalents***Investment Objectives*

Total return of the cash equivalents composite portfolio should exceed the 91-day Treasury Bill rate of return over rolling twelve-month periods. To provide effective cash management when investing cash balances, emphasis is placed on the protection of principal through the purchase of higher quality money market instruments, while at the same time attempting to achieve the highest available return.

*Investment Characteristics*

Authorized investments, minimum short-term credit ratings, portfolio concentration limits and maturity limits for the short-term investment fund (STIF) shall be set forth in OP&F's Short-Term Cash Management Policy. In addition, the frequency of credit reviews of approved issuers of commercial paper will be based on the short-term credit rating of the issuer and set forth in OP&F's Short-Term Cash Management Policy.

*Investment Structure*

Staff is responsible for the cash management function, which is described in OP&F's Short-Term Cash Management Policy.

**VI. PROXY VOTING**

OP&F's Board of Trustees believes that common stock proxies are valuable and should be voted in the long-term interests and objectives of the Plan set forth herein and OP&F's Proxy Voting Policy. Common stock proxies may be executed by the Sr. Investment Officer or the Chief Investment Officer, or their designees. Staff or their designee that exercises a proxy vote shall keep detailed records of said voting of proxies and related actions and will comply with all regulatory obligations related thereto and the policies set forth in OP&F's Proxy Voting Policy. Staff shall provide a semi-annual summary report of proxy voting actions to the Investment Committee/Board of Trustees.

**VII. SECURITIES LENDING**

The investment objective for the securities lending program is to generate incremental income within a high quality investment program that safeguards the return of principal, maintains adequate daily liquidity, ensures diversification and tightly controls exposure to fluctuating interest rates. The program may be operated by a bank trustee or a third party lending agent. Marking to market

shall be performed daily by the agent(s) and a minimum average of at least 102 percent for domestic, and 105 percent for Non-U.S. collateral shall be diligently maintained. Securities lending reports shall be provided monthly by the agent(s) to staff. Staff will present a semi-annual summary report to the Investment Committee/Board of Trustees.

### VIII. INVESTMENT MANAGER MONITORING AND EVALUATION POLICY

The purpose of OP&F's Investment Manager Monitoring and Evaluation Policy is to establish the process and discipline for managing the Investment Manager(s) relationship. The policy states the process, responsibilities and important factors for consideration in the monitoring and evaluation process. For a complete description of the monitoring and evaluation process, please see OP&F's Investment Manager Monitoring and Evaluation Policy.

### IX. COMMUNICATIONS

Each Investment Manager(s) will provide hard copy reports at least quarterly, including performance measurement, asset inventories, transaction summaries, market commentary or anything else deemed significant at the time of reporting. Each Investment Manager(s) is expected to meet with OP&F's Board or staff or Investment Consultant(s) annually or as needed.

### X. INVESTMENT MANAGER SEARCH POLICY

When applicable, the selection of Investment Manager(s) will be conducted under a Request for Proposal (RFP) process and the search may be on a closed or open manager universe basis. For a complete description of the selection of Investment Manager(s), please see OP&F's Investment Manager Search Policy.

### XI. SECURITIES LITIGATION POLICY

The Securities Litigation Policy has been adopted to ensure that OP&F takes prudent, effective, appropriate, and efficient actions to protect and increase the value of OP&F investments and to ensure that OP&F receives all money or assets which are due it as a result of the resolution of class action suits in a cost effective manner consistent with the Board's fiduciary duties. For a complete description of the policy objectives, monitoring, reporting requirements and procedures, please see OP&F's Securities Litigation Policy.

### XII. IRAN AND SUDAN DIVESTMENT POLICY

As required by uncodified provisions of Chapter 742 of the ORC, OP&F has adopted an Iran and Sudan Divestment Policy, the purpose of which is to divest and restrict the purchase of stocks and bonds issued by a publicly traded company with scrutinized business operations in Iran and Sudan, subject to the fiduciary responsibilities of the Board of Trustees. For a complete description of the responsibilities, process, reporting requirements, etc., please see OP&F's Iran and Sudan Divestment Policy.

2012 Comprehensive Annual Financial Report

# Actuarial Section

Ohio Police & Fire Pension Fund

Report of Actuary  
Description of Actuarial Assumptions and Methods  
Plan Summary – Summary of Benefit and Contribution Provisions  
Analysis of Financial Experience – Pension Trust Fund  
Short-Term Solvency Test – Pension Trust Fund  
Active Member Valuation Data  
Retirees and Beneficiaries Added to and Removed from Rolls – Pension Trust Fund  
Short-Term Solvency Test – Health Care Trust Fund  
Retirees and Beneficiaries Added to and Removed from Rolls – Health Care Trust Fund  
Analysis of Financial Experience – Health Care Trust Fund



140 East Town Street • Columbus, Ohio 43215  
[www.op-f.org](http://www.op-f.org) • 1-888-864-8363

## Report of Actuary



A Xerox Company

Oct. 24, 2012

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

Members of the Board:

Ohio Police & Fire retained Buck Consultants, LLC (Buck) to complete this actuarial valuation of the Ohio Police & Fire Pension Fund (OP&F). This report presents the results of the annual actuarial valuation of the assets and liabilities of OP&F as of Jan. 1, 2012, prepared in accordance with Chapter 742 of the Ohio Revised Code (ORC). The valuation takes into account all of the promised benefits to which members are entitled, including pension and survivor benefits.

The principal results of the valuation do not take into account Medicare Part B premium reimbursements or any other health care benefits. However, at the request of the Ohio Retirement Study Council (ORSC), supplemental results have been prepared that do take into account Medicare Part B premium reimbursements and are presented in Table 1A in the report.

The purpose of the valuation is to determine the financial status of OP&F on an actuarial basis and to provide disclosure information in accordance with and in compliance with the parameters set forth in Governmental Accounting Standards Board (GASB) Statements No. 25. (Buck prepares a separate valuation of OP&F retiree health care benefits in accordance with and in compliance with the parameters set forth in Statement No. 43.) Use of this report for any other purpose may not be appropriate and may result in mistaken conclusions due to failure to understand applicable assumptions methodologies, or inapplicability of the report for that purpose. No one may make any representations or warranties based on any statements or conclusions contained in this report without the written consent of Buck.

The valuation was based on the actuarial assumptions and methods that have been adopted by the Board of Trustees, including a valuation interest rate of 8¼ percent per annum compounded annually. The assumptions and methods were recommended by the actuary and were based on a five-year experience and extent of future mortality improvements be considered. We have reflected future mortality improvement in this valuation.

### Assets and Membership Data

OP&F reported to the actuary the individual data for members as of the valuation date. While we did not verify the data at their source, we did perform tests for internal consistency and reasonableness. The amount of assets in the pension trust fund taken into account in the valuation was based on financial statements prepared for us by OP&F.

### Funding Objectives and Progress

The actuary uses an actuarial cost method to determine the portion of OP&F's liabilities accrued by the members as of the valuation date and the portion that is attributable to future years of service. The rate of contribution necessary to systematically fund the future service liabilities, the normal cost rate, is calculated under the cost method to be a level percentage of active member payroll. The portion of the liabilities accrued as of the valuation date, the actuarial accrued liability (AAL), is compared to a market-related, actuarial value of OP&F's assets. The

amount of liabilities in excess of the assets is called the unfunded actuarial accrued liability (UAAL).

The total of Deferred Retirement Option Plan (DROP) accruals reported as of Dec. 31, 2011 was \$1.288 billion. It should be noted that the financial statements prepared by OP&F treats the balance of DROP accruals as a benefit payable, which is subtracted from (i.e., not included in) the net asset value. For consistency with this exclusion from the asset value, the AAL also has been reduced by the same amount. By treating the DROP accruals as a benefit payable, and excluding the accruals from both the liabilities and the assets, the UAAL is the same as if both the assets and liabilities included the DROP accruals.

The actuary determines how many years are required by OP&F to completely amortize the UAAL (the funding period), using the member and employer contributions reduced by the amount allocated to health care and the amount of normal cost for the year. For 2012, and each year since 2003, the funding period is infinite years, meaning the annual contribution toward the unfunded when compared to the unfunded amount is not sufficient to pay it off. The infinite funding period is attributable to an increase in the unfunded amount due to less than assumed investment performance, the level of funding (contributions to OP&F), and other adverse experience. It should be noted that an infinite funding period does not mean that OP&F is insolvent. Readers of this report are encouraged to not equate the two concepts.

Section 742.16 of the ORC, as adopted by Senate Bill No. 82, sets forth an objective that the funding period is no more than 30 years. If the funding period exceeds 30 years, a plan shall be developed and presented by the Board of Trustees to reduce the funding period to not more than 30 years. The Board of Trustees presented such a plan to the ORSC in February 2011.

On Sept. 26, 2012, Governor John Kasich signed Ohio Senate Bill 340, which is based on the plan presented by the Board of Trustees. The impact of Senate Bill 340 is not reflected in this valuation and will be reflected in future valuations and analysis.

The funded ratio (i.e., the ratio of actuarial assets to the AAL) determined as of Jan. 1, 2012 is 63.1 percent, compared to 69.4 percent determined as of Jan. 1, 2011. Taking into account the Medicare Part B premium reimbursements, the funded ratio would be 61.4 percent.

#### **Financial Results and Membership Data**

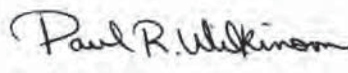
The valuation report shows detailed summaries of the financial results of the valuation and membership data used in preparing this valuation. The actuary prepared supporting schedules included in the Actuarial and Statistical Sections of the OP&F Comprehensive Annual Financial Report. The actuary prepared the trend data schedules included in the Financial Section of the OP&F Comprehensive Annual Financial Report.

The undersigned are qualified actuaries who completed the valuations in accordance with accepted actuarial procedures as prescribed by the Actuarial Standards Board. They are members of the American Academy of Actuaries and are experienced in performing actuarial valuations of public employee retirement systems. To the best of our knowledge, this report is complete and accurate and has been prepared in accordance with generally accepted actuarial principles and practice.

Respectfully submitted,



Larry Langer, FCA, ASA, EA, MAAA  
Principal, Consulting Actuary



Paul R. Wilkinson, ASA, EA, MAAA  
Director, Consulting Actuary

## Description of Actuarial Assumptions and Methods

### Assumptions

The actuarial assumptions were adopted as of Jan. 1, 2012, based on a five-year experience review covering the period 2007-2011. The next review of the actuarial assumptions is to be completed for adoption with the Jan. 1, 2017 valuation.

#### Interest Rate

8.25 percent per annum, compounded annually.

#### Salary Increase Rates

Assumed annual salary increases are as follows:

Years of Service	Salary Increase Rate
Less than 1	11.00%
1	9.50%
2	8.50%
3	6.50%
4	5.00%
5 or more	4.25%

#### DROP Interest Rate

4.50 percent per annum, compounded annually.

#### Withdrawal Rates

The following sample withdrawal rates are based on age and service (for causes other than death, disability, or retirement).

#### Police

Age	Years of Service										
	0	1	2	3	4	5	6	7	8	9	10+
25	10.3%	6.3%	3.5%	4.4%	3.9%	2.2%	2.1%	2.0%	1.8%	1.8%	1.5%
30	10.4%	5.8%	4.4%	3.5%	3.2%	3.0%	2.9%	2.5%	2.2%	1.8%	1.5%
35	13.0%	5.3%	3.2%	3.8%	3.5%	3.4%	3.2%	3.1%	2.5%	1.7%	1.3%
40	14.0%	6.0%	4.6%	4.5%	4.1%	3.9%	3.3%	3.2%	1.8%	1.5%	0.9%
45	16.0%	6.3%	6.1%	5.9%	5.2%	4.3%	3.5%	3.5%	2.1%	1.2%	0.8%
50	18.0%	8.3%	8.1%	7.5%	6.5%	5.3%	4.1%	4.0%	3.9%	3.1%	1.5%
55	20.0%	12.0%	10.0%	9.4%	8.0%	6.5%	5.2%	5.1%	4.9%	4.5%	1.7%
60	20.0%	12.0%	10.0%	9.4%	8.0%	6.5%	5.2%	5.1%	4.9%	4.5%	1.7%

#### Firefighters

Age	Years of Service										
	0	1	2	3	4	5	6	7	8	9	10+
25	2.8%	2.2%	1.6%	1.5%	1.2%	1.1%	1.0%	1.0%	0.9%	0.9%	0.8%
30	3.8%	1.6%	1.8%	1.7%	1.6%	1.3%	1.2%	1.1%	1.0%	1.0%	0.9%
35	4.2%	3.4%	2.1%	2.0%	1.9%	1.4%	1.3%	1.25%	1.1%	0.9%	0.8%
40	4.5%	3.6%	2.2%	2.1%	2.0%	1.5%	1.4%	1.3%	1.2%	1.0%	0.6%
45	4.6%	3.8%	2.7%	2.6%	2.5%	1.9%	1.6%	1.4%	1.3%	1.1%	0.5%
50	6.1%	4.4%	4.0%	3.8%	3.5%	2.7%	2.4%	2.2%	2.1%	1.5%	1.1%
55	6.1%	5.0%	5.0%	5.0%	4.0%	3.5%	2.4%	2.2%	2.0%	1.5%	1.1%
60	6.1%	5.0%	5.0%	5.0%	4.0%	3.5%	2.4%	2.2%	2.0%	1.5%	1.1%

**Rates Of Disability**

The following are sample rates of disability and occurrence of disability by type:

Age	Police	Firefighters
20	.002%	.004%
30	.255%	.063%
40	.732%	.454%
50	1.126%	.891%
55	.933%	1.350%
60	.966%	1.331%
64	1.441%	3.126%
<hr/>		
On-duty permanent and total	23%	
On-duty partial	61%	
Off-duty ordinary	16%	

**Retirement Rates**

The following rates of retirement apply to members not in DROP.

Age	Police	Firefighters
48	10%	10%
49-52	5%	5%
53-54	11%	5%
55-57	11%	10%
58-59	5%	13%
60	15%	20%
61	25%	20%
62	25%	50%
63	25%	20%
64	25%	25%
65-69	35%	25%
70	100%	100%

**Deferred Retirement Option Plan Elections**

90 percent of members who do not retire when first eligible are assumed to elect DROP.

**DROP RETIREMENT RATES** The following rates of retirement apply to members in DROP.

Age	Police - Years in DROP								
	0	1	2	3	4	5	6	7	8
48	5%								
49	5%	5%							
50	4%	5%	5%						
51	4%	5%	5%	10%					
52	4%	5%	5%	10%	10%				
53	4%	5%	5%	10%	10%	12%			
54	4%	5%	5%	10%	10%	12%	14%		
55	5%	5%	5%	15%	15%	12%	17%	30%	
56	5%	5%	5%	15%	15%	12%	17%	30%	100%
57	5%	5%	5%	15%	15%	12%	17%	30%	100%
58	5%	5%	5%	15%	15%	12%	17%	30%	100%
59	16%	5%	5%	15%	16%	15%	18%	32%	100%
60	16%	5%	5%	15%	16%	15%	18%	32%	100%
61	16%	5%	5%	15%	16%	15%	18%	32%	100%
62	16%	5%	5%	15%	16%	15%	18%	32%	100%
63	16%	5%	5%	15%	16%	15%	18%	32%	100%
64	19%	5%	5%	17%	17%	16%	19%	35%	100%
65-69	19%	5%	5%	17%	17%	16%	19%	35%	100%
70	100%	100%	100%	100%	100%	100%	100%	100%	100%

Age	Firefighters - Years in DROP								
	0	1	2	3	4	5	6	7	8
48	2%								
49	4%	3%							
50	4%	3%	3%						
51	4%	3%	3%	10%					
52	4%	3%	3%	10%	12%				
53	4%	3%	3%	10%	12%	13%			
54	4%	3%	3%	10%	12%	13%	15%		
55	5%	3%	3%	12%	12%	13%	17%	27%	
56	5%	3%	3%	12%	12%	13%	17%	27%	100%
57	5%	3%	3%	12%	12%	13%	17%	27%	100%
58	5%	3%	3%	17%	16%	15%	20%	35%	100%
59	6%	3%	3%	17%	16%	15%	20%	35%	100%
60	6%	3%	3%	17%	16%	15%	20%	35%	100%
61	6%	3%	3%	17%	16%	15%	20%	35%	100%
62	6%	3%	3%	17%	16%	15%	20%	35%	100%
63	30%	3%	3%	20%	20%	20%	20%	40%	100%
64	30%	3%	3%	20%	20%	20%	20%	40%	100%
65-69	30%	3%	3%	20%	20%	20%	20%	40%	100%
70	100%	100%	100%	100%	100%	100%	100%	100%	100%

**Retirement Age for Inactive Vested Participants**

Commencement at age 48 and 25 years of service from full-time hire date, whichever is later.

**Mortality**

Rates of death are based on the RP2000 Combined Table, age-adjusted as follows. For active members, set back six-years. For disability retirements, set forward five years for police and three years for firefighters. For service retirements, set back zero years for police and two years for firefighters. For beneficiaries, set back zero years. The rates are applied on a fully generational basis, with a base year of 2009, using mortality improvement Scale AA.

**Credited Service**

Credited service on the valuation date, as provided by OP&F, includes all service credited under the plan, including service transferred from other municipal plans and purchased service. The valuation assumes future service will be credited at the rate of one year per worked, with no assumed future crediting of transferred service or purchased service.

**415 Limits**

Benefits are limited by the IRC Section 415, assumed to increase 3.25 percent per annum.

**Future Expenses**

The normal cost is increased by all administrative expenses budgeted, net of the State Subsidy received from the State of Ohio.

**Unknown Data for Members**

Same as those exhibited by members with similar known characteristics.

**Percent Married**

75 percent of active members are assumed to be married.

**Age of Spouse**

Wives are assumed to be three years younger than their husbands.

**Optional Form Election**

33 percent of service retirees and 10 percent of disability retirees are assumed to elect the 50 percent Joint and Survivor pension. If the joint annuitant predeceases the retiree, assume the retiree's benefit increases 17.65 percent.

**Dependent Parents**

Costs based upon allowance for mortality (same rates as for beneficiaries), but no specific allowance for change in dependency status.

**Dependent Children**

Each member is assumed to have two children, born when the member was age 26. Dependency is assumed to cease when the child is 22.

**Medicare Part B Premium Trend Rates**

The Medicare Part B premium subsidy (\$99.90 per month for 2012) is assumed to increase as follows:

Year	Increase
2012	5.70%
2013	5.60%
2014	5.50%
2015	5.40%
2016	5.30%
2017	5.20%
2018	5.10%
2019 and Later	5.00%

**Medicare Part B Premium Reimbursement**

90 percent of members are assumed to be eligible for reimbursement once they reach age 65.

**METHODS**

**Actuarial Cost Method**

Projected benefit method with individual level percentage entry age normal cost and AAL. Gains and losses are reflected in the accrued liability. To be consistent with the asset methodology employed by OP&F, DROP accruals are netted out of the liabilities.

**Asset Valuation Method**

A five-year moving average market value of assets that spreads the difference between the actual investment income and the expected income on the market value (based on the valuation interest rate) over a period of five years. The actuarial value shall not be less than 80 percent or more than 120 percent of market value.

**Payroll Growth**

Inflation rate of 3.25 percent plus productivity increase rate of 0.5 percent.



## DATA

### Census and Assets

The valuation was based on members of OP&F as of the valuation date and does not take into account future members. All census and asset data was supplied by OP&F.

## PLAN SUMMARY

### Summary of Benefit and Contribution Provisions

The following is intended to summarize the key provisions valued in this valuation. Members of OP&F and other parties should not rely on this summary as a substitute for or legal interpretation of the laws and rules covering this retirement plan.

### Purpose

OP&F was established by the Ohio General Assembly to provide pension and disability benefits to members of OP&F and eligible benefits to their surviving spouses, children and dependent parents.

### Administration

The administration, control and management of OP&F are vested in the Ohio Police & Fire Pension Fund's Board of Trustees which is comprised of the following nine members:

- Two active representatives of police departments.
- Two active representatives of fire departments.
- One retired firefighter.
- One retired police officer.
- Three statutory members—one appointed by the Governor of Ohio, one by the Ohio Treasurer of State, and one appointed jointly by the Ohio Senate President and the Ohio Speaker of the House—must have professional investment expertise.

The representatives of police and fire departments are elected to four-year terms by their respective members, with one police and one fire position being a retired member or surviving spouse.

### Membership

Membership in OP&F is mandatory under Ohio law for all full-time police officers employed by Ohio municipalities and appointed under the required statutory provisions. Full-time firefighters employed by municipalities, townships, villages, joint fire districts or other political subdivisions who are required to satisfactorily complete, or

have satisfactorily completed, a firefighter training course approved under former Section 3303.07, Section 4765.55 or conducted under Section 3737.33 of the ORC, are required to be OP&F members.

### Eligibility for Membership

Full-time police officers or firefighters are eligible for membership in OP&F immediately upon commencement of employment as a full-time police officer or firefighter.

### Contributions

Contributions are established by statute. Employers of police officers pay 19.5 percent of salary; employers of firefighters pay 24 percent of salary. Members contribute 10 percent of salary.

## BENEFITS

### Service Retirement

Upon attaining a qualifying age with sufficient service credit, a member of OP&F may retire and receive a lifetime monthly pension.

### Normal Service Retirement

#### Eligibility

Age 48 with 25 years of service credit.

#### Benefit

An annual pension equal to a percentage of the allowable average annual salary. The percentage equals 2.5 percent for each of the first 20 years of service, 2 percent for each of the next five years of service, and 1.5 percent for each year of service in excess of 25 years to a maximum of 72 percent of the allowable average annual salary. Allowable average annual salary means one-third of the total salary during the three years for which the total earnings were greatest.

### Service Commuted Retirement

#### Eligibility

15 years of service credit.

#### Benefit

Commencing at age 48 and 25 years have elapsed from full-time hire date, whichever is later; an annual pension equal to 1.5 percent of the allowable average annual salary multiplied by the number of full years of service.

### Age/Service Commuted Retirement

#### Eligibility

Age 62 and 15 years of service credit.

#### Benefit

The same formula as for the Normal Service Retirement benefit.

### Rights Upon Separation From Service

#### Deferred Pension

If a member meets the service credit requirement for any service retirement pension but leaves service before attaining the required age, a pension becomes payable upon attainment of the qualifying age and filing the appropriate paperwork with OP&F.

#### Refund of Employee Contributions

Upon separation from service, a member can receive the contributions that he or she made to the plan or the employee share of member contributions picked-up on the member's behalf by their employer. Employer contributions are not refundable.

#### Termination Before Retirement With 25 Years Service Credit

##### Benefit

Same as the Normal Service Retirement benefit, except benefit commences when member reaches age 48.

#### Termination Before Retirement With 15 Years Service Credit

##### Benefit

An annual amount equal to a percentage of allowable average annual salary, where the percentage equals 1.5 percent times full years of service. Benefit commences at the later of age 48 and 25 years have elapsed from the date of full-time hire.

#### Termination Before Retirement With Less Than 15 Years Service Credit Benefit

A lump sum amount equal to the sum of the member's contributions to OP&F.

### Deferred Retirement Option Plan Eligibility

Age 48 with 25 years of service credit.

#### Benefit

The Normal Service Retirement benefit is determined at the date of DROP entry and receives annual COLAs. DROP annual accrual is the sum of the Normal Service Retirement Benefit at DROP entry, with applicable COLA paid at DROP anniversary, member contributions credited to DROP and interest.

The interest rate is the 10 year U.S. Treasury Note Business Day Series, capped at a maximum of 5 percent. Prior to April 2, 2012, the interest rate was 5 percent.

Member contributions are credited based on the number of years of DROP service under the following schedule:

Years 1 and 2	50 percent of member's contributions (5 percent of pay)
Year 3	75 percent of member's contributions (7.5 percent of pay)
Years 4–8	100 percent of member's contributions (10 percent of pay)

The minimum participation in DROP, without penalty, is three years and the maximum is eight years. If a member terminates within the first three years of joining DROP, then the member forfeits all of their DROP interest. If a member chooses to continue working after eight years in DROP, the member forfeits all DROP benefits and receives the Normal Service Retirement benefit upon retirement, with service during the DROP period included.

At retirement, the member receives their Normal Service Retirement benefit determined at the time of DROP entry, with the COLA adjustment to date of retirement when eligible and the DROP account balance as a lump sum or monthly annuity.

If a member dies while participating in DROP, the member's surviving spouse, designated beneficiary or estate will receive the entire DROP account balance determined at the time of death. The surviving spouse or contingent dependent beneficiary will receive the greater of the retirement allowance made at the time of DROP entry or the Normal Service Retirement benefit paid with COLA adjustments to the date of death, paid as if the member had elected a 50 percent joint and survivor option at death. All other statutory death benefits will apply.

If the member becomes disabled while in DROP, and has not terminated employment, the member can choose either to receive a disability benefit or stay in DROP. If the member stays in DROP, the disability benefit is forfeited. If the member chooses the disability benefit, the member forfeits all DROP benefits and receives the disability benefit, with service during the DROP period included.

### Disability Benefits

Members who become unable to perform their official duties and whose earning capacities are impaired may qualify for disability benefits. Disability benefits are classified as either service-incurred (on-duty) or non-service-incurred (off-duty) and differ in eligibility requirements and benefit formulas. Annual medical evaluations are required for disability benefit recipients who would not have met the age and service requirements for a Normal Service Retirement, unless the Board of Trustees waives this requirement based upon an OP&F physician's certification that the disability is ongoing and further evaluation would not be cost effective.

Annual earnings statements are also required to be submitted to OP&F.

### Permanent and Total Disability (On Duty)

#### Eligibility

No age or service requirement.

#### Benefit

An annual benefit equal to 72 percent of allowable average annual salary.

### Partial Disability (On Duty)

#### Eligibility

No age or service requirement.

#### Benefit

An annual benefit fixed by the Board of Trustees to be a certain percent up to 60 percent of the allowable average annual salary. If the member has 25 or more years of service, the annual disability benefit is equal to the Normal Service Retirement amount.

### Non-Service Incurred Disability (Off Duty)

#### Eligibility

Any age and five years of service.

### Benefit

An annual amount is the percent awarded by the Board of Trustees and may not exceed 60 percent of the allowable average annual salary. Service credit over 25 years cannot be used in calculating an off duty disability award.

### Pre-Retirement Survivor Annuity

#### Eligibility

Upon death before retirement, but after having satisfied the requirements for a Normal Service Retirement or an Age/Service Commuted retirement.

#### Benefit

The surviving spouse or contingent dependent beneficiary will receive the equivalent of a 50 percent joint and survivor annuity, calculated under the assumption that the decedent had retired effective the day following his/her death.

### Statutory Survivor Benefits

#### Eligibility

Upon death of any active or retired member of OP&F.

#### Benefit

##### *Surviving Spouse's Benefit*

An annual amount equal to \$6,600 (\$550 monthly), plus an annual COLA of 3 percent of the original base benefit, paid each July 1, beginning July 1, 2000. The benefit is paid to the surviving spouse for life.

The spouse's Statutory Survivor Benefit is \$4,920 (\$410 monthly) if the spouse is receiving a full death benefit under the Death Fund Benefit statute. The Death Benefit Fund is funded by the State of Ohio and provides special benefits to eligible survivors of public safety officers who are killed in the line of duty or who die from injuries or disease incurred in the performance of official duties. These eligible survivors are entitled to receive the member's full monthly salary, which will be reduced at the member's retirement eligibility date. These death benefit payments are in addition to any optional payment plan benefits elected by the member.

##### *Surviving Child's Benefit*

An annual amount equal to \$1,800 (\$150 monthly), payable until such child attains age 18 or marries, whichever occurs first. The payment can continue to an unmarried full-time student until age 22. A dependent disabled child regardless of age at time of member's

death, is entitled to a benefit until death or recovery. A COLA of 3 percent of the original base is payable each July 1.

*Dependent Parents' Benefit*

If there is no surviving spouse or dependent children, an annual amount of \$2,400 (\$200 monthly) is payable to one dependent parent or \$1,200 (\$100 monthly) each to two dependent parents for life or until dependency ceases or remarriage. A COLA of 3 percent of the original base is payable each July 1.

**Lump Sum Death**

**Eligibility**

Upon death of any retired or disabled member of OP&F.

**Benefit**

A lump sum payment of \$1,000 is paid to the member's surviving spouse or, if no surviving spouse, to a designated beneficiary. If there is no surviving spouse or beneficiary, then to the member's estate.

Survivors	Monthly Pension	Causes of Termination
Widow Widower	current amount + future COLA	• Death
Minor child	current amount + future COLA	• Death • Marriage • Attainment of age 18
Dependent disabled child	current amount + future COLA	• Death • Recovery from disability
Student	current amount + future COLA	• Death • Marriage • Attainment of age 22 • Loss of student status
One dependent parent Two dependent parents	current amount + future COLA 1/2 current amount (each) + future COLA	• Death • Re-marriage • Termination of dependency

Benefit Type	Base Monthly Benefit Amount	Base Monthly Benefit Amount Plus Increases Through July 1, 2011	Monthly Increase Effective July 1, 2012
Spouse*	\$550	\$743.60 **	\$16.50
Child	150	202.80 ***	4.50
One Parent	200	270.40 ****	6.00
Two Parents	100	135.20	3.00

\* Spouse's benefit is \$410 if spouse is receiving a full death benefit under the Death Fund Benefit statute. There is no annual increase on this benefit payment.

\*\* On July 1, 2000 The Statutory Surviving Spouse Benefit increased by \$12.10 per month. This increase was a percentage of the original benefit amount, equaling the percentage increase in the CPI plus unused prior increases, to a maximum of 3 percent. Every year after 2000, the monthly increase was \$16.50 or 3 percent of the base benefit.

\*\*\* On July 1, 2000 The Statutory Surviving Child Benefit increased by \$3.30 per month. This increase was a percentage of the original benefit amount, equaling the percentage increase in the CPI plus unused prior increases, to a maximum of 3 percent. Ever year after 2000, the monthly increase was \$4.50 or 3 percent of base benefit.

\*\*\*\* On July 1, 2000 The Statutory Surviving One Parent Benefit increased by \$4.40 per month. This increase was a percentage of the original benefit amount, equaling the percentage increase in the CPI plus unused prior increases, to a maximum of 3 percent. Ever year after 2000, the monthly increase was \$6.00 or 3 percent of base benefit.

## ANNUITIES

Effective Feb. 28, 1980, for those members who are retiring on either service pensions or disability benefits, optional annuity plans can be chosen, subject to certain limitations. Members can elect actuarially reduced benefits under a joint and survivor annuity, life annuity certain and continuous, or multiple beneficiary annuity plan. These optional annuity plans allow the member's beneficiary(ies) to receive a lifetime payment upon their death.

### Annuity Types

#### Single Life Annuity

For unmarried members, this is the standard annuity plan. Married members may elect this plan only if the spouse consents to the selection in writing. This plan pays the maximum retirement allowance that the member is entitled to receive and, upon the member's death, none of the pension or benefit is continued to any beneficiary.

#### Joint and Survivor Annuity

For married members, this is the standard annuity plan at the 50 percent continuation level. Any percent between 1 percent and 100 percent (if less than 50 percent, requires spouses consent) of the member's reduced pension may be continued to the surviving designated beneficiary if not spouse, the percent continued may be limited based on the beneficiary's age (if someone other than the surviving spouse, only with the spouse's consent). This plan automatically terminates upon death of the beneficiary, to be effective the month following OP&F's receipt of notice of death, or it may be cancelled upon divorce with the consent of the member's spouse or a specific court order. Elected option may be canceled within one year after benefits commence, with the consent of the beneficiary.

Under the multiple beneficiary annuity plan, a member may designate up to four beneficiaries at the time of retirement so that, upon death, a certain percentage of reduced monthly allowance will be continued to the member's surviving beneficiaries for their lives.

#### Life Annuity Certain and Continuous

The minimum guarantee is five years and the maximum is 20 years. 100 percent of the members' reduced pension continues to the beneficiary for the guarantee period selected. Elected option may be canceled within one-year after benefits commence, with the consent of the beneficiary.

### Group Health Insurance and Medicare

Commencing Jan. 1, 1974, the Board of Trustees may contract for group health insurance on the basis of part or all of the cost of the premium for the coverage to be paid by OP&F. Medical and prescription drug coverage sponsored by OP&F are not rights vested and are subject to change at any time upon action of the Board of Trustees.

Effective Jan. 1, 1977, OP&F is mandated to pay the premium for supplemental Medicare (Part B) up to the statutory maximum provided the benefit recipient is not eligible for reimbursement from any other sources. By law, OP&F is required to pay monthly to each recipient of service benefits, disability benefits and survivor benefits not less than \$96.40, with the exception that OP&F cannot pay an amount that exceeds the amount paid by the recipient for the coverage. Once OP&F obtains the proper documentation from the service retiree, disability retiree or surviving beneficiary of their enrollment in the Medicare program, Medicare (Part B) premium payments begin. Note: This benefit is not included in the principal valuation results, but is included in the retiree health care valuation results.

Effective July 1992, retirees and survivors make monthly medical benefit contributions, which are credited to the Health Care Stabilization Fund. These contributions are reviewed on an annual basis to determine adequacy with the rising cost of health care. In 2004, a new contribution strategy was implemented. Retirees and survivors now pay a percentage of the full cost of the benefit. The percentage ranges from 25 percent to 100 percent for themselves and dependents based on the year of retirement.

### Tiered Retirement Plan—COLA or Terminal Pay (Non-COLA)

Members retiring on or after July 24, 1986, who had 15 or more years of service as of Jan. 1, 1989 are allowed to select between two different pension calculation plans. Under the terminal pay method, a pension is calculated using terminal payments such as accrued sick leave and vacation compensation to increase the average annual salary, but subject to certain limitations, and these members do not receive cost of living adjustments. Under the COLA method, no terminal payments are added, but the pension is subject to annual increases equal to a 3 percent increase of the original base benefit per year.

The COLA method is the automatic calculation method for an active member with fewer than 15 years of service as of Jan. 1, 1989. The COLA percentage equals a fixed 3 percent increase of the original base benefit per year.

### **Post-Retirement Cost-of-Living Allowance (COLA)**

Members who retired prior to July 24, 1986 or their surviving beneficiaries under optional plans are entitled to cost-of-living increases. The annual increase is paid on July 1st of each year. The annual COLA increase is \$360 under a Single Life Annuity Plan with proportional reductions for optional payment plans.

### **Re-employed Retirants' Defined Contribution Plan Benefit**

Effective June 30, 1991, every person who is retired under an Ohio public pension plan and who is re-employed in an OP&F covered position must contribute to OP&F at the same rate as other police officers or firefighters. The employer pays the normal rate as well. If the re-employed member terminates employment before age 60, Ohio law allows the member to receive a lump sum payment of post-retirement employee contributions made during the period of reemployment, plus interest. If the member waits until age 60 to receive this benefit, he or she can choose to receive either a lump sum payment in an amount equal to twice his or her contributions, plus interest, or a lifetime annuity paid monthly. If, after calculation, the member's lifetime monthly annuity is less than \$25, the member may only select the lump sum payment option. Spousal consent may be required before payment can occur.

## Analysis of Financial Experience - Pension Trust Fund

### Gains and losses as of Jan. 1, 2012 and Jan. 1, 2011

Type of Activity	Gain (Loss)	
	2012	2011
<b>Plan Experience:</b>		
<b>Turnover</b>		
If more liabilities are released by withdrawal separations from active membership than assumed, there is a gain. If smaller releases, there is a loss.	\$(8,363,695)	\$(4,842,033)
<b>Retirement</b>		
If members retire at older ages than assumed, there is a gain. If younger, there is a loss.	18,470,941	18,303,447
<b>Death among retired members and beneficiaries</b>		
If more deaths occur than assumed, there is a gain. If fewer deaths than assumed, there is a loss.	(57,408,156)	(30,836,168)
<b>Disability Retirants</b>		
If disability claims are less than assumed, there is a gain. If more claims, a loss.	24,822,738	30,751,730
<b>Salary increase/decrease</b>		
If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss.	97,932,216	140,437,313
<b>Return to work</b>		
If participants return to work with previous service restored, there is a loss.	(806,512)	(157,441)
<b>New Entrants</b>		
If new entrants join OP&F, there is a loss.	(6,052,679)	(4,353,734)
<b>Deaths among actives</b>		
If claims costs are less than assumed, there is a gain. If more claims, a loss.	(1,365,569)	(4,677,425)
<b>Investments</b>		
If there is a greater investment return than assumed, there is a gain. If less return, a loss.	(721,224,808)	(529,943,334)
<b>Other Experience and Payroll Growth</b>		
If other experience, including less than expected payroll growth, increases the unfunded liability, there is a loss. Otherwise, there is a gain.	22,113,845	(11,412,375)
<b>Net gain (or loss) during the year due to plan experience</b>	<b>(631,881,679)</b>	<b>(396,730,020)</b>
<b>Change assumptions effective Jan. 1, 2012</b>	<b>(413,434,635)</b>	-
<b>TOTAL GAIN (OR LOSS) DURING THE YEAR</b>	<b>\$(1,045,316,314)</b>	<b>\$(396,730,020)</b>

### SHORT-TERM SOLVENCY TEST

A short-term solvency test is one means of checking a system's progress under its funding program. In a short-term solvency test, the plan's valuation assets are compared with: 1) Active member contributions on deposit; 2) The liabilities for future benefits to present retired lives; 3) The liabilities for service already rendered by active members. In a system that has been following the discipline of level percent of payroll financing, the

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

Short-Term Solvency Test - Pension Trust Fund (dollars in thousands)

	Valuation as of Jan. 1	(1)	(2)	(3)	Valuation Assets	Portion of Accrued Liabilities Covered by Valuation Assets		
		Active Member Contributions	Retirants and Beneficiaries	Active Members (Employer Financed Portion)		(1)	(2)	(3)
Police	2012	\$1,100,146	\$4,960,051	\$2,969,900	\$5,694,783	100%	93%	0%
Fire	2012	965,598	3,581,800	2,769,204	4,614,176	100%	100%	2%
Police	2011	1,100,251	4,368,659	3,008,219	5,885,449	100%	100%	14%
Fire	2011	956,559	3,132,521	2,818,228	4,795,563	100%	100%	25%
Police	2010	1,067,209	4,216,219	2,926,199	5,975,121	100%	100%	24%
Fire	2010	916,033	3,004,267	2,700,815	4,818,972	100%	100%	33%
Police	2009	1,026,597	4,077,113	2,832,235	5,163,648	100%	100%	2%
Fire	2009	874,756	2,895,243	2,601,180	4,145,508	100%	100%	14%
Police	2008	985,169	3,992,482	2,671,816	6,248,107	100%	100%	48%
Fire	2008	830,439	2,827,320	2,420,526	4,964,761	100%	100%	54%
Police	2007	934,517	3,850,347	2,444,583	5,654,396	100%	100%	36%
Fire	2007	796,751	2,757,852	2,203,455	4,503,573	100%	100%	43%

Active Member Valuation Data - Pension Trust Fund

Valuation as of Jan. 1	Number of Employers		Number of Active Members*		Average Annual Salary		Percentage of Average Annual Salary Increases		Annual Payroll (Millions)
	Police	Fire	Police	Fire	Police	Fire	Police	Fire	
2012	537	380	14,854	12,769	\$67,094	\$68,663	2.2%	1.6%	\$1,897.4
2011	533	384	15,293	12,929	65,649	67,559	2.0%	2.0%	1,868.5
2010	536	385	15,581	13,038	64,373	66,223	1.4%	1.7%	1,895.2
2009	539	382	15,889	13,173	63,480	65,097	3.1%	3.3%	1,900.9
2008	538	385	15,829	13,035	61,545	62,989	1.5%	2.4%	1,831.4
2007	540	384	15,646	12,963	60,638	61,512	0.1%	(1.3)%	1,782.9

\* Includes rehired retirees.

Retirees and Beneficiaries Added to and Removed from Rolls - Pension Trust Fund (dollars in thousands)

Year Ended Dec. 31	Added to rolls		Removed from rolls		Rolls end of year		Percentage Change in Allowance	Average Annual Allowances	Percentage Change in Membership
	Number	Annual Allowances	Number	Annual Allowances	Number	Annual Allowances			
2011	1,783	\$65,572	779	\$16,397	27,078	\$807,550	8.52%	\$29.82	3.85%
2010	1,165	34,553	803	15,721	26,074	744,144	4.74%	28.54	1.41%
2009	1,128	30,920	733	14,566	25,712	710,463	4.52%	27.63	1.56%
2008	1,046	25,590	607	12,825	25,317	679,769	4.18%	26.85	1.76%
2007	1,128	27,877	933	14,586	24,878	652,474	3.55%	26.23	0.79%
2006	1,186	32,147	962	12,701	24,683	630,080	4.70%	25.53	0.92%



Short-Term Solvency Test - Health Care Trust Fund (dollars in thousands)

Valuation Date	(A)	(B)	(C)	Reported Assets	Portion of Accrued Liabilities Covered by Valuation Assets		
	Active Member Contributions	Retirees, Survivors, And Inactive Members	Employer-Financed Portion Of Active Members		Liability (A)	Liability (B)	Liability (C)
2012	-	\$3,698,777	\$2,918,635	\$780,142	-	21.09%	26.7%
2011	-	3,295,313	2,577,583	717,730	-	21.78%	27.8%
2010	-	3,232,391	2,658,992	573,399	-	17.74%	21.6%
2009	-	3,163,622	2,724,964	438,658	-	13.87%	16.1%
2008	-	3,623,484	3,096,485	526,999	-	14.54%	17.0%
2007	-	3,273,690	2,837,092	436,598	-	13.34%	15.4%

Retirees and Beneficiaries Added to and Removed from Rolls - Health Care Trust Fund (dollars in thousands)

Year Ended Dec. 31	Added to rolls		Removed from rolls		Rolls end of year		Average Annual Subsidy	Increase in Average Subsidy
	Number	Annual Subsidy	Number	Annual Subsidy	Number	Annual Subsidy		
2011	2,241	\$9,855	1,593	\$6,378	26,044	\$114,528	\$4.397	\$.394
2010	1,579	6,322	1,491	6,497	25,396	101,679	4.004	(.354)
2009	1,568	6,833	1,626	6,244	25,308	110,286	4.358	.517
2008	1,218	4,678	2,638	9,345	25,366	97,414	3.840	.298
2007	1,496	5,300	1,497	6,861	26,786	94,889	3.542	(1.041)
2006	1,291	5,917	3,063	11,859	26,787	122,767	4.583	.711

Analysis of Financial Experience - Health Care Trust Fund

Gains and losses as of Jan. 1, 2012 and Jan. 1, 2011

Type of Activity	Gain (Loss)	
	Jan. 1, 2012	Jan. 1, 2011
<b>Plan experience:</b>		
<b>Turnover</b> If more liabilities are released by withdrawal separations from active membership than assumed, there is a gain. If smaller releases, a loss.	\$1,027,696	\$(414,453)
<b>Retirement</b> If members retire at older ages than assumed, there is a gain. If younger, a loss.	7,468,693	7,835,999
<b>Disability Retirement</b> If disability claims are less than assumed, there is a gain. If more claims, a loss.	17,928,512	18,774,807
<b>New Entrants</b> If new entrants join OP&F, there is a loss.	(1,032,736)	(1,133,019)
<b>Deaths</b> If more deaths occur than assumed, there is a gain. If fewer deaths, a loss.	(12,370,659)	(18,592,001)
<b>Claims Costs</b> If per capita costs or trend rates are less than assumed, there is a gain. Otherwise there is a loss.	321,305,492	126,651,806
<b>Investment</b> If there is greater investment return than assumed, there is a gain. If less return, a loss.	(25,371,486)	(64,806,590)
<b>Other Experience</b> If all other experience, including but not limited to data changes, increases the unfunded liability, there is a loss. If a decrease, there is a gain.	(15,136,426)	34,289,881
<b>Net gain (or loss) during the year due to plan experience</b>	<b>293,819,086</b>	<b>232,219,610</b>
<b>Change assumptions effective Jan. 1, 2012</b>	<b>(495,587,176)</b>	<b>-</b>
<b>TOTAL NET GAIN (OR LOSS)</b>	<b>\$(201,768,090)</b>	<b>\$232,219,610</b>

2012 Comprehensive Annual Financial Report

# Statistical Section

Ohio Police & Fire Pension Fund

Statistical Objectives  
Financial Trends  
Revenue Capacity Information  
Debt Capacity Information  
Demographic and Economic Information  
Operating Information  
Death Benefit Fund  
List of Professional Acronyms



140 East Town Street • Columbus, Ohio 43215  
[www.op-f.org](http://www.op-f.org) • 1-888-864-8363

## Statistical Objectives

### STATISTICAL OBJECTIVES

The objectives of the statistical section are to provide additional historical perspective, context, and relevant details to assist readers in using information in the financial statements, notes to the financial statements, and required supplementary information in order to understand and assess OP&F's overall financial condition. In support of these objectives, OP&F reports information in this section in compliance with GASB Statement 44, Economic Condition Reporting: The Statistical Section. This statement establishes standardized reporting requirements relative to the supplementary information provided in this section.

The schedules that follow show financial trend information about the growth of OP&F's assets for the past 10 years. These schedules provide detailed information about the trends of key sources of additions and deductions to OP&F's assets, which assist in providing a context framing how OP&F's financial position has changed over time. The financial trend schedules presented are:

- Changes in Net Position.
- Benefit Expenses by Type.
- Revenues by Source.
- Expenses by Type.
- DROP Program Accrued Liability.

The schedules beginning on page 79 show revenue capacity information, demographic and economic information, and operating information. The demographic and economic information is designed to assist in understanding the environment in which OP&F operates. The operating information is intended to provide contextual information about OP&F's operations to assist in assessing OP&F's economic condition. The revenue capacity information, the demographic and economic information and the operating information presented include:

- Active Member and Total Payroll Base Statistics.
- Active Member Data.
- Retired Membership by Type of Benefits.
- Retirees and Beneficiaries Statistics.
- Average Monthly Benefit Payments.

- Member Health Care Contributions.
- State of Ohio Subsidy Payments.
- Employer Contribution Rates.
- Member Contribution Rates.
- Health Care Allocation Rates from Employer Contributions
- Actuarial Interest Rates.
- DROP and Reemployed Interest Rates.
- DROP Member Count Roll Forward.
- Actuarial Valuation Information.
- Historical Annual Investment Results.
- Number of Employer Units.
- Principal Participating Employers.
- OP&F Employee Budgeted Position Counts.
- Personnel Salaries by Year.
- OP&F Budget.
- Other Operating Statistics.
- Death Benefit Fund.

To help readers of this CAFR, OP&F has added a List of Professional Acronyms at the end of the statistical section.

## Financial Trends

### Changes in Net Positions

#### Combined Trust Fund (dollars in millions)

	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003
<b>Additions</b>										
Employer Contributions	\$418	\$409	\$415	\$406	\$407	\$402	\$374	\$357	\$349	\$337
Member Contributions and Purchases	178	177	175	168	173	165	167	168	166	165
Investment Income	1,658	230	1,652	1,895	(3,833)	1,163	1,630	847	1,152	1,745
Health Care Contributions	65	62	59	59	57	56	59	55	56	17
Other Revenues	29	39	25	23	24	21	25	11	19	21
<b>Total Additions</b>	<b>2,348</b>	<b>917</b>	<b>2,326</b>	<b>2,551</b>	<b>(3,172)</b>	<b>1,807</b>	<b>2,255</b>	<b>1,438</b>	<b>1,742</b>	<b>2,285</b>
<b>Deductions</b>										
Benefit Payments	1,236	1,204	1,132	1,085	1,021	965	945	877	821	773
Administrative Expenses	16	16	15	16	16	16	17	16	16	17
Refund of Member Contributions	26	22	16	16	18	15	18	16	15	17
Other Expenses	–	–	–	–	–	–	–	–	–	1
<b>Total Deductions</b>	<b>1,278</b>	<b>1,242</b>	<b>1,163</b>	<b>1,117</b>	<b>1,055</b>	<b>996</b>	<b>980</b>	<b>909</b>	<b>852</b>	<b>808</b>
<b>Changes in Net Position</b>	<b>1,070</b>	<b>(325)</b>	<b>1,163</b>	<b>1,434</b>	<b>(4,227)</b>	<b>811</b>	<b>1,275</b>	<b>529</b>	<b>890</b>	<b>1,477</b>
<b>Net Position – Beginning of Year</b>	<b>10,468</b>	<b>10,793</b>	<b>9,630</b>	<b>8,196</b>	<b>12,423</b>	<b>11,612</b>	<b>10,337</b>	<b>9,808</b>	<b>8,918</b>	<b>7,441</b>
<b>Net Position – End of Year</b>	<b>11,538</b>	<b>10,468</b>	<b>10,793</b>	<b>9,630</b>	<b>8,196</b>	<b>12,423</b>	<b>11,612</b>	<b>10,337</b>	<b>9,808</b>	<b>8,918</b>
<b>Reserve Fund Balances:</b>										
Employers' Contribution Reserves	891	901	1,516	675	(525)	3,999	3,655	2,687	2,437	1,785
Members' Contribution Reserves	2,106	2,066	2,057	1,983	1,901	1,816	1,731	1,642	1,532	1,432
Health Care Contribution Reserves	935	780	718	573	439	527	437	343	294	231
Pension Reserves	7,606	6,721	6,502	6,399	6,381	6,081	5,789	5,665	5,545	5,470
<b>TOTAL NET POSITION</b>	<b>\$11,538</b>	<b>\$10,468</b>	<b>\$10,793</b>	<b>\$9,630</b>	<b>\$8,196</b>	<b>\$12,423</b>	<b>\$11,612</b>	<b>\$10,337</b>	<b>\$9,808</b>	<b>\$8,918</b>

## Financial Trends

### Changes in Net Position

#### Pension Trust Fund (dollars in millions)

	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003
<b>Additions</b>										
Employer Contributions	\$287	\$280	\$286	\$279	\$278	\$280	\$235	\$229	\$224	\$216
Member Contributions and Purchases	178	177	175	168	173	165	167	168	166	165
Investment Income	1,531	211	1,551	1,791	(3,697)	1,113	1,567	819	1,117	1,690
Health Care Contributions	-	-	-	-	-	-	-	-	-	-
Other Revenues	9	10	8	9	8	8	11	7	12	18
<b>Total Additions</b>	<b>2,005</b>	<b>678</b>	<b>2,020</b>	<b>2,247</b>	<b>(3,238)</b>	<b>1,566</b>	<b>1,980</b>	<b>1,223</b>	<b>1,519</b>	<b>2,089</b>
<b>Deductions</b>										
Benefit Payments	1,049	1,028	972	916	868	816	766	714	663	605
Administrative Expenses	15	15	14	16	15	14	15	13	14	15
Refund of Member Contributions	26	22	16	15	18	15	18	16	15	17
Other Expenses	-	-	-	-	-	-	-	-	-	1
<b>Total Deductions</b>	<b>1,090</b>	<b>1,065</b>	<b>1,002</b>	<b>947</b>	<b>901</b>	<b>845</b>	<b>799</b>	<b>743</b>	<b>692</b>	<b>638</b>
<b>Changes in Net Position</b>	<b>915</b>	<b>(387)</b>	<b>1,018</b>	<b>1,300</b>	<b>(4,139)</b>	<b>721</b>	<b>1,181</b>	<b>480</b>	<b>827</b>	<b>1,451</b>
<b>Net Position- Beginning of Year</b>	<b>9,688</b>	<b>10,075</b>	<b>9,057</b>	<b>7,757</b>	<b>11,896</b>	<b>11,175</b>	<b>9,994</b>	<b>9,514</b>	<b>8,687</b>	<b>7,236</b>
<b>Net Position - End of Year</b>	<b>10,603</b>	<b>9,688</b>	<b>10,075</b>	<b>9,057</b>	<b>7,757</b>	<b>11,896</b>	<b>11,175</b>	<b>9,994</b>	<b>9,514</b>	<b>8,687</b>
<b>Reserve Fund Balances:</b>										
Employers' Contribution Reserves	891	901	1,516	675	(525)	3,999	3,655	2,687	2,437	1,785
Members' Contribution Reserves	2,106	2,066	2,057	1,983	1,901	1,816	1,731	1,642	1,532	1,432
Pension Reserves	7,606	6,721	6,502	6,399	6,381	6,081	5,789	5,665	5,545	5,470
<b>TOTAL NET POSITION</b>	<b>\$10,603</b>	<b>\$9,688</b>	<b>\$10,075</b>	<b>\$9,057</b>	<b>\$7,757</b>	<b>\$11,896</b>	<b>\$11,175</b>	<b>\$9,994</b>	<b>\$9,514</b>	<b>\$8,687</b>

## Financial Trends

### Changes in Net Position

#### Health Care Trust Fund (dollars in millions)

	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003
<b>Additions</b>										
Employer Contributions	\$131	\$129	\$130	\$127	\$129	\$122	\$139	\$128	\$125	\$121
Member Contributions and Purchases	–	–	–	–	–	–	–	–	–	–
Investment Income	127	19	100	103	(136)	50	63	28	35	55
Health Care Contributions	65	62	59	59	57	56	59	55	56	17
Other Revenues	20	29	17	15	16	13	14	4	7	3
<b>Total Additions</b>	<b>343</b>	<b>239</b>	<b>306</b>	<b>304</b>	<b>66</b>	<b>241</b>	<b>275</b>	<b>215</b>	<b>223</b>	<b>196</b>
<b>Deductions</b>										
Benefit Payments	187	176	160	169	153	149	179	163	158	168
Administrative Expenses	1	1	1	1	1	2	2	3	2	2
Refund of Member Contributions	–	–	–	–	–	–	–	–	–	–
Other Expenses	–	–	–	–	–	–	–	–	–	–
<b>Total Deductions</b>	<b>188</b>	<b>177</b>	<b>161</b>	<b>170</b>	<b>154</b>	<b>151</b>	<b>181</b>	<b>166</b>	<b>160</b>	<b>170</b>
<b>Changes in Net Position</b>	<b>155</b>	<b>62</b>	<b>145</b>	<b>134</b>	<b>(88)</b>	<b>90</b>	<b>94</b>	<b>49</b>	<b>63</b>	<b>26</b>
<b>Net Position - Beginning of Year</b>	<b>780</b>	<b>718</b>	<b>573</b>	<b>439</b>	<b>527</b>	<b>437</b>	<b>343</b>	<b>294</b>	<b>231</b>	<b>205</b>
<b>Net Position - End of Year</b>	<b>935</b>	<b>780</b>	<b>718</b>	<b>573</b>	<b>439</b>	<b>527</b>	<b>437</b>	<b>343</b>	<b>294</b>	<b>231</b>
<b>Reserve Fund Balances:</b>										
Health Care Contribution Reserves	935	780	718	573	439	527	437	343	294	231
<b>TOTAL NET POSITION</b>	<b>\$935</b>	<b>\$780</b>	<b>\$718</b>	<b>\$573</b>	<b>\$439</b>	<b>\$527</b>	<b>\$437</b>	<b>\$343</b>	<b>\$294</b>	<b>\$231</b>

## Financial Trends

### Benefit Expenses by Type (dollars in millions)

Year	Service	DROP	Disability	Health Care	Survivor	Total Benefits
2012	\$529.9	\$212.1	\$232.8	\$187.4	\$74.2	\$1,236.4
2011	490.2	241.1	225.0	176.3	71.6	1,204.2
2010	444.4	241.0	217.8	159.9	69.1	1,132.2
2009	423.7	215.4	211.1	168.7	66.1	1,085.0
2008	407.4	194.9	202.1	153.4	63.1	1,020.9
2007	391.5	172.0	191.7	149.2	60.7	965.1
2006	377.0	147.7	183.5	178.9	58.4	945.5
2005	367.4	117.7	172.5	163.3	55.8	876.7
2004	360.0	86.5	162.2	157.8	54.4	820.9
2003	350.5	53.7	149.6	168.1	52.0	773.9

### Revenues by Source (dollars in millions)

Year	Employer Contributions	Member Contributions and Purchases	Employer Contributions as a Percentage of Covered Payroll	Investment and Securities Lending Income	Health Care Contributions	Other Revenues	Total Revenues
2012	\$418.3	\$177.5	22.1%	\$1,657.9	\$65.1	\$29.4	\$2,348.2
2011	408.8	176.8	21.6%	229.6	62.5	39.2	916.9
2010	415.4	175.5	21.9%	1,651.8	58.9	24.4	2,326.0
2009	405.7	168.4	21.3%	1,894.9	59.1	23.0	2,551.1
2008	407.3	172.5	22.2%	(3,833.0)	57.0	24.6	(3,171.6)
2007	400.9	165.1	23.1%	1,163.1	56.0	21.4	1,806.5
2006	373.9	167.4	21.3%	1,629.8	58.5	25.1	2,254.7
2005	357.0	167.8	21.2%	847.4	55.3	11.4	1,438.9
2004	349.4	165.9	21.2%	1,152.4	55.7	18.8	1,742.2
2003	337.2	164.5	20.5%	1,745.2	17.2	21.2	2,285.3

### Expenses by Type (dollars in millions)

Year	Benefit Payments	Administrative Expenses	Refund of Member Contributions	Other Expenses	Total Expenses
2012	\$1,236.4	\$15.5	\$26.4	\$-	\$1,278.3
2011	1,204.2	15.5	22.0	-	1,241.7
2010	1,132.2	15.0	15.8	-	1,163.0
2009	1,085.0	16.3	15.7	0.1	1,117.1
2008	1,020.9	16.0	17.7	-	1,054.6
2007	965.1	16.3	15.0	-	996.4
2006	945.5	16.8	18.0	(0.4)	979.9
2005	876.7	15.9	16.5	0.2	909.3
2004	820.9	15.9	15.3	0.2	852.3
2003	773.9	16.7	16.8	1.2	808.6

## Financial Trends

### DROP Program Accrued Liability (dollars in millions)

	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003
<b>Police</b>										
DROP Liability Beginning Balance	\$694.7	\$650.8	\$544.9	\$436.9	\$337.8	\$246.8	\$161.5	\$87.7	\$34.1	\$-
Accrued Pension and COLA	90.6	92.3	98.3	92.4	86.4	80.3	74.6	62.3	47.8	31.6
Accrued Member Share Contributions	11.3	11.7	12.5	13.0	11.8	12.1	9.0	5.6	2.9	1.8
Accrued Interest	17.8	32.2	29.2	23.9	18.7	14.2	10.0	6.0	2.9	0.7
Withdrawals	(148.0)	(92.3)	(34.1)	(21.3)	(17.8)	(15.6)	(8.3)	(0.1)	-	-
<b>DROP Liability Ending Balance</b>	<b>666.4</b>	<b>694.7</b>	<b>650.8</b>	<b>544.9</b>	<b>436.9</b>	<b>337.8</b>	<b>246.8</b>	<b>161.5</b>	<b>87.7</b>	<b>34.1</b>
<b>Fire</b>										
DROP Liability Beginning Balance	593.1	536.2	441.4	344.5	257.3	180.0	113.6	60.3	22.6	-
Accrued Pension and COLA	88.4	89.3	89.6	80.0	75.0	66.9	55.8	45.2	33.6	20.9
Accrued Member Share Contributions	11.0	11.2	11.2	11.3	10.0	9.5	6.9	3.9	2.1	1.2
Accrued Interest	15.2	27.3	23.8	19.2	14.7	10.6	7.2	4.2	2.0	0.5
Withdrawals	(136.3)	(70.9)	(29.8)	(13.6)	(12.5)	(9.7)	(3.5)	-	-	-
<b>DROP Liability Ending Balance</b>	<b>571.4</b>	<b>593.1</b>	<b>536.2</b>	<b>441.4</b>	<b>344.5</b>	<b>257.3</b>	<b>180.0</b>	<b>113.6</b>	<b>60.3</b>	<b>22.6</b>
<b>Combine Police and Fire</b>										
DROP Liability Beginning Balance	1,287.8	1,187.0	986.3	781.4	595.1	426.8	275.1	148.0	56.7	-
Accrued Pension and COLA	179.0	181.6	187.9	172.4	161.4	147.2	130.4	107.5	81.4	52.5
Accrued Member Share Contributions	22.3	22.9	23.7	24.3	21.8	21.6	15.9	9.5	5.0	3.0
Accrued Interest	33.0	59.5	53.0	43.1	33.4	24.8	17.2	10.2	4.9	1.2
Withdrawals	(284.3)	(163.2)	(63.9)	(34.9)	(30.3)	(25.3)	(11.8)	(0.1)	-	-
<b>DROP LIABILITY ENDING BALANCE</b>	<b>\$1,237.8</b>	<b>\$1,287.8</b>	<b>\$1,187.0</b>	<b>\$986.3</b>	<b>\$781.4</b>	<b>\$595.1</b>	<b>\$426.8</b>	<b>\$275.1</b>	<b>\$148.0</b>	<b>\$56.7</b>



## Revenue Capacity Information

### Active Member and Total Payroll Base Statistics (dollars in millions)

#### Number and Average Annual Salary\*

Year	Payroll Base	Member Contributions	Number of Members*	Percentage Change in Payroll Base	Percentage Change in Member Contributions	Percentage Change in Members
2012	\$1,897	\$177	27,623	1.5%	0.0%	(2.1)%
2011	1,869	177	28,222	(1.4)%	1.1%	(1.4)%
2010	1,895	175	28,619	(0.3)%	4.2%	(1.5)%
2009	1,901	168	29,062	3.8%	(2.9)%	0.7%
2008	1,831	173	28,864	2.73%	4.8%	0.9%
2007	1,783	165	28,609	1.52%	(1.2)%	2.1%
2006	1,756	167	28,026	4.3%	(0.6)%	0.5%
2005	1,684	168	27,879	2.4%	1.2%	(2.0)%
2004	1,644	166	28,441	2.4%	1.2%	(0.1)%
2003	1,606	164	28,480	4.7%	(1.8)%	0.5%

\*Includes rehired retirees

### Active Membership Data

#### Number and Average Annual Salary\*

Age	Years of Service									Total
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	
Under 25	375									375
	\$44,886									\$44,886
25-29	1,783	435								2,218
	\$50,913	\$65,326								\$53,740
30-34	1,191	1,536	649	5						3,381
	\$53,405	\$65,348	\$69,732	\$71,730						\$61,992
35-39	552	1,079	2,278	644	13					4,566
	\$50,925	\$64,996	\$68,743	\$72,385	\$76,571					\$66,239
40-44	259	636	1,755	2,449	823	11				5,933
	\$49,733	\$63,072	\$67,551	\$71,523	\$75,812	\$70,267				\$69,084
45-49	93	206	587	1,294	2,149	732	16			5,077
	\$48,288	\$62,081	\$66,087	\$69,414	\$75,274	\$79,551	\$78,689			\$72,316
50-54	46	69	175	475	950	1,203	595	13		3,526
	\$51,210	\$61,143	\$64,719	\$68,120	\$72,353	\$77,499	\$81,165	\$87,512		\$74,207
55-59	21	29	60	159	311	523	657	91		1,851
	\$53,541	\$61,171	\$63,415	\$65,923	\$69,863	\$75,042	\$78,819	\$81,812		\$74,224
60-64	4	9	19	46	75	107	120	79	12	471
	\$59,782	\$59,139	\$7,770	\$62,128	\$67,640	\$72,186	\$74,822	\$82,619	\$85,795	\$72,312
Over 64	1	2	6	8	11	10	5	6	16	65
	\$38,110	\$70,812	\$56,317	\$64,873	\$61,869	\$65,987	\$74,386	\$77,424	\$72,797	\$67,358
Total	4,325	4,001	5,529	5,080	4,332	2,586	1,393	189	28	27,463
	\$50,972	\$64,606	\$67,962	\$70,506	\$74,185	\$77,288	\$79,459	\$82,402	\$78,367	\$67,821

\*Excludes rehired retirees

## Revenue Capacity Information

### Retired Membership by Type of Benefits (Source: Actuarial Valuation)

Year	Service		Survivors		Disability		Total Beneficiaries
	Police	Fire	Police	Fire	Police	Fire	
2012	7,204	5,540	4,543	3,389	3,825	2,577	27,078
2011	6,762	5,185	4,479	3,310	3,772	2,566	26,074
2010	6,619	5,108	4,416	3,268	3,762	2,539	25,712
2009	6,546	5,060	4,300	3,194	3,721	2,496	25,317
2008	6,523	5,036	4,090	3,077	3,682	2,470	24,878
2007	6,459	5,012	4,067	3,115	3,594	2,436	24,683
2006	6,419	5,045	3,982	3,089	3,521	2,403	24,459
2005	6,452	5,101	3,931	3,063	3,429	2,364	24,340
2004	6,459	5,173	3,912	3,001	3,291	2,300	24,136
2003	6,418	5,188	3,916	3,006	3,193	2,202	23,923

### Retired Membership by Type of Benefits (Source: Actuarial Valuation)

Age Last Birthday	Number	Annual Allowance	Average Annual Allowance
<b>Service Retirees</b>			
Under 60	2,496	\$112,178,891	\$44,943
60 - 64	2,934	133,098,636	45,364
65 - 69	2,568	109,546,824	42,658
70 - 74	1,863	72,112,691	38,708
75 - 79	1,188	39,014,820	32,841
Over 79	1,695	43,792,550	25,836
<b>TOTAL</b>	<b>12,744</b>	<b>\$509,744,412</b>	<b>\$39,999</b>
<b>Survivors and Beneficiaries</b>			
Under 60	1,621	\$12,507,778	\$7,716
60 - 64	691	7,684,206	11,120
65 - 69	801	8,113,412	10,129
70 - 74	969	9,391,542	9,692
75 - 79	1,144	10,473,317	9,155
Over 79	2,706	23,605,454	8,723
<b>TOTAL</b>	<b>7,932</b>	<b>\$71,775,709</b>	<b>\$9,049</b>
<b>Disability Retirees</b>			
Under 60	2,824	\$105,816,757	\$37,471
60 - 64	1,240	46,260,167	37,307
65 - 69	989	34,602,566	34,987
70 - 74	663	21,735,648	32,784
75 - 79	354	10,000,572	28,250
Over 79	332	7,614,119	22,934
<b>TOTAL</b>	<b>6,402</b>	<b>\$226,029,829</b>	<b>\$35,306</b>

## Revenue Capacity Information

### Retirees and Beneficiaries Statistics (dollars in millions)

Year	Benefit Payments*	Refunds	Total Payments*	Number of Benefit Recipients**	Percentage Change in Benefit Recipients	Percentage Change Total Benefit Payments
2012	\$1,049	\$26	\$1,075	27,184	3.7%	2.4%
2011	1,028	22	1,050	26,225	1.4%	6.3%
2010	972	16	988	25,853	1.6%	6.0%
2009	916	16	932	25,439	1.7%	5.2%
2008	868	18	886	25,013	0.7%	6.6%
2007	816	15	831	24,831	0.3%	6.0%
2006	766	18	784	24,766	0.8%	7.3%
2005	714	16	730	24,564	0.9%	7.7%
2004	663	15	678	24,347	1.1%	9.1%
2003	605	17	622	24,081	2.3%	15.2%

\* Excludes health care benefits.

\*\* Includes terminated employees entitled to benefits but not yet receiving them.

### Average Monthly Benefit Payments\* for members placed on Retirement Rolls

#### Service Retirement

Year	Normal	Service Commuted	Age Commuted	Age / Service
2012	\$3,466	\$1,241	-	\$2,341
2011	3,442	1,282	-	2,699
2010	3,339	1,374	-	3,016
2009	3,301	1,460	-	2,359
2008	3,266	1,222	-	2,315
2007	3,251	1,265	-	1,928
2006	3,274	1,068	-	1,665
2005	3,125	1,102	-	1,231
2004	3,128	1,081	-	1,673
2003	3,150	990	-	1,569

#### Disability Retirement\*

Year	Permanent and Total	Permanent and Total Presumptive	Partial	Partial Presumptive	Off Duty
2012	\$4,276	\$3,717	\$2,928	\$3,338	\$2,770
2011	3,838	3,870	2,963	2,983	2,510
2010	3,495	3,886	2,827	3,659	2,785
2009	3,626	3,810	2,807	2,966	2,697
2008	3,509	3,424	2,874	2,696	2,511
2007	3,301	3,611	2,846	2,959	2,634
2006	3,341	2,930	2,793	2,939	2,306
2005	3,327	3,254	2,624	3,160	1,924
2004	3,209	3,163	2,712	3,080	2,167
2003	3,133	3,203	2,854	3,042	2,029

\* Source: Numbers calculated by taking an average of final placements for retirees as listed in OP&F Board of Trustees monthly reports.

## Revenue Capacity Information

### Member Health Care Contributions (dollars in millions)

Year	Contributions	Percentage Change in Contributions Received	Number of Covered Lives*	Health Care Benefit Payments	Percentage of Benefit Payments Covered by Member Contributions	Net Benefit Payment Per Covered Life
2012	\$65	5%	26,044	\$187	35%	\$0.00468
2011	62	5%	25,396	176	35%	0.00449
2010	59	0%	25,308	160	37%	0.00399
2009	59	4%	25,366	169	35%	0.00434
2008	57	2%	26,786	153	37%	0.00358
2007	56	(5)%	26,787	149	38%	0.00347
2006	59	7%	28,559	179	33%	0.00421
2005	55	(2)%	29,451	163	34%	0.00367
2004	56	229%	N/A	158	35%	N/A
2003	17	31%	N/A	168	10%	N/A

\* In 2012 OP&F restated the number of covered lives column using Buck Consultants, LLC actuarially certified number of covered lives. 2005 was the first year an actuarial review was done on Heath Care Benefits.

### State of Ohio Subsidy Payments

Year	Subsidy Amount	Percentage Change
2012	\$580,657	(9)%
2011	639,099	(8)%
2010	692,634	(11)%
2009	782,060	(9)%
2008	856,413	(12)%
2007	968,373	(10)%
2006	1,077,865	(9)%
2005*	1,185,989	(53)%
2004	2,501,471	(5)%
2003	2,635,910	(5)%

\* In 2005, the State of Ohio repealed the annual \$1.2 million subsidy provided to OP&F.

## Revenue Capacity Information

### Employer Contribution Rates (1967–present)\*

Time Frame of Rates	Year	Employer Rates	
		Police	Fire
Jan. 1, 1986 thru Present	1986	19.50%	24.00%
Jan. 1, 1985 thru Dec. 31, 1985	1985	20.03%	24.59%
Jan. 1, 1984 thru Dec. 31, 1984	1984	21.35%	24.59%
Jan. 1, 1983 thru Dec. 31, 1983	1983	18.45%	23.57%
Jan. 1, 1982 thru Dec. 31, 1982	1982	16.62%	22.39%
Jan. 1, 1981 thru Dec. 31, 1981	1981	15.60%	20.72%
Jan. 1, 1980 thru Dec. 31, 1980	1980	15.70%	19.87%
Jan. 1, 1979 thru Dec. 31, 1979	1979	18.40%	20.11%
Jan. 1, 1978 thru Dec. 31, 1978	1978	17.53%	18.90%
Jan. 1, 1977 thru Dec. 31, 1977	1977	15.34%	16.77%
Jan. 1, 1976 thru Dec. 31, 1976	1976	14.02%	15.57%
Jan. 1, 1975 thru Dec. 31, 1975	1975	12.49%	13.78%
Jan. 1, 1974 thru Dec. 31, 1974	1974	12.88%	13.60%
Jan. 1, 1973 thru Dec. 31, 1973	1973	12.85%	13.41%
Jan. 1, 1972 thru Dec. 31, 1972	1972	12.96%	13.26%
Jan. 1, 1971 thru Dec. 31, 1971	1971	12.81%	12.96%
Jan. 1, 1970 thru Dec. 31, 1970	1970	15.52%	15.52%
Jan. 1, 1969 thru Dec. 31, 1969	1969	14.68%	14.49%
Jan. 1, 1968 thru Dec. 31, 1968	1968	13.66%	13.50%
Jan. 1, 1967 thru Dec. 31, 1967	1967	13.55%	13.13%

\* For employer billing purposes, the September 1988 billing was carried through Sept. 30, 1988 and was not cut off at Sept. 8, 1988. The same goes for the employee rates for the most part.

### Member Contribution Rates

Time Frame of Rates	Member Rates	
	Police	Fire
July 2, 2015 and thereafter	12.25%	12.25%
July 2, 2014 thru July 1, 2015	11.50%	11.50%
July 2, 2013 thru July 1, 2014	10.75%	10.75%
Sept. 9, 1988 thru July 1, 2013	10.00%	10.00%
Aug. 1, 1986 thru Sept. 8, 1988	9.50%	9.50%
March 1, 1980 thru July 31, 1986	8.50%	8.50%
Jan. 1, 1968 thru Feb. 28, 1980	7.00%	7.00%
Jan. 1, 1967 thru Dec. 31, 1967	6.00%	6.00%

### Health Care Allocation Rates from Employer Contributions

Time Frame of Rates	Percentage
June 1, 2013 and thereafter	2.85%
Jan. 1, 2013 thru May 31, 2012	4.69%
Jan. 1, 2007 thru Dec. 31, 2012	6.75%
Jan. 1, 2002 thru Dec. 31, 2006	7.75%
Jan. 1, 2001 thru Dec. 31, 2001	7.50%
Jan. 1, 2000 thru Dec. 31, 2000	7.25%
Jan. 1, 1999 thru Dec. 31, 1999	7.00%
Jan. 1, 1992 thru Dec. 31, 1998	6.50%
Jan. 1, 1974 thru Dec. 31, 1991	Rate equal to dollar of Benefits Paid

## Revenue Capacity Information

### Actuarial Interest Rates

Time Frame of Rates	Actuarial Interest Rates	
	Police	Fire
Jan. 1, 1989 thru Present	8.250%	8.250%
Jan. 1, 1986 thru Dec. 31, 1988	7.750%	7.750%
Jan. 1, 1983 thru Dec. 31, 1985	7.500%	7.500%
Jan. 1, 1980 thru Dec. 31, 1982	6.375%	6.375%
Jan. 1, 1979 thru Dec. 31, 1979	6.000%	6.000%
Jan. 1, 1974 thru Dec. 31, 1978	5.000%	5.000%
Jan. 1, 1972 thru Dec. 31, 1973	4.750%	4.750%
Jan. 1, 1970 thru Dec. 31, 1971	4.625%	4.625%
Jan. 1, 1967 thru Dec. 31, 1969	4.250%	4.250%

### DROP and Reemployed Interest Rates

Time Frame of Rates*	Drop and Reemployed Interest Rates	
	Police	Fire
Oct. 1, 2012 thru Dec. 31, 2012	1.65%	1.65%
July 1, 2012 thru Sep. 30, 2012	1.67%	1.67%
Apr. 2, 2012 thru June 30, 2012	2.23%	2.23%
Jan. 19, 2012 thru Apr. 1, 2012	5.00%	5.00%

\* Effective April 2, 2012 the interest rate is equal to the 10-year U.S. Treasury Note Business Day Series, as published by the United States Federal Reserve, with a cap of 5 percent.

### DROP Member Count Roll Forward as of Dec. 31, 2012

Police		2012	2011	2010	2009	2008	2007	2006	2005	2004	2003
Balance Beginning of Year		1,801	1,985	1,990	1,893	1,797	1,683	1,524	1,277	958	0
Number of members that entered into DROP	Increases	329	356	289	289	258	272	298	289	365	971
Number of members that terminated DROP	Decreases	(335)	(540)	(294)	(192)	(162)	(158)	(139)	(42)	(46)	(13)
<b>Sub-Total at year end - Police</b>		<b>1,795</b>	<b>1,801</b>	<b>1,985</b>	<b>1,990</b>	<b>1,893</b>	<b>1,797</b>	<b>1,683</b>	<b>1,524</b>	<b>1,277</b>	<b>958</b>
<b>Fire</b>											
Balance Beginning of Year		1,740	1,888	1,744	1,648	1,541	1,375	1,145	930	668	0
Number of Members that entered into DROP	Increases	283	315	349	258	249	285	317	235	279	683
Number of members that terminated DROP	Decreases	(282)	(463)	(205)	(162)	(142)	(119)	(87)	(20)	(17)	(15)
<b>Sub-Total at year end - Fire</b>		<b>1,741</b>	<b>1,740</b>	<b>1,888</b>	<b>1,744</b>	<b>1,648</b>	<b>1,541</b>	<b>1,375</b>	<b>1,145</b>	<b>930</b>	<b>668</b>
<b>Police and Fire</b>											
Balance Beginning of Year		3,541	3,873	3,734	3,541	3,338	3,058	2,669	2,207	1,626	0
Number of members that entered into DROP	Increases	612	671	638	547	507	557	615	524	644	1,654
Number of members that terminated DROP	Decreases	(617)	(1,003)	(499)	(354)	(304)	(277)	(226)	(62)	(63)	(28)
<b>TOTAL AT YEAR END - POLICE AND FIRE</b>		<b>3,536</b>	<b>3,541</b>	<b>3,873</b>	<b>3,734</b>	<b>3,541</b>	<b>3,338</b>	<b>3,058</b>	<b>2,669</b>	<b>2,207</b>	<b>1,626</b>

## Revenue Capacity Information

### Actuarial Valuation Information - Pension Trust (dollars in millions)

As of Jan. 1	Valuation Assets	Actuarial Accrued Liabilities (AAL)	Unfunded/ (Overfunded) Actuarial Accrued Liabilities (UALL)	Ratio of Assets to AAL	Active Member Payroll	Funding Period in Years
2012	\$10,309	\$16,347	\$6,038	63.06%	\$1,897	Infinite
2011	10,681	15,384	4,703	69.43%	1,869	Infinite
2010	10,794	14,831	4,037	72.80%	1,895	Infinite
2009	9,309	14,307	4,998	65.07%	1,901	Infinite
2008	11,213	13,728	2,515	81.68%	1,831	Infinite
2007	10,158	12,988	2,830	78.21%	1,783	Infinite
2006	9,551	12,190	2,639	78.35%	1,756	Infinite
2005	9,337	11,545	2,208	80.87%	1,684	Infinite
2004	9,337	10,798	1,461	86.47%	1,644	Infinite
2003	8,683	10,508	1,825	82.63%	1,606	Infinite

### Actuarial Valuation Information - Retiree Health Care Trust (dollars in millions)

As of Jan. 1	Valuation Assets	Actuarial Accrued Liabilities (AAL)	Unfunded/ (Overfunded) Actuarial Accrued Liabilities (UALL)	Ratio of Assets to AAL	Active Member Payroll	UAAL as Percentage of Active Member Payroll
2012	\$780	\$3,699	\$2,919	21.09%	\$1,897	153.8%
2011	718	3,295	2,577	21.78%	1,869	137.9%
2010	573	3,232	2,659	17.74%	1,895	140.3%
2009	439	3,164	2,725	13.87%	1,901	143.3%
2008	527	3,623	3,096	14.54%	1,831	169.1%
2007	437	3,274	2,837	13.30%	1,783	159.1%
2006	343	3,335	2,992	10.29%	1,756	170.4%

## Historical Annual Investment Results

U.S. Equity	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003
OP&F	15.88%	0.94%	22.43%	32.82%	(38.02)%	5.37%	14.80%	7.59%	13.11%	30.00%
<b>International Equity*</b>										
OP&F	19.96%	(12.37)%	15.11%	39.58%	(45.71)%	20.61%	28.24%	14.10%	21.18%	35.92%
<b>Emerging Markets</b>										
OP&F	N/A	N/A	N/A	N/A	N/A	N/A	N/A	26.24%	22.68%	58.23%
<b>Fixed Income</b>										
OP&F–Core	6.31%	6.41%	9.72%	11.76%	0.37%	6.50%	4.59%	2.67%	4.75%	5.35%
OP&F–High Yield	15.64%	6.00%	15.02%	47.02%	(20.17)%	2.91%	10.22%	2.61%	10.65%	N/A
OP&F–GIPS	14.93%	35.50%	15.28%	9.84%	2.04%	11.72%	2.97%	2.96%	6.97%	N/A
OP&F–Commercial Mortgage**	5.28%	4.99%	16.63%	(0.63)%	0.68%	2.31%	5.08%	9.83%	4.82%	N/A
<b>Real Estate **</b>										
OP&F	13.06%	18.01%	4.86%	(37.27)%	2.07%	20.67%	26.60%	26.07%	14.14%	13.06%
<b>Private Equity **</b>										
OP&F	9.58%	17.66%	12.57%	(11.61)%	(2.32)%	31.88%	17.43%	26.76%	7.15%	(13.15)%
<b>Total Portfolio</b>										
OP&F	14.89%	2.56%	15.83%	20.73%	(28.06)%	10.47%	16.15%	9.07%	13.29%	24.96%
Policy Index***	14.94%	2.43%	12.61%	22.81%	(28.89)%	9.16%	15.69%	8.98%	12.84%	26.47%

\* International Equity benchmark is a blend of the MSCI ACWI ex U.S. (Net) through June 30, 2011 and the MSCI ACWI ex U.S. (Net) Iran/Sudan Free from July 1, 2011 forward.

\*\* One quarter in arrears.

\*\*\* Interim Policy Index: 31.6 percent Wilshire 5000, 21.7 percent MSCI ACWI ex-U.S. (Net) Iran/Sudan Free, 10 percent Barclays Aggregate, 15 percent CSFB Dev. Countries HY, 6.5 percent Global TIPS Custom, 10 percent NCREIF ODCE Index Lagged, 4, percent Wilshire 5000 + 3% Lagged, 1.3 percent CPI + 5 percent (Net).

• Long Term Policy: 18.5 percent Wilshire 5000, 18.5 percent MSCI ACWI ex-U.S. (Net) Iran/Sudan Free, 23 percent Barclays Aggregate, 15 percent CSFB Dev. Countries HY, 13 percent Global TIPS Custom, 12 percent NCREIF ODCE Index Lagged, 8 percent Wilshire 5000 +3% Lagged, 5 percent CPI + 5 percent (Net), 5 percent Alerian MLP Index (adds to 118 percent as “Risk Parity” approach uses levered core fixed income and levered Global Inflation-Protected Securities).

Time Weighted methodology, based upon market values, is used when calculating performance.

## Debt Capacity Information

OP&F does not have any outstanding debt, nor are there any plans to ever pursue issuing debt anytime in the future.

## Demographic and Economic Information

### Number of Employer Units

Year	Municipalities		Townships		Villages		Total		Total
	Police	Fire	Police	Fire	Police	Fire	Police	Fire	Both
2012	249	225	0	122	288	33	537	380	917
2011	250	227	0	123	283	34	533	384	917
2010	252	229	0	123	284	33	536	385	921
2009	252	229	0	121	287	32	539	382	921
2008	251	228	0	123	287	34	538	385	923
2007	251	229	0	122	289	33	540	384	924
2006	252	225	0	119	284	32	536	376	912
2005	251	224	0	113	286	31	537	368	905
2004	252	225	0	109	288	29	540	363	903
2003	252	223	0	110	289	29	541	362	903



## Demographic and Economic Information

### Principal Participating Employers

Employer Name	Covered Employees	Rank	Percentage of Total Covered Members
City of Columbus	3,545	1	12.83%
City of Cleveland	2,414	2	8.74%
City of Cincinnati	1,849	3	6.69%
City of Toledo	1,204	4	4.36%
City of Akron	757	5	2.74%
City of Dayton	643	6	2.33%
City of Canton	314	7	1.14%
City of Springfield	259	8	0.94%
City of Parma	223	9	0.81%
City of Hamilton	221	10	0.80%
All Others	16,194		58.62%
<b>TOTAL</b>	<b>27,623</b>		<b>100.00%</b>

## Operating Information

### OP&F Employee Budgeted Position Counts

Department	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004
Administration	47	45	46	46	47	44	45	42	44	38
Finance**	22	22	13	13	13	13	13	16	16	28
Health Care Services*	0	0	0	0	0	0	0	0	16	15
Information Services	24	24	24	24	24	25	25	25	26	29
Investments	14	15	15	15	14	14	14	14	17	15
Member Services**	34	38	46	46	51	54	64	69	56	56
<b>TOTAL FULL-TIME POSITIONS</b>	<b>141</b>	<b>144</b>	<b>144</b>	<b>144</b>	<b>149</b>	<b>150</b>	<b>161</b>	<b>166</b>	<b>175</b>	<b>181</b>

\* Health Care Services was combined with Member Services in 2006.

\*\* The Employer Services Group was transitioned to Finance from Member Services in 2012.

### Personnel Salaries by Year (dollars in thousands)

	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003
Salaries and Wages	\$8,756.9	\$8,807.9	\$8,313.9	\$8,660.2	\$8,866.4	\$8,844.4	\$8,763.8	\$8,963.4	\$9,037.8	\$9,443.8
Average Salary per Budgeted Staff	\$60.8	\$61.2	\$57.7	\$58.1	\$59.1	\$54.9	\$52.8	\$51.2	\$49.9	\$49.7

## Operating Information

### OP&F Budget\* (dollars in millions)

	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003
Administrative Expenses (Actual)*	\$52.8	\$50.3	\$46.5	\$41.0	\$43.6	\$45.9	\$41.7	\$38.7	\$41.3	\$35.9
Administrative Expenses (Budget)*	58.7	54.5	45.6	46.5	54.6	61.0	48.5	44.1	45.0	35.9
Percentage of Budget vs Actual	90%	92%	102%	88%	80%	75%	86%	88%	92%	100%
* Excludes depreciation expense										
	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003
Capital (Actual)	\$2.9	\$1.7	\$2.0	\$0.6	\$2.1	\$1.2	\$0.7	\$2.0	\$2.4	\$3.2
Capital (Budget)	3.4	3.7	4.4	3.2	4.6	3.8	5.8	2.8	2.8	4.4
Percentage of Budget vs Actual	85%	46%	45%	19%	46%	32%	12%	71%	86%	73%
	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003
Operating Expenses (Actual)*	\$15.4	15.4	\$15.0	\$16.3	\$16.0	\$16.7	\$14.7	\$13.9	\$14.3	\$15.4
Investment Expenses (Actual)*	37.4	34.9	31.5	24.7	27.6	29.2	27.0	24.8	27.0	20.5

\* Excludes depreciation expense

### Other Operating Statistics

	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003
Total Staff	144	144	144	149	150	161	166	175	181	190
Investment Staff	15	15	15	14	14	14	14	17	15	18
Investment										
Actual Expenses	\$37.4	\$34.9	\$31.5	\$24.7	\$27.6	\$29.2	\$27.0	\$24.8	\$27.0	\$20.5
Investment Income	\$1,658	\$230	\$1,652	\$1,895	\$(3,833)	\$1,163	\$1,630	\$847	\$1,152	\$1,745
Investment Staff to										
Investment Expense Ratio	\$2.5	\$2.3	\$2.1	\$1.8	\$2.0	\$2.1	\$1.9	\$1.5	\$1.8	\$1.1
Total Staff to Investment										
Income Ratio	\$11.5	\$1.6	\$11.5	\$12.7	\$(25.6)	\$7.2	\$9.8	\$4.8	\$6.4	\$9.2
Investment Staff to										
Investment Income Ratio	\$110.5	\$15.3	\$110.1	\$135.4	\$(273.8)	\$83.1	\$116.4	\$49.8	\$76.8	\$97.0

### Death Benefit Fund

Pursuant to Section 742.63 of the Ohio Revised Code, the Board of Trustees of OP&F administers the State of Ohio DBF. This program was established by the State of Ohio to provide monthly benefit payments to surviving family members of Ohio fire fighters and law enforcement officers who have been killed in the line of duty or die of a duty-related accident or illness. Funds are disbursed to OP&F, on a quarterly basis, each State fiscal year (July 1-June 30) and benefits are paid monthly by OP&F to eligible recipients. The unused balance at June 30 is returned to the State. The assets and liabilities of the DBF are included in the Fund's combining statement of plan net assets as of Dec. 31, 2012 as an agency fund. The following is a schedule of DBF financial activity:

Balance Jan. 1, 2012	<b>\$248,492</b>
Less: Survivor Benefits Paid Jan. 1 thru June 30, 2012	(9,583,053)
Balance returned to State of Ohio	(665,439)
State Funding Received	20,000,000
Less: Survivor Benefits Paid July 1 thru Dec. 31, 2012	(9,543,339)
<b>BALANCE DEC. 31, 2012</b>	<b>\$456,661</b>

## List of Professional Acronyms

---

AAL = Actuarial Accrued Liabilities	MLP = Master Limited Partnerships
ACH = Automated Clearing House	MSCI = Morgan Stanley Capital International
ACWI Ex-U.S. = All Country World Ex-U.S. Index	NCREIF = National Council of Real Estate Investment Fiduciaries
ARC = Annual Required Contributions	ODCE = Open End Diversified Core Equity
bps = Basis Points	OP&F = Ohio Police & Fire Pension Fund
Buck = Buck Consultants, LLC	OPEB = Other Post-Employment Benefit
CAFR = Comprehensive Annual Financial Report	OPERS = Ohio Public Employees Retirement System
CLO = Collateralized Loan Obligation	ORC = Ohio Revised Code
COLAs = Cost of Living Allowance	ORSC = Ohio Retirement Study Council
CPI = Consumer Price Index	PPCC = Public Pension Coordination Council
CSFB = Credit Suisse First Boston	QE3 = Third Quantitative Easing Program
DBF = Death Benefit Fund	REITs = Real Estate Investment Trusts
DROP = Deferred Retirement Option Plan	REMICs = Real Estate Mortgage Investment Conduits
ECB = European Central Bank	RFP = Request for Proposal
FHLMC = Federal Home Loan Mortgage Corporation	RSI = Required Supplementary Information
FNMA = Federal National Mortgage Association	S&P = Standard and Poor's
FOMC = Federal Open Market Committee	SSGA = State Street Global Advisors
GASB = Governmental Accounting Standards Board	STIF = Short Term Investment Fund
GDP = Gross Domestic Product	STRIPS = Separate Trading of Registered Interest and Principal Securities
GFOA = Government Finance Officers Association of the U.S. and Canada	TIPS = Treasury Inflation Protected Securities
GIPS = Global Inflation Protected Securities	TTY = TeletypeWriter
GNMA = Government National Mortgage Association	UAAL = Unfunded Actuarial Accrued Liabilities
HCSF = Health Care Stabilization Fund	U.S. = United States of America
HY = High Yield	U.S.D. = United States Dollar
IPOs = Initial Public Offering	
IRC = Internal Revenue Code	
IRS = Internal Revenue Service	
I/S Free = Iran and Sudan Free	
M&A = Mergers and Acquisitions	
MD&A = Management Discussion and Analysis	



*Securing the future for  
Ohio's police and firefighters*

Prudence • Integrity • Empathy

140 East Town Street  
Columbus, Ohio 43215

*Securing the future for Ohio's police  
and firefighters.*

Customer Service: 888-864-8363  
General Information: 614-228-2975  
TTY: 614-221-3846  
Facsimile: 614-628-1777  
E-mail: [questions@op-f.org](mailto:questions@op-f.org)

[www.op-f.org](http://www.op-f.org)

**INDEPENDENT AUDITORS' REPORT ON INTERNAL CONTROL OVER  
FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS  
BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED IN  
ACCORDANCE WITH GOVERNMENT AUDITING STANDARDS**

To the Board of Trustees  
Ohio Police and Fire Pension Fund  
Columbus, Ohio

We have audited, in accordance with the 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, the financial statements of the Ohio Police and Fire Pension Fund (the Fund), which comprise the statement of net position as of December 31, 2012 and the related statement of changes in net position for the year then ended, and the related notes to the financial statements and have issued our report thereon June 18, 2013, wherein we noted the Fund adopted the provisions of GASB Statements No. 62 and 63 for the year ended December 31, 2012.

**Internal Control Over Financial Reporting**

In planning and performing our audit of the financial statements, we considered the Fund's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Fund's internal control. Accordingly, we do not express an opinion on the effectiveness of the Fund's internal control.

*A deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. *A material weakness* is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. *A significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.



2525 north limestone street, ste.103  
springfield, oh 45503

www.cshco.com  
p. 937.399.2000  
f. 937.399.5433

**Compliance and Other Matters**

As part of obtaining reasonable assurance about whether the Fund's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, 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 or other matters that are required to be reported under *Government Auditing Standards*.

**Purpose of this Report**

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the Fund's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Fund's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

**CLARK, SCHAEFER, HACKETT & CO.**

Springfield, Ohio  
June 18, 2013



# Dave Yost • Auditor of State

**OHIO POLICE AND FIRE PENSION FUND**

**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.**

*Susan Babbitt*

**CLERK OF THE BUREAU**

**CERTIFIED  
SEPTEMBER 10, 2013**