

# The City of Phoenix Employees' Retirement Plan

COMPONENT OF THE CITY OF PHOENIX, ARIZONA

## Comprehensive Annual Financial Report

FOR THE FISCAL YEARS ENDED JUNE 30, 2013 AND 2012

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**COPERS** is dedicated to educating and assisting all past, current and future employees, enabling them to make informed decisions concerning their retirement options. Our pledge is to provide comprehensive information and exceptional customer service.





**CITY OF PHOENIX  
EMPLOYEES' RETIREMENT PLAN  
(A Component Unit of the City of Phoenix, Arizona)**

**SIXTY-SEVENTH ANNUAL  
COMPREHENSIVE ANNUAL FINANCIAL REPORT  
FOR THE FISCAL YEARS ENDED  
JUNE 30, 2013 and 2012**

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**Prepared by:**  
City of Phoenix  
Employees' Retirement System  
and  
City of Phoenix  
Finance Department





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## Introductory Section

The **Introductory Section** contains the Certificate of Achievement for Excellence in Financial Reporting, the letter of transmittal, the Retirement Board structure, the administrative organization, and the Chairperson's Report.





Government Finance Officers Association

**Certificate of  
Achievement  
for Excellence  
in Financial  
Reporting**

Presented to

**City of Phoenix  
Employees' Retirement Plan  
Arizona**

For its Comprehensive Annual  
Financial Report  
for the Fiscal Year Ended

**June 30, 2012**

Executive Director/CEO



Public Pension Coordinating Council

**Public Pension Standards Award  
For Funding and Administration  
2013**

Presented to

**City of Phoenix Employees' Retirement System**

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

*Presented by the Public Pension Coordinating Council, a confederation of*

National Association of State Retirement Administrators (NASRA)  
National Conference on Public Employee Retirement Systems (NCPERS)  
National Council on Teacher Retirement (NCTR)

Alan H. Winkle  
Program Administrator



## City of Phoenix RETIREMENT SYSTEMS

December 20, 2013

Chairperson and Members of the Retirement Board  
City of Phoenix Employees' Retirement Plan:

I am pleased to submit this Comprehensive Annual Financial Report (CAFR) of the City of Phoenix Employees' Retirement Plan (COPERS or the Plan) as of and for the years ended June 30, 2013 and 2012. This report consists of the Introductory, Financial, Investment, Actuarial and Statistical sections.

The Plan is governed by the City of Phoenix Employees' Retirement Law of 1953 (Chapter XXIV of the City of Phoenix Charter). This law has been revised over the years, with the latest amendment approved by the City voters on March 12, 2013.

COPERS was created to provide retirement, survivor and disability benefits to the City of Phoenix general employees. COPERS is a qualified retirement plan under the Internal Revenue Code. The City of Phoenix Employees' Retirement Board (the Board) is trustee of the Plan.

Elections are held every three years for the members of the Plan to elect three employee Retirement Board members. The last election was held in December 2011. The three elected employee Board members with terms of January 1, 2012 through December 31, 2014 are Elizabeth Bissa, David Hensley and Leslie Scott. Cathleen Gleason was elected by the Board members as the Retiree Board member and Citizen Board member Linda Reidenbach was reelected by the Board members for three-year terms concurrent with the term of the elected employee Board members. The Ex-Officio Board members are Jeff DeWitt, Finance Director; Rick Naimark, Deputy City Manager; Randy Piotrowski, City Treasurer and Lionel Lyons, Interim Human Resources Director.

The Mayor and City Council are covered by the Elected Officials Retirement Plan of Arizona (EORPA). Sworn police and fire employees are covered by the Arizona Public Safety Personnel Retirement System (APSPRS). The administration of the system and responsibility for making the APSPRS provisions effective for each employer are vested in Local Boards. For the City of Phoenix, this responsibility rests with the City of Phoenix Fire Pension Board and the City of Phoenix Police Pension Board. EORPA and APSPRS benefit payments, investments and overall administration of the Plans are handled by centralized State Boards. The EORPA and the APSPRS were created by Arizona State Statutes. These retirement plans publish separate financial reports.

### **FINANCIAL INFORMATION**

Responsibility for accuracy of the data, completeness, and fairness of the presentation of the CAFR, including all disclosures, rests with the Retirement Board. The Plan's record-keeping, financial statement and investment control responsibilities have been performed by the City's Finance Department. To the best of our knowledge and belief, this report is accurate in all material respects and is reported in a manner designed to present fairly the Plan net position and changes in Plan net position. All disclosures necessary to enable the reader to gain an understanding of the Plan's financial activities have been included. The Management's Discussion and Analysis, which begins on page 16, provides analysis of the financial activities for the fiscal years ended June 30, 2013 and 2012.

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to COPERS for its comprehensive annual financial report for the fiscal year ended June 30, 2012. In order to be awarded a Certificate of Achievement, an organization must conform with the highest standards of fiduciary reporting and full disclosure.

## **INTERNAL CONTROLS**

Internal controls are procedures designed to protect assets from loss, theft or misuse; to check the accuracy and reliability of accounting data; to promote operational efficiency; and to encourage compliance with managerial policies. The Board and the City of Phoenix (the City) management are responsible for establishing a system of internal controls designed to provide reasonable assurance these objectives are met. Because the cost of internal controls should not outweigh their benefits, the City's comprehensive framework of internal controls has been designed to provide reasonable, rather than absolute, assurance that the financial statements are free of any material misstatements. Representatives from the City Auditor's Department meet periodically with the Board to review their audit plans and present the results of the audits. Also, representatives from the independent auditors meet annually with the Board to review their audit plans and receive input from the Board. The City also maintains budgetary controls designed to ensure compliance with legal provisions of the annual budget adopted by the City Council.

This report has been prepared in conformance with the principles of governmental accounting and reporting as set forth by the Governmental Accounting Standards Board. Transactions of COPERS are reported on the accrual basis of accounting. Revenues are recorded when earned, without regard to the date of collection and expenses are recorded when incurred. The City's internal accounting and audit controls are designed to provide for the accuracy, reliability and integrity of all financial records.

## **MAJOR INITIATIVES INVOLVING PLAN ADMINISTRATION**

On May 17, 2012, the Retirement Board acknowledged the City of Phoenix regulation regarding the pensionable nature of sick leave payouts at retirement effective July 8, 2012.

## **ADMINISTRATIVE BUDGET**

The City provides an annual budgetary allocation to pay for the general administration of COPERS. The cost paid by the City for COPERS' administration was \$1,610,000. Most investment-related expenses, such as investment custody costs, investment manager fees, and consultant fees are paid directly from the Plan's assets. Certain administrative fees for legal, medical, actuarial and computer services are also paid directly from Plan assets. The investment and administrative costs amounted to \$10,305,000 for the fiscal year ended June 30, 2013. Administrative and investment costs combined represented 0.53% of total Plan assets.

## **FUNDING STATUS AND PROGRESS**

Fund balances are derived from net assets and are accumulated to meet current and future obligations to retirees and beneficiaries. COPERS' funding objective is to meet these obligations through contributions, which remain approximately level as a percent of member payroll. The actuarial valuation as of June 30, 2013, reflects a funded ratio of 64.2%, the difference between the funding value of assets and the actuarially calculated pension liability. The unfunded actuarial accrued liability will be amortized as a level percent of payroll over future years. The amortization period as of June 30, 2013 is 20 years. A smoothed market value of assets was used for the June 30, 2013 valuation. This method spreads the difference between the actual and expected investment return over four years. A detailed discussion of the funding of COPERS is provided in the Actuarial Section of this report.

## **INVESTMENT ACTIVITIES**

As of June 30, 2013, the net asset value of the COPERS' Plan is \$1.96 billion. The fiscal year return for the Plan is 11.35% and 0.66% better than the benchmark. The five year annualized return is 3.45%.

The Board considered and approved several contract renewals for investment managers during the year.

## **PROFESSIONAL SERVICES**

The Retirement Board retains professional consultants to prudently discharge its fiduciary responsibility for the proper administration of the Plan. Cheiron provides actuarial services and the corresponding certification. State Street Bank serves as the master custodian. Brokerage trade execution monitoring is compiled by Elkins/McSherry, LLC and reviewed by investment consultant RV Kuhns. COPERS' financial statements are

audited by Grant Thornton, LLP and reviews of operations are performed by the City Auditor's Department. Investment performance analysis, asset allocation review and investment consulting is provided by RV Kuhns.

## **SUBSEQUENT EVENTS**

On March 12, 2013, a Special Election was held to change provisions in the City of Phoenix's Charter concerning the retirement system. New employees hired on and after July 1, 2013 will be placed in Tier II. The Tier II changes for new hires are:

- Employee contribution rate based on a 50/50 split of actuarially determined rate.
- Change the pension benefit multiplier to a graduated multiplier based on years of service, matching the Arizona State Retirement system (ASRS) schedule.
- Change Rule of 80 provision to Rule of 87.
- Allow new city hires with service on account with ASRS prior to July 1, 2011 to join COPERS under current provisions.

In addition, the following items were adopted:

- Remove some non-standard investment limitations from the Charter.
- Place in the Charter certain IRS-required operational and documentation provisions that are current practice.

On October 31, 2013, the City Council eliminated certain compensation elements from the calculation of pensionable earnings for middle managers and executives, effective January 1, 2014. In addition, a vacation "snapshot" of unused vacation time will be taken December 31, 2013 for middle managers and executives and July 1, 2014 for all other General City employees.

## **ACKNOWLEDGMENTS**

The Plan received the Public Pension Standards Award for Funding and Administration. This award was presented by the Public Pension Coordination Council, a confederation of the National Association of State Retirement Administrators, the National Conference on Public Employee Retirement Systems and the National Council on Teacher Retirement. This is the fourth year the Plan has applied for and received this award.

The guidance provided by the Retirement Board is greatly appreciated. The preparation of this report is a collaborative effort of many individuals. I would like to acknowledge the hard work of the COPERS' staff, the Finance Department and the Retirement Board. This report is intended to provide important information crucial to the understanding of the pension plan.

Sincerely,



Gail Strohl  
Retirement Program Administrator



## Retirement Board



**ELIZABETH BISSA**  
Chairperson Retirement Board  
Elected Board Member



**CATHLEEN GLEASON**  
Vice Chairperson Retirement Board  
Retired Budget and Research  
Director  
City of Phoenix  
Retiree Board Member



**JEFF DEWITT**  
Finance Director  
City of Phoenix  
Ex-Officio Board Member



**DAVID HENSLEY**  
Elected Board Member



**LIONEL LYONS**  
Interim Human Resources Director  
City of Phoenix  
Ex-Officio Board Member



**RICK NAIMARK**  
Deputy City Manager  
City of Phoenix  
Ex-Officio Board Member



**RANDY PIOTROWSKI**  
Treasurer  
City of Phoenix  
Ex-Officio Board Member



**LESLIE SCOTT**  
Elected Board Member

**VACANT**  
Citizen Board Member

## Retirement Board Committees

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### Investment Committee

**Cathleen Gleason**, Chairperson  
**Jeff DeWitt**  
**David Hensley**  
**Randy Piotrowski**  
**Leslie Scott**

### Charter Amendments/Policies & Procedures Committee

**Lionel Lyons**, Chairperson  
**Elizabeth Bissa**  
**Cathleen Gleason**  
**David Hensley**

### Legal Review Committee

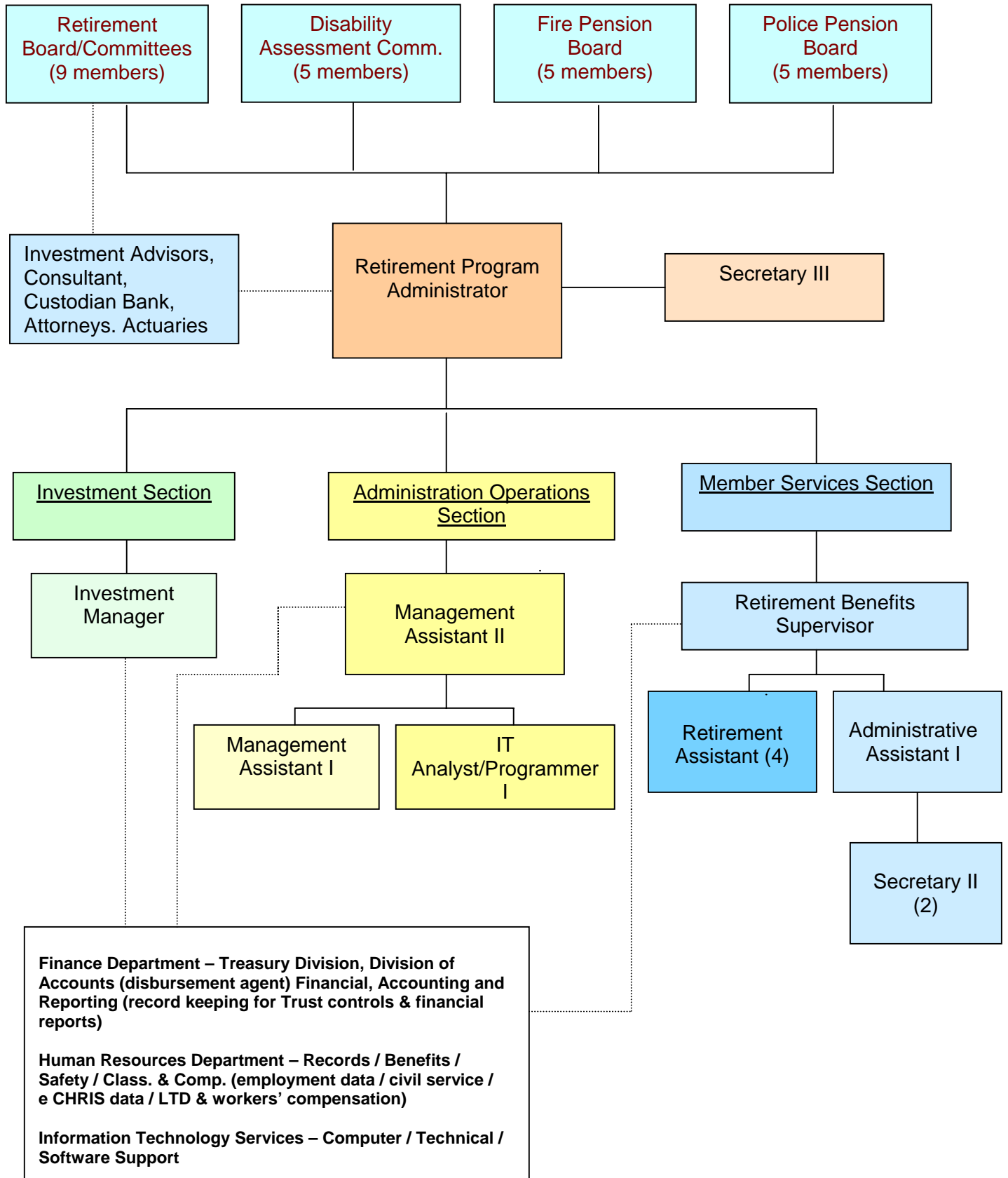
**Rick Naimark**, Chairperson  
**Jeff DeWitt**  
**Cathleen Gleason**  
**Randy Piotrowski**  
**Leslie Scott**

### Disability Assessment Committee

**Kathy Haggerty**, Chairperson  
**Stanley Flowers**  
**Robert Jones, M.D.**  
**Gail Strohl**  
**Amber Williamson**



# Administrative Organization



## Administrative Organization (Continued)

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### Administrative Staff

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<b>Gail Strohl</b>	Retirement Program Administrator
<b>John Buchanan</b>	Retirement Assistant
<b>Lollita Cordova</b>	Management Assistant I
<b>Greg Fitchet</b>	Investment Manager
<b>Stephen Herbert</b>	IT Analyst Programmer I
<b>Modesta Hinojos</b>	Secretary II
<b>Tim Jackson</b>	Retirement Assistant
<b>Terri Jimenez</b>	Administrative Assistant I
<b>Anna Martinez</b>	Management Assistant II
<b>Tricia Quiroz</b>	Retirement Assistant
<b>Adrianna Rodriguez</b>	Secretary II
<b>Josie Romero</b>	Retirement Assistant
<b>Paula Whisel</b>	Secretary III

### Accounting

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**Jeff DeWitt** Finance Department

Finance Director

### Treasurer

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**Randy Piotrowski** Finance Department

City Treasurer

### Legal

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**Gary Verburg** Law Department

City Attorney

### Actuary

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Cheiron McLean, VA

### Auditor

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Grant Thornton LLP Phoenix, AZ  
Certified Public Accountants under contract with the City Auditor

### Brokerage

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Elkins/McSherry, LLC New York, NY

### Investment Services

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Refer to Investment Section, page 46

### Legal Services

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Cohen Milstein Sellers & Toll, PLLC	Washington, D.C.
Keller Rohrback, P.L.C.	Phoenix, AZ
Kessler Topaz Meltzer & Check, LLP	Radnor, PA
Kutak Rock LLP	Scottsdale, AZ
Labaton Sucharow, LLP	New York, NY
Tiffany & Bosco P.A.	Phoenix, AZ
Yoder & Langford, P.C.	Phoenix, AZ

### Master Custodian

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State Street Bank Sacramento, CA

### Medical Advisors

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Several physicians and clinics used for evaluation of disability applicants on a "per case" basis



## City of Phoenix RETIREMENT SYSTEMS

December 20, 2013

To COPERS' Members and Retirees:

On behalf of the Retirement Board, it is my pleasure to present the City of Phoenix Employees' Retirement System (COPERS) Comprehensive Annual Financial Report (CAFR) for the fiscal years ended June 30, 2013 and June 30, 2012. This annual report contains information regarding the COPERS' administration, financial statements, investments, actuarial and statistical data.

The Board's investment consultant, R.V. Kuhns & Associates (Kuhns), provides performance measurement and assists the Board with analysis of investment issues. Kuhns reports the COPERS' total fund performance for the year ended June 30, 2013 was 11.35%. The annualized return for the past three and five years was 10.49% and 3.45%, respectively.

As reported by Kuhns, the market value of the Plan's assets increased from \$1.796 billion to \$1.960 billion in the fiscal year ended June 30, 2013. The long-term returns of the Plan were negatively impacted by the difficult market environment and economic downturn experienced beginning mid-2007 through early 2009.

The Board has implemented a diversified portfolio, in which all segments of the U.S. and International equity markets are represented. The fixed income and real estate allocations are diversified among several managers. Real estate holdings are further diversified among geographic locations and property types.

The Board's actuarial consultant, Cheiron, Inc. (Cheiron), conducted the annual actuarial valuation. In the actuarial valuation as of June 30, 2013, Cheiron reports the funded ratio of the plan to be 64.2%, an increase of 2.0% from the June 30, 2012, funded ratio of 62.2%. The plan sponsor, the City of Phoenix, remains committed to funding the employer's actuarially computed contribution amount.

Representatives from the City Auditor Department and external auditors under contract with the City Auditor meet annually with the Board to review their audit plans, receive input from the Board and present the results of their audits.

A special election was held on March 12, 2013 and voters approved a number of changes impacting the retirement system. The Charter of the City of Phoenix (Charter) was amended to include an additional benefit tier. All new employees hired on and after July 1, 2013 will be placed in Tier II with a higher employee contribution rate, revised retirement eligibility and a modified benefit ratio. The Charter's investment provisions were amended to incorporate a prudent investor standard for the retirement system, replacing security and asset class restrictions with a mandate to prudently manage total fund risk. The Charter was also revised to incorporate the documentation provisions required for tax-qualified governmental retirement plans. Historically, the Board has met its obligation to comply with these requirements through the adoption of Board policies.

The Retirement Board has been frequently updated regarding the review undertaken by the City Council's Pension Fairness and Spiking Elimination Ad Hoc Subcommittee. On October 31, 2013, the City Council voted to exclude certain compensation elements from pensionable earnings for middle managers and executives, as of January 1, 2014. A vacation "snapshot" of unused vacation time will be taken December 31, 2013 for middle managers and executives and July 1, 2014 for all other General City employees.

The Board and staff have also continued effective communication with the Plan's retirees, which included a presentation for the City of Phoenix Retirees Association members.

The CAFR and the Popular Annual Financial Report (PAFR) for the fiscal years ended June 30, 2012 and 2011 were again recognized by the Government Finance Officers Association. These reports are accessible through the COPERS' internet site.

The COPERS' Board continues to focus on fulfilling our fiduciary obligation to all stakeholders, including employees, retirees, the City of Phoenix and its taxpayers. Please contact the Retirement Office with any questions or comments.

Sincerely,



Elizabeth Bissa  
Chairperson, Retirement Board



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## Financial Section

The **Financial Section** contains the opinion of the independent auditors, management's discussion and analysis, the audited financial statements, notes to the financial statements, and relevant supplemental information.







## REPORT OF INDEPENDENT CERTIFIED PUBLIC ACCOUNTANTS

Grant Thornton LLP  
2398 E Camelback Road, Suite 600  
Phoenix, AZ 85016-9007

T 602.474.3400  
F 602.474.3421  
[www.GrantThornton.com](http://www.GrantThornton.com)

Honorable Mayor and Members of the City Council  
City of Phoenix Employees' Retirement System Retirement Board

We have audited the accompanying statements of plan net position of the City of Phoenix Employees' Retirement System (the "Plan"), for the years ended June 30, 2013 and 2012, and the related statements of changes in plan net position for the years ended June 30, 2013 and 2012.

### 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.

### Auditor's 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. 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 auditor's 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 Plan'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 Plan'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, information regarding the City of Phoenix Employees' Retirement System's net position held in trust for pension benefits as of June 30, 2013 and 2012, and changes therein for the year then ended, and its financial status as of June 30, 2013 and 2012 and changes therein for the year then ended in accordance with accounting principles generally accepted in the United States of America.

#### Other matters

##### Required Supplementary information

Accounting principles generally accepted in the United States of America require that management's discussion and analysis, as well as, the schedule of funding progress and the schedule of employer contributions on pages 16 through 20 and page 37, respectively, be presented to supplement the basic financial statements. Such information, although not a required part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. This required supplementary information is the responsibility of management. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America established by the American Institute of Certified Public Accountants. These limited procedures 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 basic financial statements, and other knowledge we obtained during our audit of the basic 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.

##### *Supplementary information*

Our audit was conducted for the purpose of forming an opinion on the Plan's financial statements as a whole. The additional supplementary information listed in the table of contents is presented for purposes of additional analysis and is not a required part of the basic financial statements. Such supplementary information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. The information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures. These additional procedures included comparing and reconciling the information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the supplementary information is fairly stated, in all material respects, in relation to the basic financial statements as a whole.



*Other information*

Our audit was conducted for the purpose of forming an opinion on the basic financial statements taken as a whole. The introductory, investment, actuarial, and statistical sections are presented for purposes of additional analysis and are not a required part of the basic financial statements. Such information has not been subjected to the auditing procedures applied to the audit of the basic financial statements, and accordingly, we express no opinion on it.

GRANT THORNTON LLP

Phoenix, Arizona  
December 20, 2013

## Management's Discussion and Analysis (unaudited)

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Dear Members and Retirees:

The City of Phoenix Employees' Retirement System ("COPERS" or the "Plan") is pleased to provide the following analysis of the financial activities for the fiscal years ended June 30, 2013 and 2012. The information provided is intended to be considered in conjunction with the Transmittal Letter in the Introductory Section, the Statements provided in the Financial, Investment, Actuarial and Statistical Sections of this Comprehensive Annual Financial Report ("CAFR"), and the Notes to the Financial Statements.

### Financial Highlights:

(in thousands)

- As of June 30, 2013, \$1,959,952 in Plan Net Position is held in Trust for the payment of pension benefits, as identified in the Statements of Plan Net Position on page 21. This amount represents an increase of 9.1% from June 30, 2012. The increase is attributable primarily to gains experienced in the financial markets, which impacted COPERS' investment performance. The Plan Net Position as of June 30, 2012 was \$1,795,690 compared to \$1,824,207 as of June 30, 2011. The decrease of 1.6% during 2012 was attributable to lower returns experienced in the financial markets, which impacted COPERS' investment performance.
- COPERS' additions to Plan Net Position, as reported in the Statements of Changes in Plan Net Position on page 22, for the fiscal year ended June 30, 2013 was \$333,242 compared to \$132,188 for fiscal year ended June 30, 2012 and \$440,548 for fiscal year ended June 30, 2011. The increase for the current year was attributable primarily to investment gains. The amount as of June 30, 2013, includes employer and employee contributions of \$137,832 and net investment income of \$195,305. Fiscal year ended June 30, 2012 and June 30, 2011, employer and employee contributions were \$133,822 and \$119,613, respectively. The net investment income (loss) was \$(5,664) and \$315,936 respectively.
- The Statements of Changes in Plan Net Position report an increase in deductions in Plan position of 5.1% from the fiscal year ended June 30, 2012. This compares to a 6.1% increase in deductions between June 30, 2012 and June 30, 2011. Deductions for fiscal year ended June 30, 2013 were \$168,980 compared to \$160,705 for fiscal year ended June 30, 2012 and \$151,515 for fiscal year ended June 30, 2011. The increases in deductions as of June 30, 2013 and June 30, 2012 are attributable to an increase in the number of retirees.
- The recent Actuarial Valuation prepared as of June 30, 2013 reported the funded ratio to be 64.2%. The funded ratio for fiscal years June 30, 2012 and June 30, 2011 was 62.2% and 66.7%, respectively. A smoothed market value of assets was used for the June 30, 2013, June 30, 2012 and June 30, 2011 valuations. This method spreads the difference between the actual and expected investment return over four years.

### Using This Annual Report:

This report is prepared to provide information as a means for making management decisions, complying with statutory provisions, and demonstrating the responsible stewardship of the assets of the Plan. The financial statements starting on page 21 in the Financial Section identify the Net Position Held in Trust for Pension Benefits, and provide a comparison of the current fiscal year to the prior year.

## Management's Discussion and Analysis (unaudited) (Continued)

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### Overview of Financial Statements:

The Financial Section includes the following:

- Statements of Plan Net Position (Page 21)
- Statements of Changes in Plan Net Position (Page 22)
- Notes to the Financial Statements (Page 23)
- Required Supplementary Information (Page 37)
- Additional Supplementary Information (Page 39)

### Statements of Plan Net Position:

These statements identify the receivables, investments, and liabilities of the Plan to arrive at the Net Position Held in Trust for Pension Benefits payable to retirees and survivors. The current year information is provided in comparison to the previous year to assist the reader in evaluating the progress of the Plan.

### Statements of Changes in Plan Net Position:

The Statements of Changes in Plan Net Position differ from the Statements of Plan Net Position by providing the reader with the Plan's additions and deductions for the current year and the previous year. The statements provide the net increases or decreases realized during the years.

### Notes to the Financial Statements:

The Notes to the Financial Statements are an integral part of the financial statements. The information provides the reader with a better understanding of the data presented in the financial statements to further evaluate the financial condition and operations of the Plan.

### Required Supplementary Information (RSI):

The RSI provides the Plan's funding progress for the last eight years and the funding ratio to identify the Plan's ability to meet its current and future benefit obligations. The Schedule of Employer Contributions for the last ten years includes the City's required dollar amount of contributions made to the Plan. The Notes to the Required Supplementary Information provide additional information regarding actuarial assumptions and factors affecting trends.

### Additional Supplementary Information:

The Additional Supplementary Information includes Administrative Expenditures and Encumbrances for the current and previous year in operating COPERS. The administrative expenditures are paid by the City of Phoenix and are not recognized in the COPERS' financial statements. The Schedules of Investment Expenses provide the reader with the cost to the Plan for managing and monitoring the Plan's assets.

## Management's Discussion and Analysis (unaudited)

(Continued)

### Financial Analysis

(in thousands)

The evaluation of the Plan's net position provides a measurement tool in assessing the progress and performance of the Plan. COPERS' Plan Net Position as of June 30, 2013 was \$1,959,952. This amount represents an increase of 9.1% from Plan Net Position of \$1,795,690 as of June 30, 2012. The Plan Net Position as of June 30, 2011 was \$1,824,207. The Plan Net Position reports Cash & Cash Equivalents as of June 30, 2013 as \$23,854 compared to \$28,403 for June 30, 2012 resulting in a decrease of \$4,549. Cash & Cash Equivalents will fluctuate due to timing of investments managed by the individual fund managers. Uninvested cash will be held in Cash & Cash Equivalents and may change at any point in time. The Plan Net Position reports Total Liabilities as of June 30, 2013 as \$211,924 compared to \$167,258 for June 30, 2012, was attributable to an increase in securities lending collateral. The return on investments for fiscal years ended June 30, 2013, 2012 and 2011 was 11.35%, (0.18%) and 21.33%, respectively. The investment performance for the fiscal year ended June 30, 2013 was attributable to domestic equity performance of 25.11%, international equity performance of 14.19%, real estate performance of 13.02%, real return performance of (0.13%), fixed income performance of 0.43% and long/short equity performance of 11.58%. The investment performance for the fiscal year ended June 30, 2012 was attributable to domestic equity performance of (3.6%), international equity performance of (12.11%), real estate performance of 14.86%, real return performance of 1.57%, fixed income performance of 8.31% and long/short equity performance of (2.18%). The investment performance for the fiscal year ended June 30, 2011 was attributable to domestic equity performance of 38.82%, international equity performance of 34.29%, real estate performance of 24.56%, real return performance of 2.43%, fixed income performance of 5.73% and long/short equity performance of 9.53%.

Table 1: COPERS' Plan Net Position for June 30, 2013 and 2012 (in thousands)

	<u>2013</u>		<u>2012</u>		<u>Change</u>	<u>% Change</u>
Cash & Cash Equivalents	\$ 23,854	\$	28,403	\$	(4,549)	(16.0%)
Total Receivables	82,523		52,614		29,909	56.8
Total Investments	<u>2,065,499</u>		<u>1,881,931</u>		<u>183,568</u>	9.8
Total Assets	2,171,876		1,962,948		208,928	10.6
Total Liabilities	<u>211,924</u>		<u>167,258</u>		<u>44,666</u>	26.7
COPERS' Net Position	<u>\$ 1,959,952</u>	\$	<u>1,795,690</u>	\$	<u>164,262</u>	9.1%

Table 2: COPERS' Plan Net Position for June 30, 2012 and 2011 (in thousands)

	<u>2012</u>		<u>2011</u>		<u>Change</u>	<u>% Change</u>
Cash & Cash Equivalents	\$ 28,403	\$	51,998	\$	(23,595)	(45.4%)
Total Receivables	52,614		62,795		(10,181)	(16.2)
Total Investments	<u>1,881,931</u>		<u>1,990,630</u>		<u>(108,699)</u>	(5.5)
Total Assets	1,962,948		2,105,423		(142,475)	(6.8)
Total Liabilities	<u>167,258</u>		<u>281,216</u>		<u>(113,958)</u>	(40.5)
COPERS' Net Position	<u>\$ 1,795,690</u>	\$	<u>1,824,207</u>	\$	<u>(28,517)</u>	(1.6%)

## Management's Discussion and Analysis (unaudited) (Continued)

### Reserves:

COPERS maintains five accounts to hold reserves for benefit payments. Additions to the reserves come from contributions (employer and member) and investment income. Distributions from the reserves include monthly pension benefits and increases to eligible pensions under the Pension Equalization Program and the "13<sup>th</sup> Check." A schedule of reserve account balances is in Note 3 to the Financial Statements.

### COPERS' Activities:

(in thousands)

COPERS provides retirement pensions, survivor benefits, member contribution refunds, and disability benefits to qualified members and their beneficiaries. These benefits are financed through employer and member contributions and income from COPERS' investments.

Net investment income, which includes net appreciation and depreciation in fair value of investments, bond interest, dividend income, net securities lending income and investment expenses for the fiscal year ended June 30, 2013 was \$195,305. This compares to net investment income for June 30, 2012 and June 30, 2011 of \$(5,664) and \$315,936 respectively. Employer contributions increased during the fiscal year due to the increase in the actuarial required contribution of \$110,094 for the fiscal year ended June 30, 2013 compared to \$105,682 for the fiscal year ended June 30, 2012. Deductions increased by 5.1% over the prior fiscal year, primarily a result of increases in benefit payments and the number of retirees. This compares to a 6.1% increase in deductions from June 30, 2011 to June 30, 2012. Benefit payments for the fiscal years ended June 30, 2013, 2012 and 2011 were \$165,521, \$156,679 and \$145,922, respectively. The increase in benefit payments for the last two fiscal years is due to an increase in the number of retirees.

The summary of COPERS' revenues (additions) and expenses (deductions) for the fiscal years ended June 30, 2013, 2012 and 2011 are provided in Table 3 and Table 4:

Table 3: Additions and Deductions to/from Plan Net Position for the fiscal years ended June 30, 2013 and June 30, 2012 (in thousands)

	<u>2013</u>	<u>2012</u>	<u>Change</u>	<u>% Change</u>
<b>Additions</b>				
Employer Contributions	\$ 110,094	\$ 105,682	\$ 4,412	4.2%
Members' Contributions	27,738	28,140	(402)	(1.4)
Inter-System Transfers	105	4,030	(3,925)	(97.4)
Net Investment Income	194,902	(6,352)	201,254	*
Net Securities Lending Income	<u>403</u>	<u>688</u>	<u>(285)</u>	<u>(41.4)</u>
Total	<u>333,242</u>	<u>132,188</u>	<u>201,054</u>	<u>152.1</u>
<b>Deductions</b>				
Benefit Payments	165,521	156,679	8,842	5.6
Refunds	2,464	2,333	131	5.6
Inter-System Transfers	606	1,365	( 759)	(55.6)
Administrative Expense	<u>389</u>	<u>328</u>	<u>61</u>	<u>18.6</u>
Total	<u>168,980</u>	<u>160,705</u>	<u>8,275</u>	<u>5.1</u>
Net Change in Position	<u>164,262</u>	<u>(28,517)</u>	<u>192,779</u>	<u>(676.0)</u>
Ending Net Position	<u>\$ 1,959,952</u>	<u>\$ 1,795,690</u>	<u>\$ 164,262</u>	<u>9.1%</u>

\* not meaningful

## Management's Discussion and Analysis (Continued)

Table 4: Additions and Deductions to/from Plan Net Position for the fiscal years ended June 30, 2012 and June 30, 2011 (in thousands)

	2012	2011	Change	% Change
<b>Additions</b>				
Employer Contributions	\$ 105,682	\$ 90,965	\$ 14,717	16.2%
Members' Contributions	28,140	28,648	( 508)	(1.8)
Inter-System Transfers	4,030	4,999	( 969)	(19.4)
Net Investment Income	(6,352)	314,830	(321,182)	(102.0)
Net Securities Lending Income	688	1,106	( 418)	(37.8)
<b>Total</b>	<b>132,188</b>	<b>440,548</b>	<b>(308,360)</b>	<b>(70.0)</b>
<b>Deductions</b>				
Benefit Payments	156,679	145,922	10,757	7.4
Refunds	2,333	2,470	(137)	(5.5)
Inter-System Transfers	1,365	2,872	(1,507)	(52.5)
Administrative Expense	328	251	77	30.7
<b>Total</b>	<b>160,705</b>	<b>151,515</b>	<b>9,190</b>	<b>6.1</b>
<b>Net Change in Position</b>	<b>(28,517)</b>	<b>289,033</b>	<b>(317,550)</b>	<b>(109.9)</b>
<b>Ending Net Position</b>	<b>\$ 1,795,690</b>	<b>\$ 1,824,207</b>	<b>\$ (28,517)</b>	<b>(1.6%)</b>

### Requests for Information:

This report is prepared to provide the Retirement Board, members, retirees and citizens with an overview of the plan, to assess COPERS' financial position and to show accountability for funds received. Questions regarding the information provided in this financial report or requests for additional information may be addressed to:

COPERS  
200 W. Washington, 10<sup>th</sup> Floor  
Phoenix, AZ 85003  
(602) 534-4400  
[www.phoenix.gov/copers](http://www.phoenix.gov/copers)

# Statements of Plan Net Position

June 30, 2013 and 2012

(in thousands)

	<u>2013</u>	<u>2012</u>
<b>ASSETS</b>		
<b>Cash and Cash Equivalents</b>	\$ 23,854	\$ 28,403
<b>Receivables</b>		
Due from the City of Phoenix	323	95
City of Phoenix Contributions	1,696	1,158
Member Contributions	492	429
Interest and Dividends	1,796	2,224
Unsettled Broker Transactions - Sales	38,958	25,714
Unsettled Broker Transactions - Foreign Exchange Sales	39,252	22,975
Other	6	19
Total Receivables	<u>82,523</u>	<u>52,614</u>
<b>Investments, at Fair Value</b>		
Temporary Investments from Securities		
Lending Collateral	96,526	87,622
Fixed Income	380,973	327,655
Domestic Equities and Other	911,588	1,100,289
International Equities	425,636	366,365
Hedge Funds	250,776	--
Total Investments	<u>2,065,499</u>	<u>1,881,931</u>
Total Assets	2,171,876	1,962,948
<b>Deferred Outflows of Resources</b>		
Total deferred outflows of resources	<u>--</u>	<u>--</u>
<b>LIABILITIES</b>		
Payable for Securities Lending		
Collateral	96,526	87,622
Unsettled Broker Transactions - Purchases	74,667	55,332
Unsettled Broker Transactions - Foreign Exchange Purchases	39,252	22,975
Investment Management Fees Payable	1,370	1,305
Other Payables	109	24
Total Liabilities	<u>211,924</u>	<u>167,258</u>
<b>Deferred InFlows of Resources</b>		
Total deferred inflows of resources	<u>--</u>	<u>--</u>
Commitments and Contingencies		
<b>Net Position Held in Trust for Pension Benefits</b>	\$ <u>1,959,952</u>	\$ <u>1,795,690</u>

The accompanying notes are an integral part of these financial statements.

## Statements of Changes in Plan Net Position For the Fiscal Years Ended June 30, 2013 and 2012

(in thousands)

	2013	2012
<b>ADDITIONS</b>		
<b>Contributions</b>		
City of Phoenix	\$ 110,094	\$ 105,682
Member	27,738	28,140
Inter-System Transfers	105	4,030
Total Contributions	137,937	137,852
<b>Net Investment Income</b>		
From Investing Activities:		
Net Appreciation/(Depreciation) in Fair Value of Investments	169,729	(34,306)
Interest	8,302	9,969
Dividends	21,471	22,411
Other	583	190
Total Income/(Loss) from Investing Activities	200,085	(1,736)
Less Investing Activities Expense	(5,183)	(4,616)
Net Income/(Loss) from Investing Activities	194,902	(6,352)
From Security Lending Activities:		
Security Lending Gross Income	612	1,024
Less Security Lending Activity Expenses:		
Agent Fees	(173)	(295)
Broker Rebates/Collateral Management Fees	(36)	(41)
Total Security Lending Expenses	(209)	(336)
Net Income from Security Lending Activities	403	688
Total Net Investment Income/(Loss)	195,305	(5,664)
Total Additions	333,242	132,188
<b>DEDUCTIONS</b>		
Benefit Payments	165,521	156,679
Refunds of Contributions	2,464	2,333
Inter-System Transfers	606	1,365
Administrative Expense	389	328
Total Deductions	168,980	160,705
<b>NET INCREASE/(DECREASE)</b>	164,262	(28,517)
<b>Net Position Held in Trust for Pension Benefits</b>		
Beginning of Year	1,795,690	1,824,207
End of Year	\$ 1,959,952	\$ 1,795,690

The accompanying notes are an integral part of these financial statements.



# Notes to the Financial Statements

## For the Fiscal Years Ended June 30, 2013 and 2012

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### **Note 1 - Summary of Significant Accounting Policies**

The City of Phoenix Employees' Retirement Plan ("COPERS" or the "Plan") is a defined benefit single-employer public employees' retirement system for the City of Phoenix ("City") general municipal employees. The accounting policies of COPERS conform to accounting principles generally accepted in the United States of America ("GAAP") as applicable to governmental retirement plans.

#### **a. Reporting Entity**

COPERS' prepares and distributes separate financial statements as required by the Charter of the City of Phoenix (Chapter XXIV, Article II, Employees' Retirement Law of 1953) ("Charter"). Its financial statements are also included as a component unit of the City reporting entity due to the significance of COPERS' operational and financial relationships with the City. The City is the only non-employee contributor to the pension plan. Not all employees of the City are covered under COPERS. Police officers and firefighters are covered under the Arizona Public Safety Personnel Retirement System ("APSPRS") and elected officials under the Elected Officials Retirement Plan of Arizona ("EORPA"). APSPRS and EORPA were established by Arizona State Statute and are administered by an independent Board of Trustees. The City's involvement with these plans is limited to the administration of benefits for APSPRS through the City of Phoenix Fire and Police Local Boards and making the required annual contributions.

#### **b. Basis of Accounting**

COPERS' financial statements are prepared using the accrual basis of accounting using the economic resources measurement focus. Employee contributions are recognized as revenues in the period in which employee services are performed and the contributions are therefore earned. Employer contributions are recognized at the same time, as the City is formally committed to contributing the actuarially determined amount each year. Benefit payments received each month by retirees are recognized as an expense of the prior month, and refunds are recognized as expenses when due and payable, in accordance with the terms of the plan.

#### **c. Use of Estimates**

The preparation of financial statements in conformity with GAAP requires management to make a number of estimates and assumptions that affect the reported amounts of net position held in trust for pension benefits and changes therein. Actual results could differ from those estimates.

#### **d. Investments**

Equity securities and fixed-income securities are reported at fair value (Note 8). Interest and dividend income is recognized on the accrual basis as earned. Purchases and sales of investments are recorded on a trade-date basis. Cash equivalents are determined by using a maturity of no more than 90 days at time of purchase. The fair value of an investment is the amount that the Plan could reasonably expect to receive for it in a current sale between a willing buyer and a willing seller. The fair values of investments are generally based on published market prices and quotations obtained from major investment firms. For alternative investments where no readily ascertainable market value exists, the Plan's custodian, in consultation with the Plan investment managers, determines fair values for the individual investments.

# Notes to the Financial Statements

## (Continued)

### Note 2 - Description of Plan

#### a. Purpose

COPERS' is a single-employer, defined benefit pension plan established by the City Charter. Its purpose is to provide retirement, disability retirement and survivor benefits for its members. Members are full-time employees on a work schedule which consists of the number of full-time hours per week designated for the class of employment for the employee's classification and which work schedule is intended to be continuous over a period of twelve months at the aforementioned full-time hours per week. All full-time classified civil service employees and full-time appointive officials of the City with the exception of sworn police and firefighters are required, as a condition of employment, to contribute to COPERS.

#### b. Administration

The general administration, management and operation of COPERS are vested in a nine-member Retirement Board consisting of three elected employee members, four statutory members, a citizen member and a retiree member. The Retirement Board appoints the Retirement Program Administrator, a civil service position, and contracts investment counsel and other services necessary to properly administer the Plan.

#### c. Plan Amendment and Termination

COPERS is administered in accordance with the Charter and can be amended or repealed only by a vote of the people. There are no provisions for termination of COPERS.

#### d. Membership Data

	June 30	
	2013	2012
Current retirees, beneficiaries and survivors	5,703	5,477
Alternate payees	121	112
Terminated vested members	788	697
Active members:		
Vested	7,149	7,238
Non-vested	941	1,087
Total Members	<u>14,702</u>	<u>14,611</u>

#### e. Pension Benefits

Benefits are calculated on the basis of a given rate, final average salary and service credit. Members are eligible for retirement benefits at age 60 with ten or more years of service credit; age 62 with five or more years of service credit; or where age and service credits equal 80. The benefit is based on 2% of final average compensation multiplied by the first 32.5 years of service credit, 1% in excess of 32.5 years to 35.5 years, and 0.5% thereafter. A deferred pension is available at age 62 for members who have five or more years of service credit at time of separation and leave their accumulated contributions in COPERS.

A supplemental post-retirement payment and a permanent benefit increase (under the Pension Equalization Program) may be provided to retirees if sufficient reserves are available at the end of the fiscal year. The reserve is funded if the five-year average investment return exceeds 8 percent.

## Notes to the Financial Statements

(Continued)

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### Note 2 - Description of Plan (Continued)

#### f. Disability Benefits

A member who becomes permanently disabled for the performance of duty is eligible for a disability benefit if the disability is 1) by reason of a personal injury or disease and the member has ten or more years of service credit, or 2) due to on-the-job injuries, regardless of service credit.

#### g. Survivor Benefits

Dependents of deceased members may qualify for survivor benefits if the deceased member had ten or more years of service credit, or if the member's death was in the line of duty with the City and compensable under the Workmen's Compensation Act of the State of Arizona. Chapter XXIV, Section 25 of the Charter of the City of Phoenix, specifies the dependents and conditions under which they qualify for survivor benefits.

#### h. Refunds

Upon separation from employment, a member or beneficiary not entitled to a pension may withdraw the member's contribution plus applicable interest. An interest rate of 3% for fiscal year 2013 (2% for fiscal year 2012) was granted by the Retirement Board to be applied at June 30, 2013 to the members' mean account balances during the fiscal year. The acceptance of a refund cancels the individual's rights and benefits in COPERS. Employer contributions to COPERS are not refundable.

#### i. Tax Exempt Status of Member Contributions

COPERS' has received a favorable letter of determination of qualification from the Internal Revenue Service under Section 401(a) of the Internal Revenue Code. Continued tax-exempt status of COPERS is contingent on future operations remaining in compliance with Section 401(a).

Under Internal Revenue Code Section 414(h)(2) and Revenue Ruling 81-36, effective January 1, 1985 the City of Phoenix authorized that a portion of its contributions be earmarked as being made by the members of COPERS, and "picked up" that portion of the designated active member contributions. The portion of COPERS' contribution that is picked up by the City of Phoenix is treated as an employer contribution for federal and state income tax purposes and excluded from the member's gross income until distributed by COPERS.

#### j. New Accounting Pronouncements

GASB Statement No. 63, *Financial Reporting of Deferred Outflows of Resources, Deferred Inflows of Resources, and Net Position*, provides financial reporting guidance for deferred outflows of resources and deferred inflows of resources. Concepts Statement No. 4, *Elements of Financial Statements*, introduced and defined those elements as a consumption of net assets by the government that is applicable to a future reporting period, and an acquisition of net assets by the government that is applicable to a future reporting period, respectively. Previous financial reporting standards do not include guidance for reporting those financial statement elements, which are distinct from assets and liabilities. The requirements of this Statement are effective for fiscal periods beginning after December 15, 2011 and COPERS' implemented this statement in Fiscal Year 2013.

GASB Statement No. 64, *Derivative Instruments: Application of Hedge Accounting Termination Provisions*, clarifies the circumstances in which hedge accounting should continue when a swap counterparty, or a swap counterparty's credit support provider, is replaced. The requirements of this Statement are effective for fiscal periods beginning after June 15, 2011. COPERS currently has no effective hedging relationships and therefore is not impacted by the Statement.

GASB Statement No. 67, *Financial Reporting for Pension Plans*. This Statement replaces the requirements of Statement No. 25, *Financial Reporting for Defined Benefit Pension Plans and Note Disclosures for Defined Contribution Plans*, as well as the requirements of Statement No. 50, *Pension Disclosures*, as they relate to pension plans. The requirements of this Statement are effective for financial statements for periods beginning after June 15, 2013. COPERS will implement this Statement in fiscal year 2014. COPERS management has not fully determined the effects that implementation of Statement No. 67 but determined it will have a significant impact on COPERS' financial statements.

# Notes to the Financial Statements

## (Continued)

### Note 3 – Net Position Held in Trust for Pension Benefits

Various accounts have been established to hold the reserves for benefit payments:

- The **Income Account** is used to account for COPERS' investment income and loss, including net appreciation or depreciation in fair value and miscellaneous income. At year-end, the Income Account is closed to the Employees' Savings Account, the Pension Accumulation Account, the Pension Reserve Account and the Pension Equalization Reserve Account, which results in no fund balance in the Income Account.
- The **Employees' Savings Account** is used to account for member contributions, member refunds, and the member portion of investment income. As a condition of employment, each member is required to contribute 5 percent of his/her covered compensation. Accumulated contributions receive regular interest that is computed at the end of each fiscal year on the mean balance in the members' accounts during the year. The rate of interest is established each year by the Board (3% in fiscal 2013 and 2% in fiscal 2012). Transfers are made from the Employees' Savings Account to the Pension Reserve Account when a member retires or becomes eligible for disability benefits.
- The **Pension Accumulation Account** is used to account for employer contributions and for a portion of investment income. The Charter requires the City to contribute an amount that is determined annually by COPERS' retained actuaries. Contributions are based upon a level percentage of payroll funding principle so that the contribution rates do not fluctuate significantly over time. This contribution is over and above the member contributions made by the City. The Pension Accumulation Fund may carry a negative balance as the City contribution rate includes a component for the unfunded actuarial liability (UAL). Transfers are made from the Pension Accumulation Account to the Pension Reserve Account when a member retires or becomes eligible for disability benefits.
- The **Pension Reserve Account** is used to account for distributions to retirees and the balance receives regular interest that is computed at the end of each fiscal year on the mean balance during the year. The rate of interest is the actuarial assumed rate.
- The **Pension Equalization Reserve Account** is used for funding increases to eligible pensions under the Pension Equalization Program and the "13th Check." The Pension Equalization Program was established on October 1, 1991, when voters of the City of Phoenix approved an amendment to the City Charter, allowing pension adjustments to be paid to retired members of COPERS. These adjustments are to be made exclusively from COPERS' investment earnings in excess of 8% over the preceding 5-year period, and may not exceed the Phoenix area Consumer Price Index (CPI). This amendment was effective January 1, 1992, and will benefit only retirees who, as of January 1 of each year, have received at least 36 pension payments.

Following are the fiscal year-end reserve balances as of June 30, 2013 and 2012 respectively, based on amortized cost for fixed income investments and cost for equity investments (in thousands):

	<u>2013</u>	<u>2012</u>
Employees' Savings	\$ 450,256	\$ 443,964
Pension Accumulation	(109,982)	(83,262)
Pension Reserve	1,509,965	1,437,135
Pension Equalization Reserve	594	576
Convert to Fair Value	<u>109,119</u>	<u>(2,723)</u>
Total Based on Fair Value	<u>\$ 1,959,952</u>	<u>\$ 1,795,690</u>

## Notes to the Financial Statements (Continued)

### Note 4 - Administrative Costs and Investment Fees

The 2013 administrative costs paid by the City and not recognized in COPERS' financial statements were \$1,610,000. This compares to the 2012 administrative costs of \$1,620,000. Investment-related costs are paid directly from Plan assets. The COPERS' Board approves the payment of certain fees from Plan assets which consist of contributions and investment income for legal, medical, actuarial and computer services. The investment and administrative costs from Plan assets were \$10,305,000 and \$10,252,000 for the fiscal years ended June 30, 2013 and 2012, respectively. Fund Manager fees charged to the Plan for investments for actively managed funds are deducted from income earned and are not separately reflected. Consequently, Fund Manager fees are reflected as a reduction of investment return for such investments.

### Note 5 - Funding Requirement Determinations and Actual Contributions

City of Phoenix contributions for the fiscal year ended June 30, 2013 were \$110,094,000 which is equivalent to 20.15% of the estimated annual active member payroll, compared to \$105,682,000 or 18.18% for the fiscal year ended June 30, 2012. Member contributions for the fiscal years ended June 30, 2013 and June 30, 2012 were \$27,738,000 and \$28,140,000 respectively, which represent the required 5% of covered compensation as a condition of employment.

Employer contributions are actuarially determined amounts, which together with member contributions, are sufficient to cover both (i) normal costs of the plan, and (ii) financing of unfunded actuarial costs over a selected period of future years. (See Note 6)

### Note 6 – Funded Status and Funding Progress (as of most recent valuation)

Unfunded actuarial liabilities are determined annually by the consulting actuary. The unfunded actuarial liability as of June 30, 2013 and June 30, 2012 are detailed below (in thousands).

	<u>2013</u>	<u>2012</u>
<b>Actuarial Value of Assets</b>	\$ 1,961,939	\$ 1,827,528
<b>Actuarial Liability</b>		
Active Members	1,409,121	1,376,678
Retirees and Beneficiaries Currently Receiving Benefits	1,603,011	1,525,152
Terminated Members Not Yet Receiving Benefits	<u>43,475</u>	<u>37,543</u>
Total Actuarial Liability	<u>3,055,607</u>	<u>2,939,373</u>
<b>Unfunded Actuarial Liability</b>	<u>\$ (1,093,668)</u>	<u>\$ (1,111,845)</u>
<b>Funded Ratio (actuarial value of assets to unfunded actuarial liability)</b>	64.2%	62.2%
<b>Covered Payroll</b>	\$ 508,032	\$ 506,017
<b>UAL (as a percentage of covered payroll)</b>	215.3%	219.7%

## Notes to the Financial Statements

(Continued)

### Note 6 – Funded Status and Funding Progress (as of most recent valuation) (Continued)

The schedule of funding progress, presented as Required Supplementary Information (RSI) following the notes to the financial statements, presents multiyear trend information about whether the actuarial values of the plan are increasing or decreasing over time relative to the actuarial liability for benefits.

Actuarial present values are determined by a consulting actuary applying actuarial assumptions to reflect the time value of money (through discounts for interest) and the probability of payment (by means of decrements, such as for death, disability, withdrawal or retirement) between the valuation date and the expected date of payment.

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

<b>Valuation Date:</b>	June 30, 2013	June 30, 2012
<b>Actuarial Cost Method</b>	Individual Entry Age	Individual Entry Age
<b>Amortization Method</b>	Level Percent Open	Level Percent Open
<b>Remaining Amortization Period</b>	20 Years	20 Years
<b>Asset Valuation Method</b>	4-Year Smoothed Market Value	4-Year Smoothed Market Value
<b>Actuarial Assumptions:</b>		
<b>Investment Rate of Return</b>	8.0%	8.0%
<b>Projected Salary Increases (1)</b>	5.0% - 8.8%	5.0% - 8.8%
<b>Cost-of-Living Adjustments</b>	None	None
<b>Factors Affecting Trends</b>	None	None

(1) Includes inflation at 4.5%. Merit and longevity assumptions are age-related rates.

The actuarial assumptions employed as of June 30, 2013 and June 30, 2012 includes the following:

- 1) Salary Scale – Projected salary increases of 4.5% per year compounded annually attributable to inflation, with another 0.5% to competition and productivity. Additional projected salary increases ranging from 0.0% to 3.8% per year, depending on age, attributable to merit and longevity.
- 2) Multiple Decrement Tables:
  - a) Death - For determination of member, retiree and beneficiary mortality, the RP 2000 Healthy Annuitants Mortality Table.
  - b) Disability - Based upon COPERS' experience.
  - c) Withdrawal - Based upon COPERS' experience, measures the probability of members terminating employment for reasons other than retirement, death or disability.
- 3) Smoothed Funding – A smoothed market value of assets was used for the June 30, 2013 valuation. This method, which is unchanged from last year, spreads the difference between the actual and expected investment return over four years.

The foregoing actuarial assumptions are based on the presumption that COPERS will continue as presently chartered. If COPERS is amended, different actuarial assumptions and other factors might be applicable in determining actuarial present values.

## Notes to the Financial Statements (Continued)

### Note 7 - Funding Policy

As a condition of employment, members are required to contribute 5% of their salary to COPERS as provided in Chapter XXIV, Section 27, of the City Charter. Present members' accumulated contributions at June 30, 2013 were \$450,256,426, including interest compounded annually compared to \$443,963,569 at June 30, 2012 and are included in the Employee Savings Account as discussed on page 26. The City's funding policy is designed to provide annual contributions to COPERS in amounts that are estimated to remain a constant percentage of members' compensation each year, such that, when combined with members' contributions, all active member benefits will be fully funded as earned. Contributions by the City to the Plan are actuarially determined. The unfunded actuarial liability in excess of applicable value of assets is amortized as a level percent of payroll over 20 years from June 30, 2013.

### Note 8 - Investments

COPERS is authorized to invest in common stocks, obligations of the U.S. Treasury, its agencies and instrumentalities, money market accounts, certificates of deposit, the State Treasurer's investment pool, obligations issued or guaranteed by any state or political subdivision thereof, which are rated in the highest short-term or second highest long-term category, and investment grade corporate bonds, debentures, notes and other evidences of indebtedness which are not in default as to principal or interest and are issued or guaranteed by a solvent U.S. corporation. COPERS is also authorized to invest in "Investment Derivative Instruments" which include swaps, forwards, options on swaps, and options on forwards.

The Board's present policy has resulted in approximately 25.8% being invested (at fair value) in domestic common stocks as of June 30, 2013 or 22.7% (at cost). The City Charter does not contain any limitations on the percent invested in international equities. The Board's present policy has a target of 22% investment (at fair value) in international equity investments. As of June 30, 2013 approximately 21.2% was invested (at fair value) in international equity investments.

A summary of investments at June 30, 2013 and 2012 is as follows (in thousands):

	2013		2012	
	Fair Value	Amortized Cost	Fair Value	Amortized Cost
Temporary Investments from Securities Lending Collateral (Note 9)	\$ 96,526	96,526	\$ 87,622	\$ 87,622
Fixed Income	380,973	386,699	327,655	321,339
Domestic Equities and Other	911,588	825,643	1,100,289	1,072,446
Hedge Funds	250,776	219,200	-- *	-- *
International Equities	425,636	428,311	366,365	403,248
Total Investments	2,065,499	1,956,379	1,881,931	1,884,655
Cash and Cash Equivalents	23,854	23,853	28,403	28,402
Total	\$ 2,089,353	\$ 1,980,232	\$ 1,910,334	\$ 1,913,057

\* The June 30, 2012 Hedge Funds was included in Domestic Equities and Other. The Hedge Funds amount for Fair Value was \$223,638 and Amortized Cost was \$219,200 as of June 30, 2012.

COPERS' investments are managed by professional fund managers and are held by a plan custodian who is a COPERS' agent.

As of June 30, 2013, the total market value of options held was \$12,121,920 and the total market value for swaps was \$856,403. On June 30, 2012, the total market value of options held was \$12,703,647 and the total market value for swaps was \$294,210.

## Notes to the Financial Statements (Continued)

### Note 8 – Investments (Continued)

The following schedule provides the categories of investments at June 30, 2013 and 2012 (in thousands):

<b>Investment Categories</b>	<b>2013 Fair Value</b>	<b>2012 Fair Value</b>
Cash	\$ (12)	\$ 256
Short-Term Investment Fund	23,866	28,147
Cash and Cash Equivalents	23,854	28,403
Temporary Investments from Securities Lending Collateral	96,526	87,622
Fixed Income:		
Derivatives	12,978	12,998
U S Government Guaranteed Securities	60,545	60,514
Government Agencies Securities	6,763	6,129
Mortgage Backed Securities-Residential	86,775	103,275
Asset Backed Securities	8,033	5,515
Municipal Bonds	10,919	11,173
Corporate Bonds	81,300	96,929
Foreign (USD)	113,660	31,122
	380,973	327,655
Domestic Equities	528,779	759,623
International Equities:		
Commingled Funds	425,636	366,365
Commingled Equity Index Fund	144,046	178,729
Hedge Funds	250,776	--*
Real Estate Funds	231,941	144,227
Commodities:		
Exchange Traded Fund	6,822	17,710
Total with Securities Lending Collateral	\$ 2,089,353	\$ 1,910,334

\* The June 30, 2012 Hedge Funds was included in Domestic Equities and Other. The Hedge Funds amount for Fair Value was \$223,638 and Amortized Cost was \$219,200 as of June 30, 2012.

### Custodial Credit Risk – Deposits

Custodial credit risk for deposits is the risk that in the event of a depository institution failure, a government will not be able to recover deposits or collateral held by an outside party. As of June 30, 2013, COPERS did not realize any custodial credit risk for deposits.



## Notes to the Financial Statements (Continued)

### Note 8 – Investments (Continued)

#### Custodial Credit Risk – Investments

Custodial credit risk for investments is the risk that in the event of a failure of a counterparty to a transaction, a government will not be able to recover the value of investment or collateral securities that are in the possession of an outside party. As of June 30, 2013 and 2012, COPERS did not realize any custodial credit risk for investments or securities lending arrangements. Note 9 on page 35, provides detailed information regarding securities lending. COPERS' policy requires all investments to be collateralized and registered in COPERS' or its nominee(s) name.

#### Concentration of Credit Risk

Concentration of Credit Risk is the risk of loss attributed to the magnitude of a government's investment in a single issuer. COPERS' investment policy does not allow for an investment in any one issuer that is in excess of five percent of COPERS' total investments which includes futures, options and swaps, except investments issued or explicitly guaranteed by the U.S. government. As of June 30, 2013 and 2012, COPERS did not have any investments with any one issuer in excess of five percent.

#### Foreign Currency Risk

Foreign currency risk is the risk that changes in exchange rates which adversely affect the fair value of an investment or a deposit. COPERS' investment policy includes a target of 22% of the Plan's total assets in international equity investments. The current actual international equity investment allocation is 21.2% of total Plan assets as of June 30, 2013. The fair value of COPERS' international commingled equity funds at June 30, 2013 was \$425,636,000, of which \$353,612,000 managed by Baillie Gifford, GMO and Mondrian was exposed to foreign currency risk. The fair value of COPERS' international commingled equity funds at June 30, 2012 was \$366,365,000, of which \$291,718,000 managed by Baillie Gifford, GMO and Mondrian was exposed to foreign currency risk.

Dollar denominated holdings and non-dollar denominated holdings accounted for 89.1% and 10.9%, respectively, of the foreign fixed income investments at June 30, 2013. Dollar denominated holdings and non-dollar denominated holdings accounted for 95.2% and 4.8%, respectively, of the foreign fixed income investments at June 30, 2012.

#### **Foreign Currency Exposure**

**June 30, 2013 and 2012**

(in thousands)

Currency	Fixed Income Currency Contracts 2013	Fixed Income Currency Contracts 2012
Australian Dollar	\$ 438	\$ 989
Brazilian Real	8,330	353
British Pound	1,342	--
Canadian Dollar	3,215	2,208
Chinese RMB	--	4,240
Euro	3,272	3,148
Japanese Yen	8,094	901
Mexican Peso	1,072	964
Philippine Peso	427	--
Totals	\$ 26,190	\$ 12,803

# Notes to the Financial Statements

## (Continued)

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### Note 8 – Investments (Continued)

#### Commitments

In connection with the purchase of various non-core real estate investments, COPERS has commitments totaling \$97,000,000 as of June 30, 2013 and \$97,000,000 as of June 30, 2012. Remaining unfunded commitments for real estate are \$35,194,270 as of June 30, 2013 and \$50,496,332 as of June 30, 2012. COPERS is not in any redemption queues. All non-core real estate is self liquidating.

#### Credit Risk

Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations. COPERS' investment policy permits purchasing any security that is included in the Barclays Capital US Aggregate Index and relies on the methodology used by Barclays Capital to determine if a security is investment grade. For fixed income securities and their futures or options derivatives, emphasis will be on high-quality securities.

COPERS' currently has four managers responsible for fixed income investments. Artio Capital Management, MFS Heritage Trust, PIMCO and Western Asset Management Company ("Western") are active bond managers. As part of their portfolio, Western may enter into futures, options, and swaps contracts for hedging purposes and/or as a part of the overall portfolio strategy and will be incidental to its securities trading activities for the account. Table I on page 33 provides information relating to the credit risk for the fixed income investments in COPERS' as of June 30, 2013 and 2012.

#### Interest Rate Risk

Interest rate risk is the risk that changes in interest rates adversely affecting the fair value of an investment. Typically, the longer the maturity of an investment, the greater the sensitivity of its fair value to changes in interest rates. COPERS' investment services agreement with Western Asset Management Company directs them to maintain an average weighted duration of portfolio security holdings including futures and options positions within +/- 20% of the Barclays Capital US Aggregate Index. COPERS' investment management agreement with Artio Global Management specifies a weighted average duration of +/- one year of the Barclays Capital US Aggregate Index. The investment management agreement with PIMCO requires a weighted average duration of +/- two years of the Barclays Capital US Aggregate Index and MFS Heritage Trust specifies a weighted average duration of +/- seven years of the JPMorgan Emerging Markets Bond Index.

Information about the interest rate risk exposure of COPERS is provided in Table I on page 33. COPERS' assets include several collateralized mortgage obligations and mortgage backed securities, which could be considered as highly sensitive to interest rate changes, depending upon the exercise of prepayment options.

COPERS' investment policy permits the following investments, which include investments that are considered to be highly sensitive to interest rate changes due to long maturities, prepayment options, coupon multipliers, reset dates and similar terms:

- Obligations issued or guaranteed by the U.S. Federal Government, U.S. Federal Agencies or U.S. government-sponsored corporations and agencies.
- Obligations of U.S. and non-U.S. corporations such as mortgage bonds, convertible and non-convertible notes and debentures.
- Mortgage-backed and asset-backed securities, swaps, forwards, options on swaps, options on forwards.
- Obligations denominated in U.S. dollars of international agencies, supranational entities and foreign governments (or their subdivisions or agencies).
- Securities defined under Rule 144A and Commercial paper defined under Section 4(2) of the Securities Act of 1933.
- Bank Loans, TBA Securities and Mortgage Dollar Rolls.
- General obligation bonds, revenue bonds, improvement district bonds, or other evidences of indebtedness of any state of the United States, or any of the counties or incorporated cities, towns and duly organized school districts in the State of Arizona which are not in default as to principal and interest.

## Notes to the Financial Statements (Continued)

### Note 8 – Investments (Continued)

Table I: Credit Rating and Maturity for COPERS' Fixed Income Investments (in thousands)

	Credit Quality Ratings	2013		2012	
		Fair Value	Weighted Average Maturity (Years)	Fair Value	Weighted Average Maturity (Years)
<b>Total Derivatives</b>	Not Rated	\$ 12,978	0.577	\$ 12,998	0.506
<b>Total U. S. Government Guaranteed Securities</b>	Not Rated	60,545	9.014	60,514	12.071
Government Agency	Not Rated	2,044	5.044	165	4.434
Government Agency	BBB	36	26.551	--	--
Government Agency	AA	4,171	9.805	5,219	9.014
Government Agency	A	512	6.279	745	6.504
<b>Total Government Agency</b>		<b>6,763</b>		<b>6,129</b>	
Mortgage Backed	Not Rated	11,917	38.083	15,133	41.433
Mortgage Backed	AAA	12,030	30.280	15,275	30.709
Mortgage Backed	AA	54,940	59.199	64,708	35.467
Mortgage Backed	A	1,612	28.984	2,095	27.705
Mortgage Backed	BBB	875	23.721	498	23.599
Mortgage Backed	BB	553	22.923	991	22.572
Mortgage Backed	B	2,004	24.244	2,443	24.031
Mortgage Backed	CCC	2,392	21.919	1,530	24.360
Mortgage Backed	CC	--	--	405	23.651
Mortgage Backed	C	302	34.090	--	--
Mortgage Backed	D	150	22.612	197	23.718
<b>Total Mortgage Backed</b>		<b>86,775</b>		<b>103,275</b>	
Asset Backed	AAA	3,798	6.071	2,069	13.520
Asset Backed	AA	2,426	12.304	2,049	12.987
Asset Backed	A	481	29.582	456	30.429
Asset Backed	BBB	126	9.579	209	18.943
Asset Backed	B	365	21.176	19	5.071
Asset Backed	CCC	837	31.069	713	31.975
<b>Total Asset Backed</b>		<b>\$ 8,033</b>		<b>\$ 5,515</b>	

## Notes to the Financial Statements (Continued)

### Note 8 – Investments (Continued)

Table I: Credit Rating and Maturity for COPERS' Fixed Income Investments (in thousands) (Continued)

	Credit Quality Ratings	2013		2012	
		Fair Value	Weighted Average Maturity (Years)	Fair Value	Weighted Average Maturity (Years)
Municipal Bonds	AAA	\$ 1,155	16.674	\$ 1,179	24.970
Municipal Bonds	AA	5,964	25.228	5,473	28.010
Municipal Bonds	A	3,272	28.045	4,016	23.765
Municipal Bonds	B	528	33.942	505	34.942
<b>Total Municipal Bonds</b>		<b>10,919</b>		<b>11,173</b>	
Corporate Bonds	Not Rated	42,862	9.659	47,441	6.804
Corporate Bonds	AAA	1,373	17.181	2,209	33.553
Corporate Bonds	AA	3,445	5.203	4,212	6.558
Corporate Bonds	A	11,795	9.549	12,032	11.877
Corporate Bonds	BBB	19,935	7.810	26,016	9.235
Corporate Bonds	BB	1,848	13.688	4,217	9.379
Corporate Bonds	B	42	7.260	222	19.968
Corporate Bonds	CCC	--	--	225	23.167
Corporate Bonds	C	--	--	355	35.090
<b>Total Corporate Bonds</b>		<b>81,300</b>		<b>96,929</b>	
Foreign	Not Rated	88,388	9.997	4,605	0.534
Foreign	AAA	5,494	3.033	5,002	2.990
Foreign	AA	3,133	2.238	4,153	6.007
Foreign	A	5,520	3.786	7,220	6.039
Foreign	BBB	9,099	5.607	10,075	6.707
Foreign	BB	41	3.66	--	--
Foreign	B	1,985	6.212	67	37.529
<b>Total Foreign</b>		<b>113,660</b>		<b>31,122</b>	
<b>Total Fixed Income Investments by Maturity Date</b>		<b>\$ 380,973</b>		<b>\$ 327,655</b>	

## **Notes to the Financial Statements**

### **(Continued)**

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#### **Note 9 – Securities Lending Program**

State statutes and City Charter do not prohibit COPERS from participating in securities lending transactions, and COPERS has, via a Securities Lending Authorization Agreement effective March 5, 2002, authorized State Street Bank and Trust Company ("State Street") to lend its securities to broker-dealers and banks pursuant to a form of loan agreement. The Agreement was amended effective November 16, 2006 directing State Street Bank and Trust to invest cash collateral in the Funds for Short-Term Investment – Quality D, replacing the requirement to invest in the Quality A Fund.

During 2013 and 2012, State Street lent, on behalf of COPERS, certain securities held by State Street as custodian and received cash (United States and foreign currency), securities issued or guaranteed by the United States government and irrevocable letters of credit as collateral. State Street did not have the ability to pledge or sell collateral securities delivered absent a borrower default. Borrowers were required to deliver collateral for each loan equal to: (i) in the case of loaned securities denominated in United States dollars or whose primary trading market was located in the United States or sovereign debt issued by foreign governments, 100% of the market value of the loaned securities; and (ii) in the case of loaned securities not denominated in United States dollars or whose primary trading market was not located in the United States, 105% of the market value of the loaned securities.

During 2013 and 2012, COPERS and the borrowers maintained the right to terminate all securities lending transactions on demand. The cash collateral received on each loan was invested, together with the cash collateral of other qualified tax-exempt plan lenders, in a liquidity pool and a duration pool. As of June 30, 2013, the liquidity pool had an average duration of 29 days and an average weighted final maturity of 85 days and the duration pool had an average duration of 44 days and an average weighted final maturity of 1,972 days. Because the loans were terminable at will, their duration did not generally match the duration of the investments made with cash collateral. On June 30, 2013, COPERS had no credit risk exposure to borrowers. The collateral held, and the market value of securities on loan for COPERS as of June 30, 2013, were \$96,526,478 and \$94,225,018, respectively, and as of June 30, 2012, were \$87,621,782 and \$87,206,220, respectively.

#### **Note 10 – Risk and Uncertainties**

COPERS invest in various investment securities. Investment securities are exposed to various risks such as interest rate, market and credit risks. Due to the level of risk associated with certain investment securities, it is at least reasonably possible that changes in the values of investment securities will occur in the near term and such changes could materially affect the amounts reported in the statements of changes in plan assets. Because the values of individual investments fluctuate with market conditions, the amount of investment gains or losses that COPERS will recognize in its future financial statements cannot be determined.

#### **Note 11 – Funds To/From Other Systems**

Under the provisions of Arizona Revised Statutes, Sections 38-730 and 38-922 as amended, transfers between COPERS and the Arizona State Retirement System ("ASRS") are allowed when the City hires an employee who was formerly covered by ASRS, or a COPERS' member who separates from City of Phoenix employment goes to work for an entity that covers its employees under ASRS. The amount of the transfers, in and out of COPERS, during 2012 was equal to the present value of the employees' then-vested benefits. The amount of the transfers, in and out of COPERS, during 2013 was equal to the greater of the member's accumulated contribution balance or the present value of the member's projected benefits to the extent funded on a market value basis.

# Notes to the Financial Statements

(Continued)

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## **Note 11 – Funds To/From Other Systems (Continued)**

Under the provisions of Arizona Revised Statutes, Section ARS 38-923 and 38-924 as amended in 2006, an active or inactive member of COPERS or the Public Safety Personnel Retirement System (“PSPRS”) who becomes a member of the other retirement system may transfer service credits from the member’s prior retirement system to the member’s current retirement system. The amount of the transfers from COPERS during 2013 and 2012 was equal to the member’s account.

## **Note 12 – Interfund Balances**

On the Statement of Plan Net Position, the liability if any, due to the City of Phoenix, results from the fact that COPERS does not have a local bank account. The City of Phoenix Payroll Section issues both Retirement pension warrants and employee retirement contribution refund warrants from the City’s bank account through a warrant or direct deposit.

Until Retirement personnel instruct State Street Bank and Trust to wire funds to the City of Phoenix in reimbursement for the warrants and direct deposits, the Retirement Plan is in debt to the City. Also, City employees previously employed by government entities may purchase prior service credits. The dollar amount of these purchases is deposited in the City’s bank account, to be later transferred to the Plan’s custodian. Until the transfer is made, the City is in debt to the Retirement Plan.

## **Note 13 – Contingent Liabilities**

COPERS is a party in pending litigation matters. While the final outcomes cannot be determined at this time, management is of the opinion that the final obligations, if any, for these legal actions will not have a material adverse effect on COPERS’ financial position or change in net assets.

## **Note 14 – Subsequent Events**

Voters approved changes to the City of Phoenix retirement system at a Special Election held on March 12, 2013. New employees hired on and after July 1, 2013 will be placed in Tier II. The employee contribution rate for this new tier will be based on 50% of the actuarially determined rate necessary to fully fund the Annual Required Contribution. For Fiscal Year 2013-2014, the Tier II employee rate is 13.62%. For retirement eligibility, this tier will follow the “Rule of 87” where the employee age plus credited service equals 87. For this tier, the benefit ratio is 2.1% for up to 20 years; 2.15% for 25-29.9 years and 2.3% for 30 years or greater.

In addition, the approved ballot measure allowed the Investment Policy to be updated to include any investments that meet the Prudent Investor Rule. The Retirement Board may now invest in any kind of property or type of investment consistent with the standards set forth in the City Charter, if two-thirds of the Retirement Board authorizes the utilization of the new investment category.

On October 31, 2013, the City Council approved the Pension Fairness and Spiking Elimination Ad Hoc Subcommittee’s recommendations. Effective January 1, 2014, the following items are not included in the definition of compensation for purposes of pension calculation for executives and middle managers:

- Payments towards expenses incurred in the performance of employment obligations, whether paid as reimbursements or as set allowances, and including but not limited to communication allowances and transportation allowances
- Lump-sum payouts on unused accrued sick leave upon retirement (except unused leave accrued pursuant to the sick leave “snapshot” effective July 1, 2012)
- Lump-sum payouts on unused accrued vacation leave upon separation
- Reimbursements to employees for retirement contributions

The above changes are considered part of labor agreements for all other General City employees and would become effective upon the expiration of these agreements on July 1, 2014.

## Required Supplementary Information

### Schedule of Funding Progress Last Eight Fiscal Years (in thousands)

Actuarial Valuation Date	(1) Actuarial Value of Assets	(2) Actuarial Liability (AL) Entry Age	(3) Unfunded AL (2)-(1)	(4) Funded Ratio (1)/(2)	(5) Annual Covered Payroll	(6) Unfunded AL as a Percentage of Covered Payroll (3)/(5)
06/30/13	\$ 1,961,939	\$ 3,055,606	\$ 1,093,668	64.2%	\$ 508,032	215.3%
06/30/12	1,827,528	2,939,374	1,111,845	62.2	506,017	219.7
06/30/11	1,834,620	2,752,909	918,289	66.7	513,322	178.9
06/30/10	1,868,093	2,697,288	829,195	69.3	550,175	150.7
06/30/09	1,895,148	2,518,094	622,946	75.3	539,468	115.5
06/30/08 (a)	1,908,414	2,413,365	504,951	79.1	566,512	89.1
06/30/07	1,816,508	2,166,119	349,611	83.9	535,079	65.3
06/30/06 (a)	1,626,741	2,000,346	373,605	81.3	497,105	75.2

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

(a) After changes in benefit provisions, actuarial assumptions and/or actuarial cost methods.

### Schedule of Employer Contributions Last Ten Fiscal Years (in thousands)

Fiscal Year	Valuation Date	Annual Required Contribution	Percent Contributed
2012-13	2011	\$ 110,094	100%
2011-12	2010	105,682	100
2010-11	2009	90,965	100
2009-10	2008	86,241	100
2008-09	2007	66,383	100
2007-08	2006	64,198	100
2006-07	2005	58,151	100
2005-06	2004	52,974	100
2004-05	2003	43,375	100
2003-04	2002	39,564	100

## **Required Supplementary Information (Continued)**

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### **Notes to the Required Supplementary Information**

There were no changes in actuarial methods implemented in the June 30, 2013 annual valuation.

The following changes in methods were made pursuant to the recommendations in the actuarial audit of the June 30, 2007 annual valuation and implemented in the June 30, 2008 annual valuation:

- The Normal Cost contribution rate was calculated to be consistent with contributions that are paid throughout the year, not at the beginning of the year.
- The calculation of the projected final average compensation and years of service at retirement was changed to mid-year, consistent with the timing regarding the applications of the assumptions.



## Additional Supplementary Information

### Schedule of Investment Expenses For the Fiscal Years Ended June 30, 2013 and 2012

Payee	Fees		Nature of Services
	2013	2012	
RV Kuhns & Associates	\$ 189,625	\$ 186,038	Investment Consultant
State Street Bank	136,082	115,634	Master Custodian
Elkins McSherry	10,000	10,000	Brokerage Services
Artio Global Investors	455,532	476,301	Investment Management
Cadence Capital	476,761	511,658	Investment Management
Cramer Rosenthal McGlynn	456,647	521,471	Investment Management
Dimensional	255,153	323,152	Investment Management
Eagle Asset	288,423	357,045	Investment Management
J P Morgan	683,795	609,783	Investment Management
MFS	214,821	--	Investment Management
Mondrian	378,898	324,763	Investment Management
MSCI ACWI ex US Index Fund	87,269	51,305	Investment Management
PIMCO	488,631	515,295	Investment Management
Research Affiliates	286,669	220,110	Investment Management
Robeco Investment Management	89,130	--	Investment Management
TA Associates	39,977	--	Investment Management
The Boston Company	305,082	229,569	Investment Management
Western Asset	247,104	270,273	Investment Management
Wrightwood Capital	44,978	14,114	Investment Management
Foreign Taxes	17,833	3,268	
Total	\$ 5,152,410	\$ 4,739,779	

Payee (1)	Fees		Nature of Services
	2013	2012	
Baillie Gifford	\$ 369,991	\$ 619,269	Investment Management
GMO	1,104,481	894,243	Investment Management
JDM Partners	258,543	260,212	Investment Management
K2 Advisors	888,859	835,963	Investment Management
Morgan Stanley	693,383	656,893	Investment Management
PAAMCO	474,713	859,688	Investment Management
RECAP II	141,303	162,997	Investment Management
RECAP III	317,120	531,522	Investment Management
TA Associates	155,196	128,249	Investment Management
Wheelock	300,000	182,055	Investment Management
Wrightwood Capital	60,283	52,771	Investment Management
Total	\$ 4,763,872	\$ 5,183,862	

### Schedule of Administrative Expenses For the Fiscal Years Ended June 30, 2013 and 2012

Payee	Fees Paid		Nature of Services
	2013	2012	
Cheiron, Inc	\$ 88,863	\$ 17,500	Actuarial Services
City of Phoenix Law Department	33,162	--	Legal Services
Dr. Laura Don	2,688	1,438	Medical Services
Dr. Paul Geimer	1,590	--	Medical Services
Levi Ray & Shoup	231,903	228,620	Computer Services
MCN	10,055	9,960	Medical Services
Rodwan Consulting Company	--	21,734	Actuarial Services
Yoder & Langford, P.C.	20,370	49,050	Legal Services
Total	\$ 388,631	\$ 328,302	

(1) Fees for these managers are not paid separately as are fees to the other fund managers; they are not included in the investment expenses reported in the Statements of Changes in Net Position. The fees are a component of the overall performance of the investment.

## Additional Supplementary Information (Continued)

### Schedule of Administrative Expenditures and Encumbrances (Non-GAAP Budgetary Basis) Paid by the City of Phoenix for the Fiscal Years Ended June 30, 2013 and 2012

	2013		2012	
	Original Budget	Plan Actual	Original Budget	Plan Actual
Personal Services				
Staff Salaries and Benefits	\$ 1,053,276	1,015,849	\$ 1,013,731	\$ 1,023,961
Insurance	188,874	176,521	177,366	181,013
Social Security and Medicare	72,008	67,779	70,804	77,780
Retirement Contributions	201,808	212,855	188,923	211,761
Total Personal Services	1,515,966	1,473,004	1,450,824	1,494,515
Professional Services				
Consultants	85	20	115	138
Audit and Accounting	101,954	102,729	114,055	87,616
Total Professional Services	102,039	102,749	114,170	87,754
Communications				
Printing	9,305	8,493	9,305	14,323
Postage and Mailing	20,596	10,858	32,327	11,646
Telephone	853	1,135	300	133
Subscriptions and Memberships	2,000	1,750	2,000	1,750
Total Communications	32,754	22,236	43,932	27,852
Miscellaneous				
Supplies	13,675	10,757	13,675	7,955
Insurance	69	69	58	516
Computer Equipment	0	0	0	1,056
Other	2,680	1,106	2,604	726
Total Miscellaneous	16,424	11,932	16,337	10,253
Total Administrative Expenditures and Encumbrances	\$ <u>1,667,183</u>	<u>1,609,921</u>	\$ <u>1,625,263</u>	\$ <u>1,620,374</u>

Note: Administrative expenditures of COPERS are budgeted and paid by the City of Phoenix. The COPERS' Board approves the payment of fees for legal, medical and actuarial from Plan assets not included in amounts above.



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## Investment Section

The **Investment Section** contains the Plan's report on investment activity, its investment policies, schedules of investment results and related information.





# RVKuhns

▶▶▶ & ASSOCIATES, INC.

December 18, 2013

Board of Trustees  
City of Phoenix Employees' Retirement System  
c/o Gail Strohl  
Retirement Program Administrator  
200 W. Washington Street, 10th Floor  
Phoenix, Arizona 85003

Dear Board Members:

The past year has been marked by general improvement of the U.S. economy, as well as positive performance in the equity markets and slightly elevated price inflation. In each of the last four quarters U.S. Real Gross Domestic Product grew as the economy expanded by 1.6% since June 30, 2012.<sup>1</sup> The economy also added approximately 2,251,000 nonfarm jobs as the unemployment rate declined to 7.6%.<sup>2</sup> Inflation, as measured by the Consumer Price Index, rose 1.8% during the year. The Federal Reserve kept target short-term interest rates at a range of 0.00 – 0.25% over the course of the fiscal year, and Treasury yields rose across their range of maturities greater than one year, while declining slightly for maturities one year and less.

The market value of the City of Phoenix Employees' Retirement System (the System) assets increased from \$1.795 billion to \$1.959 billion in the year ended June 30, 2013. Five years ago, the fund was valued at \$1.818 billion.

The past year through June 30, 2013 exhibited generally strong equity markets with both U.S. and international equities ending the year positive. In the United States, the S&P 500 Index returned 20.6%. Broad international equity markets followed domestic equities during the past year, returning 14.1% (as measured by the MSCI All Country World ex U.S. Index). However, the past year was not favorable to fixed income; fixed income securities returned -0.7% (as measured by the Barclays U.S. Aggregate Bond Index).

The System's overall investment return over the past year was 11.4%, the System's three-year annualized return was 10.5%, and the System's five-year annualized return was 3.4%. The ten-year annualized return was 6.0%.<sup>3</sup> The long-term fund return results were negatively impacted by the difficult market environment and economic downturn experienced during mid-2007 through early 2009. We are hopeful that, with improved investment results since that time, the long-term returns will improve. The System's current actuarial assumed rate of return is 8.0%, which represents the System's long-term return goal.

The System's current investments are diversified. All segments of the U.S. and International equity markets are represented in the portfolio, and the fixed income portfolio is well diversified between four investment

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<sup>1</sup> Based on data provided by the U.S. Department of Commerce, Bureau of Economic Analysis.

<sup>2</sup> Based on data provided by the U.S. Department of Labor.

<sup>3</sup> Total Fund performance is gross of fees.



managers (U.S and non-U.S.). The System has a well diversified real estate portfolio through its two core real estate managers and multiple value-added and opportunistic real estate investments. In an effort to respond to inflation and to provide a return that is uncorrelated to major markets, the plan utilizes a real return strategy. Additional exposure to alternative investments within the portfolio includes two managers that maintain both long and short positions in equities. As of June 30, 2013, 25.9% of the System's investments were invested in U.S. equities, 21.2% in non-U.S. equities, 22.8% in fixed income investments (U.S and non-U.S.), 11.8% in real estate, 8.2% in real return strategies, 9.7% in long/short equity strategies, and 0.4% in cash equivalents.<sup>4</sup> This investment allocation is consistent with policy guidelines.

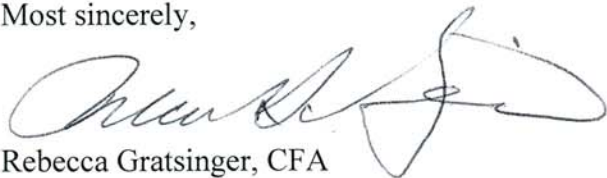
We believe that the recent course undertaken by the Board to diversify the System's investments into several new asset classes will enhance future portfolio returns while reducing risk or volatility in returns. Over the past five years, the Board has approved the inclusion of several new asset classes to the portfolio, including real estate, emerging markets equities, a real return strategy, and international small-capitalization equities. Recently, the System has implemented further diversification of the fixed income and real estate portfolios and added long/short equities as a new diversifying asset class. We are confident that the Board's decisions in this respect will preserve and enhance the System's ability to meet its long-term goals.

The System's investment policies, goals, and objectives, as well as the performance of its assets and transaction costs are regularly monitored by the Board and by R.V. Kuhns & Associates. These evaluations include analysis of the investment management firms and the custodial bank that serve the System.

The System's assets are held in custody at State Street Bank. Market values and returns referenced above are calculated by RVK and based upon financial statements prepared by State Street Bank and investment managers. The statements are, to the best of our knowledge, reliable and accurate. Investment performance is calculated using a time-weighted rate of return methodology (gross of fees) based upon market values and cash flows.

An uncertain market environment demands careful attention and thoughtful treatment of the assets entrusted to the Board's care by the System's employee participants. We expect the Board's continued high standard of care for these assets and commitment to diversification to allow the System to meet its long-term goals and objectives.

Most sincerely,



Rebecca Gratsinger, CFA  
Chief Executive Officer

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<sup>4</sup> Allocation shown may not sum up to 100% exactly due to rounding.

## **Outline of Investment Policies and Objectives**

**Adopted July, 1990 and subsequently amended**

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1. COPERS' asset allocation targets (at fair value) as of June 30, 2013 were 16.5% large cap domestic equities, 6.5% small/mid cap domestic equities, 19.4% international large cap equities, 2.6% international small/mid cap equities, 20.0% domestic fixed income, 15.0% real estate, 5.0% emerging market debt, 5.0% real return and 10.0% long/short equity.
2. Each asset class will be broadly diversified to be similar to the market for the asset class. The market for stocks shall be represented by the Russell 1000 Value and Growth Indices, the Russell Mid Cap Index, the Russell 2000 Growth and Value Index, MSCI EAFE Small Cap Index, MSCI ACWI ex US Index, MSCI ACWI ex US Small Cap Index and the S & P 500 Index. The market for bonds shall be represented by the Barclays Capital US Aggregate Bond Index and the Barclays Capital US Govt/Credit Int. Term Bond Index. The market for real estate shall be represented by the NCREIF ODCE Property Index.
3. Multiple managers will be employed. Allocations among the managers will be controlled by the Trustees to maintain both diversification and policy guidelines.
4. Investments will conform to the Phoenix City Charter, Chapter 24, Article II, Section 34 (See note 8). All other investments are prohibited.
5. COPERS' main investment objective is to achieve a rate of return that exceeds inflation by at least 3 percent over time. The actuarial assumed rate of return is 8%.

## **Directed Brokerage Commissions**

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A directed commissions program was established by COPERS' Board on July 31, 1991. Becker, Burke Associates ("BBA") provided the directed commissions program through December 31, 2003. As of January 1, 2004 State Street Global Markets, LLC ("SSGM") became the provider of the commission recapture program. SSGM has agreed to allocate to the fund 80% of commissions for US trades executed with a network of brokers and 100% (above the "execution only" rate) for US trades directly with SSGM's Trading Desk, identified and designated by investment managers as "directed." Under this program, COPERS equity managers are requested to execute trades to achieve best execution of fund transactions and to use best efforts to place trades with SSGM. For the fiscal year ended June 30, 2013, the total payments received from the directed brokerage commission program under SSGM were \$22,154.

## Investment Services Under Contract (as of June 30, 2013)

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### Equity Managers

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Baillie Gifford	<b>Kathrin Hamilton</b>	Edinburgh, Scotland
Cadence Capital Management	<b>Mike Skillman</b>	Boston, MA
Cramer Rosenthal McGlynn	<b>Serra Sonmez</b>	New York, NY
Eagle Asset Management	<b>Clay Lindsey</b>	St. Petersburg, FL
GMO	<b>Wendy Malaspina</b>	Berkeley, CA
Mondrian	<b>Paul Ross</b>	Philadelphia, PA
Robeco Investment Management	<b>William Supple</b>	Boston, MA
SSgA MSCI ACWI ex US Index Fund	<b>Megan Hart</b>	San Francisco, CA
SSgA S & P 500 Index	<b>Megan Hart</b>	San Francisco, CA
The Boston Company	<b>Jerry Navarette</b>	Boston, MA

### Hedge Fund Managers

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K2 Advisors	<b>Clare Myers</b>	Stamford, CT
PAAMCO	<b>Jim Meehan</b>	Irvine, CA

### Transition Managers

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Northern Trust Transition Management	<b>Grant Johnsey</b>	Chicago, IL
Russell Implementation Services, Inc	<b>Steve Cauble</b>	Seattle, WA
State Street Global Markets	<b>James Coherty</b>	Irvine, CA

### Fixed Income Managers

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Aberdeen/Artio Global Investors	<b>Teri Smith</b>	New York, NY
MFS Institutional Advisors	<b>Carolyn Lucey</b>	Boston, MA
PIMCO	<b>Matt Clark</b>	Newport Beach, CA
Western Asset Management	<b>Joseph Carieri</b>	Pasadena, CA

### Real Estate Managers

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JDM Partners	<b>Mel Shultz</b>	Phoenix, AZ
J.P. Morgan	<b>John Faust</b>	San Francisco, CA
Morgan Stanley Real Estate Advisor	<b>Candice Todd</b>	Atlanta, GA
RECAP	<b>Kong Thien Choo</b>	Singapore
TA Realty Associates	<b>Tom Landry</b>	Boston, MA
Wheelock Street Partners	<b>Lawrence Settanni</b>	Greenwich, CT
Wrightwood Capital	<b>Henry Bieber</b>	Chicago, IL

### Real Return Managers

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Research Affiliates LLC	<b>John West</b>	Newport Beach, CA
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### Investment Consultant

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R.V. Kuhns & Associates, Inc	<b>Rebecca Gratsinger</b>	Portland, OR
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## Schedule of Investment Results

For the Fiscal Years Ended June 30, 2013

	1-Year	Annualized	
		3-Years	5-Years
<b>TOTAL PORTFOLIO:</b>			
<b>COPERS</b>	11.35%	10.49%	3.45%
Target Benchmark	10.69	10.68	3.05
R.V. Kuhns All Pension Plans \$1B - \$5B median	11.34	11.48	5.34
<b>EQUITY FUNDS:</b>			
<b>Baillie Gifford (1)</b>	14.50	--	--
MSCI ACWI Ex US Index	14.14	8.48	(0.34)
<b>Cadence Capital Management</b>	16.86	15.11	2.88
Russell 1000 Growth Index	17.06	18.68	7.47
<b>Cramer Rosenthal McGlynn</b>	25.48	18.03	8.66
Russell 2000 Value Index	24.77	17.33	8.59
<b>Eagle Asset Management</b>	28.65	21.62	11.39
Russell 2000 Growth Index	23.67	19.96	8.89
<b>GMO</b>	13.12	8.12	(2.34)
Custom Benchmark	14.14	8.49	(1.28)
<b>Mondrian Investment Partners (2)</b>	17.49	--	--
MSCI EAFE Small Cap Index	21.25	12.25	2.83
<b>Robeco Investment Management (3)</b>	--	--	--
Russell 1000 Value Index	25.32	18.51	6.67
<b>S&amp;P 500 Index SSgA SPDR (4)</b>	--	--	--
S&P 500 Index (Cap Wtd)	20.60	18.45	7.01
<b>SSgA MSCI ACWI Ex US Index (5)</b>	13.87	--	--
MSCI ACWI Ex US Index	14.14	8.48	(0.34)
<b>The Boston Company</b>	33.11	21.47	12.68
Russell Midcap Index	25.41	19.53	8.28
<b>FIXED INCOME FUNDS:</b>			
<b>Aberdeen/Artio (6)</b>	(0.01)	4.51	--
Barclays Capital US Aggregate Bond Index	(0.69)	3.51	5.19
<b>MFS Heritage Trust (7)</b>	--	--	--
JPMorgan EMBI Global Dvf'd TR Index	1.12	7.33	8.38
<b>PIMCO (8)</b>	0.25	4.68	--
<b>Western Asset Management</b>	1.50	5.39	7.24
Barclays Capital US Aggregate Bond Index	(0.69)	3.51	5.19
<b>HEDGE FUND OF FUNDS:</b>			
<b>K2 Advisors (9)</b>	12.49	5.78	--
<b>PAAMCO (10)</b>	10.73	6.48	--
<b>REAL ESTATE FUNDS:</b>			
<b>J P Morgan</b>	14.36	15.05	1.10
<b>JDM Partners (11)</b>	0.25	25.11	--
<b>Morgan Stanley</b>	16.07	17.09	1.34
<b>RECAP II (12)</b>	29.87	22.01	--
<b>RECAP III (13)</b>	12.04	--	--
<b>TA Associates Realty (14)</b>	10.74	12.84	--
<b>Wheelock (15)</b>	42.39	--	--
<b>Wrightwood (16)</b>	15.10	18.02	--
NCREIF ODCE Index	12.17	14.96	(0.15)
<b>REAL RETURN FUND</b>			
<b>Research Affiliates</b>	(0.13)	1.29	0.84
CPI + 4% (Long Term)	5.82	6.41	5.36

## Schedule of Investment Results

(Continued)

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- (1) Baillie Gifford added July 1, 2011 as an International Commingled Equity Fund manager; funds transitioned from Pyramis. Performance figures would not be representative of the benchmark index.
- (2) Mondrian added as an international Small Cap manager July 1, 2011. Performance figures would not be representative of the benchmark index.
- (3) Robeco Investment Management was added as a domestic large cap value manager on May 1, 2013. Funds transitioned from Dimensional Fund Advisors. Performance figures would not be representative of the benchmark index.
- (4) S&P 500 Index SSqA SPDR was added on May 1, 2010. Performance figures would not be representative of the benchmark index.
- (5) MSCI ACWI Ex US was added as an international equity manager effective July 29, 2011. Funding came from the termination of MSCI EAFE Small Cap Exchange. Performance figures would not be representative of the benchmark index.
- (6) Aberdeen/Artio added as core plus fixed income manager effective July 1, 2010; funds transitioned from Western Asset Management and Wells Capital. Performance figures would not be representative of the benchmark index.
- (7) MFS Heritage Trust added as core plus fixed income manager effective February 1, 2013. Performance figures would not be representative of the benchmark index.
- (8) PIMCO added as core plus fixed income manager effective July 1, 2010; funds transitioned from Western Asset Management and Wells Capital. Performance figures would not be representative of the benchmark index.
- (9) K2 Advisors added as a hedge fund of funds manager effective June 1, 2009. Performance figures would not be representative of the benchmark index.
- (10) PAAMCO added as a hedge fund of funds manager effective January 2, 2009. Performance figures would not be representative of the benchmark index.
- (11) JDM Partners was added as an opportunistic real estate manager on February 1, 2010. Performance figures would not be representative of the benchmark index.
- (12) RECAP II was added as an opportunistic real estate manager of January 8, 2009. Performance figures would not be representative of the benchmark index.
- (13) RECAP III was added as an opportunistic real estate manager of February 13, 2012. Performance figures would not be representative of the benchmark index.
- (14) TA Associates Realty added as a value added real estate manager on October 1, 2009. Performance figures would not be representative of the benchmark index.
- (15) Wheelock was added as an opportunistic real estate manager of May 24, 2012. Performance figures would not be representative of the benchmark index.
- (16) Wrightwood Capital added as a value added real estate manager on January 8, 2009. Performance figures would not be representative of the benchmark index.

The calculations above were prepared by COPERS' consultant, using a time-weighted rate of return, based on market value. Non core real estate performance is calculated as an IRR.

## Asset Allocation by Manager

As of June 30, 2013

Manager	Style	Management (in thousands)	% of Portfolio
<b>EQUITY FUNDS</b>			
Baillie Gifford	International	\$ 150,333	7.54%
Cadence Capital Management	Large Cap Growth	112,803	2.71
Cramer Rosenthal McGlynn	Small Cap Value	53,959	2.77
Eagle Asset Management	Small Cap Growth	55,296	7.63
GMO	International	151,984	5.66
Mondrian Investment Partners	International	51,296	2.41
MSCI ACWI ex US Index Fund	International	61,445	6.02
Robeco Investment Management	Large Cap Value	117,114	2.57
S&P 500 Index	Large Cap Core	119,961	5.88
The Boston Company	Mid Cap Value	47,928	3.08
TOTAL EQUITY FUNDS		922,119	46.27
<b>FIXED INCOME FUNDS</b>			
Aberdeen/Artio Global Investors	Core Plus Fixed Income	144,046	7.23
MFS Emerging Markets Debt	Emerging Markets Debt	87,286	4.38
PIMCO	Core Plus Fixed Income	170,788	8.57
Western Asset Management	Core Plus Fixed Income	78,868	3.96
COPERS Cash Account	Short Term Income Fund	8,661	0.43
TOTAL FIXED INCOME FUNDS		489,649	24.57
<b>HEDGE FUND OF FUNDS</b>			
K2 Advisors	Hedge Fund of Funds	92,944	4.66
PAAMCO	Hedge Fund of Funds	96,387	4.84
TOTAL HEDGE FUND OF FUNDS		189,331	9.50
<b>REAL ESTATE FUNDS</b>			
JDM Partners	Opportunistic Real Estate	33,515	1.68
J P Morgan Investment Management	Core Real Estate	72,497	0.47
Morgan Stanley	Core Real Estate	85,048	0.46
RECAP II	Opportunistic Real Estate	7,757	3.64
RECAP III	Opportunistic Real Estate	9,281	4.27
TA Realty Associates	Value Added Real Estate	9,255	0.50
Wheelock	Opportunistic Real Estate	9,934	0.39
Wrightwood Capital	Value Added Real Estate	4,654	0.23
TOTAL REAL ESTATE FUNDS		231,941	11.64
<b>REAL RETURN FUNDS</b>			
Research Affiliates		159,787	8.02
TOTAL REAL RETURN FUNDS		159,787	8.02
Total Portfolio		\$ 1,992,827	100.00%
Securities Lending		96,526	
TOTAL INVESTMENTS		\$ 2,089,353	

## List of Largest Assets Held

As of June 30, 2013 (dollars in thousands)

### Ten Largest Bond Holdings (Market Value)

Par Value	Description	Interest Rate	Due	Rating	Market Value
\$ 17,200	US Treasury N/B	1.75%	05/15/2022	AA+	\$ 16,401
12,300	US Treasury N/B	2.00	02/15/2023	AA+	11,838
11,800	US Treasury N/B	1.63	08/15/2022	AA+	11,071
7,600	US Treasury N/B	0.88	01/31/2017	AA+	7,588
5,550	US Treasury N/B	1.75	05/15/2023	AA+	5,198
5,000	FNMA Conv TBA 30Yr	3.00	12/01/2099	AA+	4,872
4,000	FNMA TBA Aug 30 Single Fam	4.50	08/01/2099	AA+	4,225
4,100	FNMA TBA 30 yr Single Family	3.50	12/01/2099	AA+	4,162
3,220	FNMA Conv 30 Yr	2.5	12/01/2099	AA+	2,973
2,400	FNMA TBA	3.00	12/01/2099	AA+	2,345

### Ten Largest Stock Holdings (Market Value)

Shares	Stock	Value
183,716	Microsoft Corp	\$ 6,344
148,664	Wells Fargo + CO	6,135
101,145	JP Morgan Chase + CO	5,339
12,890	Apple Inc	5,105
41,630	Berkshire Hathaway Inc CL B	4,659
23,356	Intl Business Machines Corp	4,464
51,495	Johnson & Johnson	4,421
49,270	Occidental Petroleum Corp	4,396
66,575	Qualcomm Inc	4,066
43,210	Exxon Mobil Corp	3,904

A complete list of portfolio holdings is available at the COPERS' office.

## Schedule of Investment Related Fees

For the Fiscal Year Ended June 30, 2013

	Assets Under Management (in thousands)	Fees (1)	Basis Points
<b>Equity Funds</b>			
Baillie Gifford	\$ 150,333	\$ 369,991	24.61
Cadence Capital Management	112,803	476,761	42.27
Cramer Rosenthal McGlynn	53,959	456,647	84.63
Dimensional Fund Advisors	--	255,153	--
Eagle Asset Management	55,296	288,423	52.16
GMO	151,984	1,104,481	72.67
Mondrian	51,296	378,898	73.87
MSCI ACWI Ex US Index Fund	61,445	87,269	14.21
Robeco	117,114	89,130	14.20
S & P 500 SPDR	119,961	--	--
The Boston Company	47,928	305,082	63.66
TOTAL EQUITY FUNDS	<u>922,119</u>	<u>3,811,835</u>	
<b>Fixed Income Funds</b>			
Artio Global Investors	144,046	455,532	31.63
MFS Emerging Markets Debt	87,286	214,821	24.62
PIMCO	170,788	488,631	28.61
Western Asset Management	78,868	247,104	31.34
COPERS Cash Account STIF	8,661	--	--
TOTAL FIXED INCOME FUNDS	<u>489,649</u>	<u>1,406,088</u>	
<b>Hedge Fund of Funds</b>			
K2 Advisors	92,944	888,859	95.64
PAAMCO	96,387	474,713	95.63
TOTAL HEDGE FUND OF FUNDS	<u>189,331</u>	<u>1,363,572</u>	
<b>Real Estate Funds</b>			
JDM Partners	33,515	258,543	77.15
JP Morgan Investment Management	72,497	683,795	94.32
Morgan Stanley	85,048	693,383	81.53
RECAP II	7,757	141,303	182.17
RECAP III	9,281	317,120	341.69
TA Realty Associates	9,255	195,173	210.89
Wheelock	9,934	300,000	301.99
Wrightwood Capital	4,654	105,261	226.18
TOTAL REAL ESTATE FUNDS	<u>231,941</u>	<u>2,694,578</u>	
<b>Real Return Funds</b>			
Research Affiliates	159,787	286,669	17.94
TOTAL REAL RETURN FUNDS	<u>159,787</u>	<u>286,669</u>	
Total before Securities Lending	<u>1,992,827</u>	<u>9,562,742</u>	
Securities Lending (2)	96,526	--	
TOTAL	<u>\$ 2,089,353</u>	<u>\$ 9,562,742</u>	
<b>Other Investment Service Fees</b>			
RV Kuhns & Associates (Consultant)		189,625	
State Street Bank (Custodian)		136,082	
Elkins McSherry Brokerage		10,000	
Foreign Taxes		17,833	
TOTAL OTHER INVESTMENT SERVICE FEES		<u>353,540</u>	
TOTAL INVESTMENT RELATED FEES		<u>\$ 9,916,282</u>	

(1) Does not represent contractual fee schedule and may include expenses other than management fees.

(2) No separate billing for the securities lending program, the fees are netted from the securities lending income.

# Investment Summary

As of June 30, 2013

Type of Investment	Market Value (in thousands)	Percent of Total Market Value
<b>Fixed Income:</b>		
Asset Backed	\$ 8,033	0.40%
Corporate Bonds	81,300	4.08
Derivatives	12,978	0.65
Foreign (USD)	113,660	5.70
Government Agencies Securities	6,763	0.34
Mortgage Backed Securities	86,775	4.35
Municipal Bonds	10,919	0.55
U S Treasury Securities	60,545	3.04
<b>Total Fixed Income</b>	<b>380,973</b>	<b>19.11</b>
<b>Domestic Equities:</b>		
Commingled Fund	150,148	7.53
Consumer Discretionary	59,178	2.97
Consumer Staples	16,772	0.84
Energy Related	26,176	1.31
Financials	69,392	3.48
Health Care	55,874	2.80
Industrials	51,830	2.60
Information Technology	80,819	4.06
Materials	13,586	0.68
Utilities	5,004	0.25
<b>Total Domestic Equities</b>	<b>528,779</b>	<b>26.53</b>
<b>Real Estate:</b>		
Commingled Funds	231,941	11.64
<b>Commingled Equity Index Fund</b>	<b>144,046</b>	<b>7.23</b>
<b>Commingled Bond Index Fund</b>	<b>250,776</b>	<b>12.58</b>
<b>International Equities:</b>		
Commingled Funds	425,636	21.36
<b>Commodities:</b>		
Exchange Traded Funds	6,822	0.34
<b>Cash &amp; Cash Equivalents</b>	<b>23,854</b>	<b>1.20</b>
<b>Total before Securities Lending</b>	<b>\$ 1,992,827</b>	<b>100.00%</b>
<b>Securities Lending</b>	<b>96,526</b>	
<b>Total Investments</b>	<b>\$ 2,089,353</b>	

**Schedule of Commissions**  
**For the Fiscal Year Ended June 30, 2013**

Brokerage Firm	Number of Shares Traded	Total Commissions	Commissions Per Share
State Street Global Markets	1,880,753	\$ 43,131	\$ 0.0229
Investment Technology Group	2,780,981	34,573	0.0124
Knight Equity Markers L.P.	3,131,074	28,289	0.0090
Jefferies + Company Inc	1,211,099	20,161	0.0166
Instinet	1,112,997	17,365	0.0156
Lek Securities Corp	410,597	15,574	0.0379
Merrill Lynch	797,754	13,997	0.0175
Burke and Quick Partners LLC	348,413	13,566	0.0389
J.P. Morgan Securities Inc.	535,535	11,774	0.0220
Credit Suisse Securities (USA) LLC	724,474	10,996	0.0152
Goldman Sachs + Co	328,620	10,285	0.0313
All Other Brokers (1)	7,066,988	193,022	0.0273
<b>Total</b>	<b>20,329,285</b>	<b>\$ 412,733</b>	

(1) Includes brokers with total commissions less than \$10,000 each







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## Actuarial Section

The **Actuarial Section** contains the actuary's certification letter, supporting schedules prepared by the actuary, and a summary of plan provisions.





December 13, 2013

***VIA ELECTRONIC MAIL***

Board of Retirement  
City of Phoenix Employees' Retirement System  
200 W. Washington St., 10th Floor  
Phoenix, Arizona 85003

Dear Members of the Board:

The purpose of this letter and accompanying schedules is to provide the information and disclosures related to the City of Phoenix Employees' Retirement System (COPERS) deemed appropriate for the Actuarial Section of a Comprehensive Annual Financial Report by the Government Finance Officers Association. This information is based on the COPERS June 30, 2013 actuarial valuation report, which should be referred to for the complete actuarial communication and a discussion of the findings of the actuarial valuation. Actuarial valuations have been performed annually starting with the June 30, 1995 actuarial valuation.

The actuarial cost method adopted by COPERS (Individual Entry Age) is designed to spread the cost of benefits over each employee's working career as a level percentage of pay. The funded ratio measures the level of assets compared to the actuarial liability, which represents the level of assets targeted by the actuarial cost method as of the valuation date. Deviations from the targeted amount of assets (Unfunded Actuarial Liability) were amortized as a level percentage of expected payroll over a 20-year open period under the prior method. The Board adopted a new amortization method in September 2013 that amortizes the Unfunded Actuarial Liability (UAL) as of June 30, 2013 over a closed 25-year period and future gains and losses over closed 20-year periods. The new method is effective for contributions made for the fiscal year ending June 30, 2015 and later.

The demographic assumptions used in the valuation were adopted by the Board based on recommendations made by the prior actuary. The last experience study performed covered the period from July 1, 2004 through June 30, 2009. Experience studies are typically performed every three to five years, so we anticipate performing a study in 2014 and will evaluate the demographic assumptions at that time. In September 2013, the Board adopted new assumptions, based upon our recommendations, for the purpose of determining contributions for the fiscal year ending June 30, 2015 and later. The Board and its auditor have determined that the prior assumptions (adopted by the Board based on the prior actuary's recommendations and not our best estimates) apply for financial reporting purposes as of June 30, 2013. As a result, the amounts reported in the June 30, 2013 Comprehensive Annual Financial Report (CAFR) exhibits do not reflect the financial impact of the September 2013 recommended assumptions, which are being used to determine future contributions. The new assumptions, which will be effective for financial reporting purposes for the fiscal year ending June 30, 2014, increase the measure of the actuarial liability by approximately \$425 million.



In preparing our report, we relied on information (some oral and some written) supplied by the Retirement Program administrator and staff. This information includes, but is not limited to, the plan provisions, employee data, and financial information. We performed an informal examination of the obvious characteristics of the data for reasonableness and consistency in accordance with Actuarial Standard of Practice No. 23.

We have prepared the following information for inclusion in the Actuarial Section of this Comprehensive Annual Financial Report (CAFR) based on the June 30, 2013 actuarial valuation:

- Summary of Actuarial Assumptions and Methods;
- Schedule of Active Member Valuation Data;
- Schedule of Retirees and Beneficiaries Added to and Removed from Rolls;
- Solvency Test; and
- Analysis of Financial Experience.

We have prepared the following information for inclusion in the Financial Section of this CAFR:

- Notes to Required Supplementary Information, and
- Schedule of Funding Progress.

In addition, we have prepared the following information for inclusion in the Statistical Section of this CAFR.

- Schedule of Retired Members by Type of Benefit

For the schedules listed above, all historical information prior to the June 30, 2012 actuarial valuation is based on information reported by the prior actuary.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period); and changes in plan provisions or applicable law.

To the best of our knowledge, this letter and its contents have been prepared in accordance with generally recognized and accepted actuarial principles and practices which are consistent with the Code of Professional Conduct and applicable Actuarial Standards of Practice set out by the Actuarial Standards Board. Furthermore, as credentialed actuaries, we meet the Qualification Standards of the American Academy of Actuaries to render the opinion contained in this letter. This letter does not address any contractual or legal issues. We are not attorneys and our firm does not provide any legal services or advice.

Board of Retirement  
December 13, 2013  
Page 3

This letter was prepared exclusively for the City of Phoenix Employees' Retirement System for the purpose described herein. This letter is not intended to benefit any third party, and Cheiron assumes no duty or liability to any such party.

Sincerely,  
Cheiron



William R. Hallmark, ASA, FCA, EA, MAAA  
Consulting Actuary



Elizabeth A. Wiley, FSA, FCA, EA, MAAA  
Associate Actuary

# **Supporting Schedules**

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## **Summary of Actuarial Assumptions and Methods**

The City of Phoenix Employees' Retirement Board adopts actuarial assumptions and methods which are recommended by the COPERS' actuary.

### **Method Changes**

The following changes in methods were made pursuant to the recommendations in the actuarial audit of the June 30, 2007 annual valuation: 1) The Normal Cost contribution rate was calculated to be consistent with contributions that are paid throughout the year, not at the beginning of the year. 2) The calculation of projected final average compensation and years of service at retirement was changed to mid-year, consistent with the timing regarding the applications of the assumptions.

### **Funding Method**

The Individual Entry-Age Normal Actuarial Cost method is used in the actuarial valuation. This cost method was adopted effective June 30, 1991. The unfunded actuarial liability was amortized as a level percent of payroll over 20 years and added to the computed normal cost.

### **Asset Valuation Method for Actuarial Purposes**

A smoothed market value of assets was used for the June 30, 2013 valuation. This method, which is unchanged from last year, spreads the difference between the actual and expected investment return over four years.

### **Valuation Data**

The data with respect to persons now covered and present assets were furnished by COPERS' administrative staff. Data is examined for general reasonableness and year-to-year consistency, but is not audited by the actuary. COPERS' fiscal year coincides with the City's fiscal year (July 1 to June 30).

### **Economic Assumptions**

#### **Investment Return**

8.0% annually, compounded annually. Considering other financial assumptions, the 8.0% rate translates to an assumed real rate of return of 3.5% over inflation and 3.0% over across-the-board salary increases. The real rate of return is the rate of investment return over the inflation rate. Adopted 1991.

#### **Active Member Total Payroll**

Increasing 5.0% annually, compounded annually, comprised of projected salary increases of 4.5% per year compounded annually attributable to inflation, with another 0.5% to competition and productivity. Additional projected salary increases ranging from 0.0% to 3.8% per year, depending on age, attributable to merit and longevity. Adopted 2000.

### **Experience Study**

COPERS' actuary conducts an experience study every five years to determine if any adjustments in actuarial assumptions are necessary. This report reflects the assumption changes adopted by the Board November 17, 2005, following the experience study for the period of July 1, 1999 through June 30, 2004. An experience study was conducted for the period of July 1, 2004 through June 30, 2009. No assumption changes have been adopted following the experience study.

## Supporting Schedules (Continued)

### Summary of Actuarial Assumptions and Methods (Continued)

#### Individual Member Pay Increases

A member's pay is assumed to increase each year, in accordance with a table consisting of a percent increase for each age. Adopted June 28, 2000. For sample ages, the following table describes annual increase percents:

Age	Merit and Longevity	Base	Competition/ Productivity	Total
20	3.8%	4.5%	0.5%	8.8%
25	3.1	4.5	0.5	8.1
30	2.7	4.5	0.5	7.7
35	2.4	4.5	0.5	7.4
40	2.2	4.5	0.5	7.2
45	1.6	4.5	0.5	6.6
50	1.1	4.5	0.5	6.1
55	0.6	4.5	0.5	5.6
60	0.1	4.5	0.5	5.1
65	0.0	4.5	0.5	5.0

#### Decrement Assumptions

##### Mortality

The mortality table used was the RP 2000 Mortality Table Combined Healthy. Adopted November 17, 2005. These rates were first used for the June 30, 2006 valuation.

#### Rates of Mortality for Active and Retired Healthy and Disabled Lives at Selected Ages

Age	Male	Female
25	0.0376%	0.0207%
30	0.0444	0.0264
35	0.0773	0.0475
40	0.1079	0.0706
45	0.1508	0.1124
50	0.2138	0.1676
55	0.3624	0.2717
60	0.6747	0.5055
65	1.2737	0.9706
70	2.2206	1.6742
75	3.7834	2.8106
80	6.4368	4.5879
85	11.0757	7.7446
90	18.3408	13.1682
95	26.7491	19.4509

## Supporting Schedules (Continued)

### Summary of Actuarial Assumptions and Methods (Continued)

#### Retirement

Sample probabilities of retirement with an unreduced age and service pension are shown below. Adopted November 17, 2005. These rates were first used for the June 30, 2006 valuation.

#### Percent of Active Members Retiring Within Year Following Attainment of Indicated Retirement Age

<u>Retirement Age</u>	<u>Percent Retiring</u>	<u>Retirement Age</u>	<u>Percent Retiring</u>
50	25%		
51	25	61	20%
52	25	62	35
53	25	63	30
54	25	64	25
55	35	65	45
56	25	66	30
57	25	67	30
58	25	68	30
59	25	69	30
60	25	70	100

#### Turnover

Adopted November 17, 2005. These rates were first used for the June 30, 2006 valuation. Rates of separation from employment for reasons other than age and service retirement, death or disability are:

<u>Sample Ages</u>	<u>Years of Service</u>	<u>% of Active Members Separating Within Next Year</u>
All	0	20.0%
All	1	18.0
All	2	12.0
All	3	9.0
All	4	8.0
25	5 & Over	7.0
30	5 & Over	6.0
35	5 & Over	5.0
40	5 & Over	3.0
45	5 & Over	3.0
50	5 & Over	2.5
55	5 & Over	2.5
60	5 & Over	2.5
65	5 & Over	2.5



## Supporting Schedules (Continued)

### Summary of Actuarial Assumptions and Methods (Continued)

#### Actuarial Valuation Data - Active Members

Valuation Year	Number of Members	Annual Payroll (in thousands)	Average Pay	% Increase/(Decrease) in Average Pay
2013	8,090	\$ 508,032	\$ 62,798	3.3%
2012	8,325	506,017	60,783	1.5
2011	8,569	513,322	59,904	(3.1)
2010	8,896	550,175	61,845	6.8
2009	9,317	539,468	57,901	(1.6)
2008	9,624	566,512	58,865	5.2
2007	9,564	535,079	55,947	4.2
2006	9,260	497,105	53,683	3.6
2005	9,036	467,998	51,793	4.2
2004	8,960	445,348	49,698	6.7

#### Schedule of Retirees and Beneficiaries Added To and Removed From Rolls

(dollars in thousands)

Year End	Added to Rolls			Removed		Rolls End of Year		Average Annual Pensions	% Increase in Annual Pensions
	No.	Annual Pensions		No.	Annual Pensions	No.	Annual Pensions		
		New	PEP (a)						
2013	426	\$ 12,574	\$ --	201	\$ 3,996	5,703	\$ 168,843	\$ 29,606	5.4%
2012	448	14,488	--	161	4,174	5,478	160,294	29,256	6.9
2011	444	15,251	--	184	3,574	5,191	149,950	28,887	8.4
2010	432	15,139	120	170	3,206	4,931	138,273	28,042	9.5
2009	426	14,195	1,594	174	3,002	4,669	126,220	27,034	11.3
2008	348	10,935	2,874	148	2,732	4,417	113,433	25,681	10.8
2007	290	8,205	1,519	142	2,165	4,217	102,356	24,272	8.0
2006	309	9,247	1,976	147	2,144	4,069	94,797	23,297	9.0
2005	314	7,795	1,159	150	2,554	3,907	85,718	21,940	8.1
2004	296	7,610	1,727	145	2,122	3,743	79,318	21,191	9.1

(a) Pension Equalization Increase

## Supporting Schedules (Continued)

### Solvency Test

(dollars in thousands)

Valuation Date	Aggregate Accrued Liabilities for				Valuation Assets	Portion of Accrued Liabilities Covered by Assets		
	(1)	(2)	(3)	(1)		(2)	(3)	
	Active Member Contributions	Retirees and Beneficiaries	Active Members Employer Portion					
6/30/2013	\$ 396,583	\$ 1,603,010	\$ 1,056,013	\$ 1,961,939	100%	98%	-- %	
6/30/2012	443,964	1,525,152	970,258	1,827,528	100	91	--	
6/30/2011	446,456	1,431,877	874,576	1,834,620	100	97	--	
6/30/2010	445,141	1,311,929	940,217	1,868,093	100	100	12	
6/30/2009	446,039	1,193,391	878,664	1,895,148	100	100	29	
6/30/2008	433,742	1,066,886	912,737	1,908,414	100	100	45	
6/30/2007	403,819	964,006	798,294	1,816,508	100	100	56	
6/30/2006	374,091	892,123	734,131	1,626,741	100	100	49	
6/30/2005	354,438	798,414	642,663	1,511,553	100	100	56	
6/30/2004	334,535	737,684	612,577	1,417,774	100	100	56	

### Analysis of Financial Experience

(dollars in thousands)

	Derivation for Year Ended June 30,				
	2013	2012	2011	2010	2009
(1) UAL at Start of Year	\$ 1,111,845	\$ 918,289	\$ 829,195	\$ 622,946	\$ 504,950
(2) Normal cost for year	71,828	77,366	80,099	78,731	83,089
(3) Contributions	(143,502)	(133,822)	(119,613)	(116,482)	(98,157)
(4) Assumed Investment Income Accrual on (1), (2) and (3)	86,136	71,248	64,652	48,228	39,755
(5) Expected UAL Before Changes	1,126,307	933,081	854,333	633,424	529,637
(6) Effect of Assumption Changes	--	--	--	--	--
(7) Effect of Method Changes	--	--	--	--	--
(8) Effect of Benefit Changes	--	--	--	--	--
(9) Expected UAL After Changes	1,126,307	933,081	854,333	633,424	529,637
(10) Actual UAL	1,093,668	1,111,845	918,289	829,195	622,946
(11) Gain (loss) (9) - (10)	\$ 32,639	\$ (178,764)	\$ (63,956)	\$ (195,771)	\$ (93,309)
(12) As % of AL at Start of Year	1.1%	(6.5%)	(2.4%)	(7.8%)	(3.9%)

UAL means unfunded actuarial liability

AL means actuarial liability

The entire cost of the pension increases created by the Pension Equalization Program is funded by a separate reserve, established from investment earnings in excess of the assumed rate on retired life reserves; no increase in the unfunded actuarial liability is created.

# **Summary of Plan Provisions**

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## **Purpose**

COPERS is a defined benefit pension plan, was created under and is governed by the Charter of the City of Phoenix to provide retirement, survivor and disability benefits to the City of Phoenix general employees. COPERS is a qualified plan under the Internal Revenue Code.

## **Administration**

The Charter provides that the administration, management and operation of COPERS be vested in a nine-member Retirement Board. The Board has the responsibility of administering the Charter provisions and bears a fiduciary obligation to the City, the taxpayers and the municipal employees and retirees who are the Plan's beneficiaries.

Three of the Board members are elected from and by the active employee members of COPERS, and must have at least ten years of credited service. Four members are statutory, consisting of the City Manager or his delegate, the City Treasurer, the Finance Director and department head to be selected by the City Manager. The eighth Board member is a citizen, who is a resident of the City of Phoenix has at least five years experience in retirement administration, and is not employed by the City or a COPERS' retiree. The ninth board member is a COPERS' retiree and is elected by the employee Board members. A listing of the current Retirement Board is included on page 6 of this report.

## **Voluntary Retirement**

An active member may retire with benefits if he or she ("he") meets the eligibility requirements of:

- age 60 with 10 or more years of credited service,
- age 62 with 5 or more years of credited service, or
- an age which added to his or her ("his") years of credited service equals 80 (Rule of 80).

## **Final Average Compensation**

Final Average Compensation ("FAC") is the average of a member's monthly pay during the 36 consecutive months of credited service producing the highest monthly average contained within the 120 consecutive months of credited service immediately preceding retirement. For most members, this is the last three years of employment. Pursuant to City management and Board action, FAC includes vacation payout, Deferred Compensation ("DCP") fringe and travel/communication allowance. Inclusion of travel allowance in FAC was effective July 1995 and the DCP fringe inclusion is retroactive to the inception of the program in 1986. Inclusion of the sick leave payout in the calculation of final average compensation began July 1, 1996. Beginning in fiscal year 1997, salary adjustments for certain employees (referred to as reimbursement of contributions), are included in the calculation of final average compensation.

## **Credited Service**

A member's unused sick leave shall be added to his credited service upon retirement. COPERS' service credit and benefit calculations must be consistent with the Charter and Board-adopted policies.

## **Summary of Plan Provisions (Continued)**

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### **Purchase of Public Service Credits**

On January 28, 1998, the COPERS' Board, after review of legal and actuarial considerations, adopted a program permitting COPERS' members to purchase in-state and out-of-state public service credits, along with non-intervening military service credits, towards their retirement. The basic requirements for this program are contained in Board Policy. Effective January 1, 2007, the Board revised the service purchase program. The cost of eligible service shall be based on the full actuarial cost of providing benefits for the period of service being purchased. Members are eligible to purchase service credits upon membership with COPERS. Military purchases are limited to a maximum of five years. The Board policy revision to the service purchase program is to allow active members to purchase previous City of Phoenix job-share and City of Phoenix full-time temporary employment service, adopted on May 21, 2008, after legal and actuarial reviews, was implemented effective October 1, 2008.

### **Pension Allowance**

The normal retirement benefit is payable monthly for the lifetime of a member. The annual amount equals 2 percent of FAC times credited service up to 32.5 years, plus 1 percent of FAC times service in excess of 32.5 years to 35.5 years, plus 1/2 of 1 percent of FAC times service in excess of 35.5 years. Effective January 2, 2000, the minimum monthly retirement benefit is \$500 per month for retirees with 15 years or more of service and \$250 per month for retirees with less than 15 years.

### **Deferred Retirement**

If a member leaves COPERS' covered employment before age 60, but after completing five or more years of credited service, he becomes eligible for a deferred pension, provided he lives to age 62 and does not withdraw his accumulated contributions.

### **Disability Retirement**

- **Non-Duty**

A member with ten or more years of credited service, who becomes totally and permanently disabled for duty in the employ of the City from other than duty connected causes, is eligible for a non-duty disability benefit computed in the same manner as a pension allowance, based upon his service and average salary at the time of disability.

- **Duty**

A member who becomes totally and permanently disabled for duty in the employ of the City, as a result of a duty-related injury or disease, is eligible for a duty disability benefit computed in the same manner as a pension allowance, regardless of length of service. There is a 15% (of FAC) minimum benefit payable.

Upon termination of the workmen's compensation period, if any, the member shall be given service credit and the disability pension shall be recomputed to include such additional credited service.

- **Disability Assessment Committee Examinations**

The City Charter provides for a Disability Assessment Committee ("DAC") consisting of five members: the Personnel Safety Administrator; the Executive Secretary to the Board; two employee members appointed by the Board; and one citizen member appointed by the Board who is a resident of Maricopa County, not employed by the City or receiving benefits from the plan and has at least five years experience in a responsible position in the health care field. The DAC determines eligibility for disability benefits under the Charter. Each person alleging a condition of disability or the continuance of such condition shall be required to undergo any medical examinations required by the DAC, but not more than twice annually or after age 60.

## **Summary of Plan Provisions (Continued)**

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### **Survivor Benefits**

Dependents of deceased members may qualify for survivor benefits if (1) the deceased member had ten or more years of credited service or (2) the member's death was the result of causes arising out of and in the course of his employment with the City, and is compensable under the Workmen's Compensation Act of the State of Arizona.

If the member had less than ten years of credited service and died as a result of causes arising out of and in the course of his employment, his credited service shall be increased to ten years.

A deceased member's spouse will be paid a benefit equivalent to Option A Standard, 100 percent Joint and Survivor, calculated as if the member had retired the day preceding the date of his death, notwithstanding that he might not have attained age 60. Benefits cease upon death of the survivor.

The voters of the City of Phoenix approved a change to the Charter on September 7, 1999 to increase surviving child pension benefits. Effective January 1, 2000, a deceased member's unmarried child or children under age 18 shall receive a benefit of \$200 per month, regardless of the number of children. The benefit shall cease upon adoption, marriage, death or upon attainment of age 18.

### **Post-Retirement Distribution (13th Check)**

Each year, based upon a predetermined formula and investment return, a distribution amount (known as the "13th Check") for each eligible retiree and beneficiary may be payable in the form of a supplemental one-time payment, provided an adequate balance in the Pension Equalization Reserve exists. This payment must be made prior to the seventh month after the end of the fiscal year. A minimum 1% of annual pension, for the 13th Check, was established by an amendment to the City Charter, adopted by City of Phoenix voters October 3, 1995.

### **Pension Equalization Program**

A provision for permanent pension adjustments, based on Plan performance, was established effective January 1, 1992. On the basis of COPERS' five-year average rate of return, reported by the Plan's consultant, earnings in excess of 8 percent will be transferred to a Pension Equalization Reserve. The Plan's actuary will determine what percentage pension increase should be applied to eligible retirees who, on January 1, have received 36 pension payments. This permanent increase to the gross pension, under said formula, shall not exceed the Consumer Price Index as calculated by the U.S. Department of Labor, Bureau of Labor Statistics ("Phoenix-Mesa, AZ" for all Urban Consumers).

### **Optional Forms of Payment**

When a COPERS' member makes application for retirement, his benefits are calculated in four optional forms, and he selects the one that best fits his retirement needs. The election of an optional form of payment is made prior to the receipt of the first benefit check. Otherwise, such election is irrevocable. Married members must select Option A Standard unless the spouse signs a consent form authorizing a different option. The four options are as follows:

- **Straight Life Option**

This is the highest payment available to a retiree; however, upon the death of the retiree, monthly payments cease. If the retiree had not received an amount equal to at least his accumulated contributions (inclusive of regular interest to date of retirement) before his death, a refund of the balance of his account is made to his designated beneficiary. The City of Phoenix Charter was amended on September 7, 1999, to establish a minimum pension benefit of \$500 for retirees with 15 years or more of service and \$250 for retirees with less than 15 years.

## **Summary of Plan Provisions (Continued)**

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### **Optional Forms of Payment (Continued)**

- **Option A**

This is a continuing survivor option that allows the retiree to receive less than the Straight Life Option, with the provision that the designated survivor will receive 100 percent of the retiree's reduced benefit for the remainder of his lifetime.

**Standard:** Under this option, should the designated survivor die prior to the retiree, the pension paid the retiree will remain the same.

**Pop-Up:** This form of Option A is available to all retirees and provides that, should the designated survivor die before the retiree, the reduced pension paid the retiree shall be increased to equal the Straight Life Option for the remainder of the retiree's life. The selection of this form of Option A generally provides an amount less than that available under the Option A Standard.

- **Option B**

This option is also a continuing survivor option similar to Option A above, except that the percentage is changed. Under Option B, the retiree would receive less than the Straight Life Option (more than under Option A) with the designated survivor receiving 50 percent of the retiree's benefit for the remainder of his lifetime.

**Standard:** Under this option, should the designated survivor die prior to the retiree, the pension paid the retiree will remain the same.

**Pop-Up:** This form of Option B is available to all retirees and provides that, should the designated survivor die before the retiree, the reduced pension paid the retiree shall be increased to equal the Straight Life Option for the remainder of the retiree's life. The selection of this option generally provides an amount less than that available under the Option B Standard.

- **Option C**

The final of the four options is referred to as a "ten-year certain and life" form. As with the other options, the benefit is payable for the lifetime of the retiree but with the added provision that if the retiree lives less than 10 years after retirement, COPERS will make additional monthly payments to the designated survivor, not to exceed 120 monthly payments (between the retiree and the survivor). Monthly payments cease upon the primary retiree's death if he lives more than 10 years.

### **Member Contributions**

As a condition of employment, each member is required to contribute 5 percent of his covered compensation. The City, however, established a qualified employee "pick-up" plan [under Internal Revenue Code Section 414(h)] effective January 1, 1985. Under this plan, the City pays the required 5 percent on behalf of the members on a pre-tax basis.

Accumulated contributions also include regular interest that is computed at the end of each fiscal year on the mean balance in the member's account during the year. The rate of interest is established each year by the Board. The Board adopted a 3 percent interest rate for June 30, 2013.

If a member leaves covered City employment for reasons other than retirement, his accumulated contributions may be refunded to him. If a member dies prior to accruing ten or more years of credited service and not as a result of causes arising out of and in the course of his employment, his accumulated contributions are refunded to his designated beneficiary.

## Summary of Plan Provisions (Continued)

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### Employer Contributions

The Charter requires the City to contribute an amount that is determined annually by COPERS' retained actuary. Contributions are based upon level percentage of projected payroll funding principles, so that the contribution rates do not fluctuate significantly over time. This contribution is over and above the member contributions made by the City. The Schedule of Employer Contributions for the Last Ten Fiscal Years is located on page 37 of this report.

It is noted this summary of plan provisions has been written to furnish the members of COPERS and other readers with general information about the Plan. Since it is a summary, all of the requirements of the Plan are not covered. Details of all benefits can be obtained from Chapter XXIV of the City Charter, which is available in COPERS' Office. **Although every effort has been made to accurately summarize the benefits under the Plan, the provisions of Chapter XXIV shall prevail in the unlikely event of discrepancies.**







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## Statistical Section

The **Statistical Section** provides financial and demographic data pertaining to COPERS.





## **Statistical Section**

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The purpose of the statistical section is to provide the reader with data, which is considered to be pertinent to the financial and economic condition of the retirement plan. Each schedule is defined below with an explanation of the schedule and an identification of the source of the data.

### **Schedule of Changes in Plan Net Position**

This schedule provides the additions and deductions to the plan for the past ten years. The change in net position is provided to illustrate whether or not sufficient resources are available in the current fiscal year to cover plan benefits. This schedule is developed using the Statements of Changes in Plan Net Position for the past ten years.

### **Schedule of Benefit Expenses by Type**

This schedule provides the benefit expenses of the plan by type for the last ten years. COPERS' benefits include payments for service retirements, disability benefits, death in service benefits, child benefits, payment to alternate payees and survivor benefits. This schedule is developed using reports from the City's accounting system. The expenses can be found in COPERS' Statements of Changes in Plan Net Position for the past ten years.

### **Schedule of Retired Members by Type of Benefit**

This schedule provides the number of retired members by type of benefit. COPERS plan benefits include payments for deferred benefits, normal retirement benefits, disability benefits, survivor benefits, death benefits and payments to alternate payees. The schedule is developed using COPERS' database.

### **Schedule of Average Benefit Payment Amounts**

This schedule provides the average benefit payments per years of credited service. This information is provided to illustrate the changes in benefit payment amounts as the amount of service earned increases. This schedule is developed using COPERS' database.

## Schedule of Changes in Plan Net Position

### Last Ten Fiscal Years

(in thousands)

	<u>2013</u>	<u>2012</u>	<u>2011</u>	<u>2010</u>	<u>2009</u>
<b>ADDITIONS</b>					
Member Contributions	\$ 27,738	\$ 28,140	\$ 28,648	\$ 30,240	\$ 31,774
Employer Contributions	110,094	105,682	90,965	86,241	66,383
Funds from Other Systems	105	4,030	4,999	4,619	2,411
Net Investment Income (Loss)	<u>195,305</u>	<u>(5,664)</u>	<u>315,936</u>	<u>143,016</u>	<u>(375,388)</u>
Total Additions to Plan Net Position	<u>333,242</u>	<u>132,188</u>	<u>440,548</u>	<u>264,116</u>	<u>(274,820)</u>
<b>DEDUCTIONS</b>					
Benefit Payments	165,521	156,679	145,922	133,522	121,484
Refunds of Contributions	2,464	2,333	2,470	2,877	2,812
Funds to Other Systems	606	1,365	2,872	1,699	1,518
Administrative Expenses	<u>389</u>	<u>328</u>	<u>251</u>	<u>402</u>	<u>477</u>
Total Deductions from Plan Net Position	<u>168,980</u>	<u>160,705</u>	<u>151,515</u>	<u>138,500</u>	<u>126,291</u>
<b>CHANGE IN PLAN NET POSITION</b>	<u>\$ 164,262</u>	<u>\$ (28,517)</u>	<u>\$ 289,033</u>	<u>\$ 125,616</u>	<u>\$ (401,111)</u>
	<u>2008</u>	<u>2007</u>	<u>2006</u>	<u>2005</u>	<u>2004</u>
<b>ADDITIONS</b>					
Member Contributions	\$ 31,237	\$ 30,207	\$ 27,979	\$ 26,307	\$ 24,783
Employer Contributions	64,198	58,151	52,974	43,375	39,564
Funds from Other Systems	4,755	4,507	1,070	963	373
Net Investment Income (Loss)	<u>(106,022)</u>	<u>272,051</u>	<u>133,934</u>	<u>120,237</u>	<u>198,641</u>
Total Additions to Plan Net Position	<u>(5,832)</u>	<u>364,916</u>	<u>215,957</u>	<u>190,882</u>	<u>263,361</u>
<b>DEDUCTIONS</b>					
Benefit Payments	109,308	100,366	91,911	83,657	76,949
Refunds of Contributions	2,623	2,770	2,465	2,508	2,272
Funds to Other Systems	2,103	1,798	600	888	600
Administrative Expenses	<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>340</u>
Total Deductions from Plan Net Position	<u>114,034</u>	<u>104,934</u>	<u>94,976</u>	<u>87,053</u>	<u>80,161</u>
<b>CHANGE IN PLAN NET POSITION</b>	<u>\$ (119,866)</u>	<u>\$ 259,982</u>	<u>\$ 120,981</u>	<u>\$ 103,829</u>	<u>\$ 183,200</u>

Note: Administrative expenses of COPERS are paid by the City of Phoenix. As of October 22, 2008, the COPERS' Board approved the payment of certain fees for legal, medical, actuarial and computer services from Plan assets. The \$340,000 for fiscal year 2003-2004 represents computer services for COPERS' new computer system, which was authorized by the Retirement Board and was not included in the City's budget.

## Schedule of Benefit Expenses by Type

### Last Ten Fiscal Years

#### Retirement and Survivor Benefits (in thousands)

Fiscal Year	Age & Service Benefits Retirees	Death In Service	Disability Benefits Retirees		Survivors	Deferred	Child	Alternate Payee	Total Benefits
			Duty	Non-Duty					
2012-2013	\$ 143,969	\$ 2,812	\$ 702	\$ 2,880	\$ 11,581	\$ 2,158	\$ 31	\$ 1,387	\$ 165,520
2011-2012	136,223	2,793	700	2,882	10,792	1,997	36	1,257	156,680
2010-2011	126,574	2,706	718	2,774	10,047	1,859	32	1,210	145,920
2009-2010	115,115	2,672	707	2,650	9,633	1,651	32	1,062	133,522
2008-2009	104,189	2,795	716	2,541	8,819	1,444	33	947	121,484
2007-2008	93,116	2,583	690	2,398	8,413	1,287	39	782	109,308
2006-2007	85,252	2,509	668	2,202	7,799	1,208	39	681	100,358
2005-2006	77,829	2,414	626	2,029	7,319	1,033	49	611	91,910
2004-2005	* 73,703	2,366	597	1,958	7,094	--	--	--	85,718
2003-2004	* 68,192	2,281	577	1,864	6,404	--	--	--	79,318

\*Amounts shown are annualized amounts based on the June 30<sup>th</sup> payroll.

#### Refunds (in thousands)

Fiscal Year	Beneficiaries	Separation	Total Refunds
2012-2013	\$ 821	\$ 1,644	\$ 2,465
2011-2012	437	1,896	2,332
2010-2011	677	1,793	2,470
2009-2010	963	1,914	2,877
2008-2009	618	2,194	2,812
2007-2008	149	2,474	2,623
2006-2007	376	2,394	2,770
2005-2006	347	2,118	2,465
2004-2005	228	2,280	2,508
2003-2004	216	2,056	2,272

# Schedule of Retired Members by Type of Benefit

## June 30, 2013

Monthly Benefit	Number of Retirees	Type of Retirement						
		Deferred	Normal or Voluntary	Duty Disability	Non-Duty Disability	Survivor Payment	Death Benefit	Alternate Payee
Deferred	788	788	--	--	--	--	--	--
\$1 - 300	85	--	48	1	--	11	12	13
301 - 400	153	--	96	7	2	38	3	7
401 - 500	129	--	82	10	4	23	2	8
501 - 600	135	--	86	4	10	24	6	5
601 - 700	155	--	85	4	11	46	5	4
701 - 800	173	--	91	3	14	38	13	14
801 - 900	170	--	99	5	20	37	7	2
901 - 1,000	167	--	89	3	15	44	8	8
1,001 - 1,100	195	--	120	4	14	39	9	9
1,101 - 1,200	166	--	102	1	17	29	7	10
1,201 - 1,300	164	--	110	1	12	26	5	10
1,301 - 1,400	162	--	113	1	10	26	9	3
1,401 - 1,500	168	--	118	4	4	25	10	7
1,501 - 2,000	713	--	563	13	25	76	21	15
2,001 - 2,500	762	--	658	1	14	74	11	4
2,501 - 3,000	587	--	534	--	7	33	12	1
3,001 - 4,000	834	--	784	--	3	37	10	--
4,001 - 5,000	462	--	446	--	2	13	1	--
Over 5,001	444	--	429	--	--	11	3	1
<b>Totals</b>	<b>6,612</b>	<b>788</b>	<b>4,653</b>	<b>62</b>	<b>184</b>	<b>650</b>	<b>154</b>	<b>121</b>

Monthly Benefit	Total	Option Selected						
		Life	Option A		Option B		Option C	Child Benefit
			Standard	Pop-Up	Standard	Pop-Up		
\$1 - 300	85	43	20	7	--	--	3	12
301 - 400	153	99	29	8	2	5	10	--
401 - 500	129	78	36	8	--	--	7	--
501 - 600	135	76	24	20	3	1	11	--
601 - 700	155	94	31	17	2	3	8	--
701 - 800	173	111	27	19	3	4	9	--
801 - 900	170	90	29	21	6	10	14	--
901 - 1,000	167	109	30	16	5	5	2	--
1,001 - 1,100	195	122	40	17	3	4	9	--
1,101 - 1,200	166	80	52	15	2	11	6	--
1,201 - 1,300	164	83	40	21	6	11	3	--
1,301 - 1,400	162	85	38	13	5	13	8	--
1,401 - 1,500	168	99	28	19	6	13	3	--
1,501 - 2,000	713	310	206	88	29	46	34	--
2,001 - 2,500	762	332	217	88	28	70	27	--
2,501 - 3,000	587	239	146	81	38	55	28	--
3,001 - 4,000	834	327	255	96	31	85	40	--
4,001 - 5,000	462	182	131	56	23	55	15	--
Over 5,001	444	180	137	50	21	37	19	--
<b>Totals</b>	<b>5,824</b>	<b>2,739</b>	<b>1,516</b>	<b>660</b>	<b>213</b>	<b>428</b>	<b>256</b>	<b>12</b>

Deferred	788
<b>Total</b>	<b>6,612</b>

## Schedule of Average Benefit Payment Amounts By Year of Retirement

### Last Five Fiscal Years

Retirement Effective Dates For Fiscal Years Ending June 30:	Years of Credited Service					
	5-9	10-14	15-19	20-24	25-29	30+
2013						
Average Monthly Benefit	\$ 559.68	\$ 1,260.13	\$ 1,907.01	\$ 2,599.91	\$ 3,748.72	\$ 4,933.05
Mean Monthly Final Average Compensation	\$ 4,273.41	\$ 5,221.78	\$ 5,509.08	\$ 5,821.48	\$ 6,697.39	\$ 7,417.31
Number of Active Retirees	41	41	28	54	94	48
2012						
Average Monthly Benefit	\$ 572.10	\$ 1,082.46	\$ 1,761.17	\$ 2,793.32	\$ 3,620.34	\$ 4,805.13
Mean Monthly Final Average Compensation	\$ 4,353.18	\$ 4,633.71	\$ 5,268.80	\$ 6,176.80	\$ 6,574.75	\$ 7,449.58
Number of Active Retirees	30	35	32	64	118	62
2011						
Average Monthly Benefit	\$ 573.56	\$ 1,125.30	\$ 1,756.20	\$ 2,780.95	\$ 4,123.71	\$ 4,908.60
Mean Monthly Final Average Compensation	\$ 4,216.52	\$ 4,941.00	\$ 5,243.97	\$ 6,276.18	\$ 7,396.17	\$ 7,417.58
Number of Active Retirees	33	42	35	66	104	84
2010						
Average Monthly Benefit	\$ 556.25	\$ 1,112.81	\$ 1,795.80	\$ 2,584.18	\$ 3,931.29	\$ 4,556.99
Mean Monthly Final Average Compensation	\$ 4,315.32	\$ 4,734.51	\$ 5,317.53	\$ 5,926.53	\$ 7,021.19	\$ 6,980.08
Number of Active Retirees	30	24	37	66	103	103
2009						
Average Monthly Benefit	\$ 595.09	\$ 1,141.51	\$ 1,714.34	\$ 2,654.99	\$ 3,604.90	\$ 4,514.93
Mean Monthly Final Average Compensation	\$ 4,223.79	\$ 4,792.32	\$ 5,219.21	\$ 5,874.84	\$ 6,522.92	\$ 6,947.19
Number of Active Retirees	29	25	38	70	99	96
From July 1, 2008 to June 30, 2013						
Average Monthly Benefit	\$ 571.34	\$ 1,144.44	\$ 1,786.90	\$ 2,682.67	\$ 3,805.79	\$ 4,743.74
Mean Monthly Final Average Compensation	\$ 4,276.44	\$ 4,864.66	\$ 5,311.72	\$ 6,015.17	\$ 6,842.48	\$ 7,242.35
Number of Active Retirees	163	167	170	320	518	393







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**City of Phoenix**

