City of Phoenix Employees' Retirement System (COPERS)



Pueblo Grande Museum Entrance and Streetscape Public Art Project Brad Goldberg, artist SmithGroupJJR and Floor Associates, landscape architects

Popular Annual Financial Report For Fiscal Year Ended June 30, 2016

ABOUT COPERS

Table of Contents

Page 1	COPERS Title Page
Page 2	About COPERS
Page 3	Message from Administrator
Page 4	COPERS Organization
Page 5	Actuarial Summary
Page 8	Financial Summary
Page 8	Fiduciary Net Position for Benefits
Page 9	Statement of Changes in Fiduciary Net Position
Page 10	Assets and Liabilities
Page 11	Investments Summary
Page 12	Outstanding Achievement Award
Page 13	COPERS Contact Information



Tammy Ryan Chairperson



David Nieto Board Member



Kathleen Gitkin Board Member



Susan Perkins Vice Chairperson



Charlene Reynolds Board Member



Toni Maccarone Board Member



John Hedblom Board Member



Blair Johnson Board Member



Denise Olson Board Member

Message from the Administrator

Dear Reader:

I am pleased to present the 2016 Popular Annual Financial Report (PAFR) for the City of Phoenix Employees' Retirement System (COPERS) for the fiscal year ended June 30, 2016. The information presented here is a summary of the more detailed 2016 COPERS Comprehensive Annual Financial Report (CAFR) which is prepared and presented in conformity with Generally Accepted Accounting Principles (GAAP). The PAFR is not intended to replace the CAFR but to summarize the financial health and the investment performance of COPERS throughout the fiscal year. I encourage you to review the CAFR in its entirety online at phoenix.gov/copers.

The COPERS 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 August 25, 2015. 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 the trustee of the Plan.

The net asset value of COPERS as of June 30, 2016 was \$2.151 billion. The fiscal year net return for the Plan was 0.6%, which was 6.9% below the assumed rate of return of 7.50%. The five year annualized return, net of fees, was 5.5%.

Over the course of the fiscal year, COPERS obtained, installed and implemented the necessary hardware and software to begin remote check deposits into our custodial bank for the first time. Before this was implemented, COPERS was reliant on the City's Finance Department to accumulate and deposit COPERS' checks, a process that sometimes delayed those deposits. COPERS can now immediately deposit checks, which allows those funds to be invested on a timelier basis.

With the IRS' pending termination of its determination letter filing program, it was imperative that COPERS file its application for a determination letter by the January 31, 2016 deadline. COPERS worked with its outside tax counsel and the City Attorney's Office to ensure necessary amendments were made to COPERS' plan documents in time to meet that deadline. We successfully filed the application by the deadline, and are awaiting the IRS' findings. Assuming we receive a positive response, the determination letter will not only verify that COPERS is structured as required by the Internal Revenue Code in order to maintain its tax-qualified status, but it will significantly help our investment program as we work with both domestic and international investment managers.

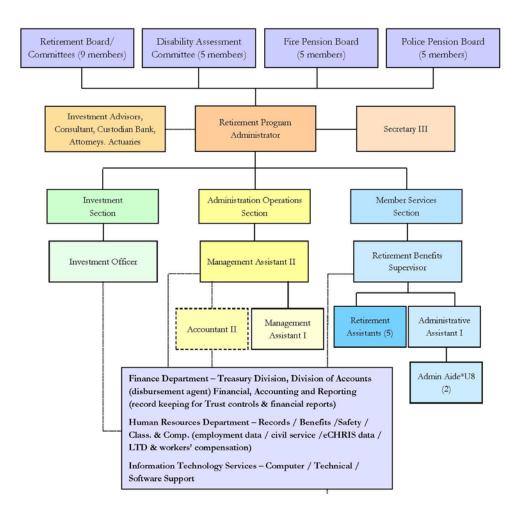
On August 25, 2015, the Phoenix voters approved several changes to the Plan. One of those changes set an 11% cap on the employee contributions for Tier 2 members effective January 2016. That cap reduced Tier 2 member contributions by 4.51%. The second major change was to create a new Tier 3 retirement plan for all employees who begin service with the City on or after January 1, 2016. Tier 3 has lower benefit ratios and only applies to the first \$125,000 of a member's salary (which amount is indexed for inflation); any amounts earned over that limit are subject to a defined contribution plan administered by the City's Human Resources Department. Tier 3 members also have a variable employee contribution rate with an 11% cap, similar to the new Tier 2 contribution structure.

I would like to acknowledge the guidance provided by the Retirement Board. I would also like to acknowledge the hard work of the COPERS staff and the Finance Department for their collaboration for the information provided in the COPERS CAFR and PAFR. This report is intended to provide important information crucial to the understanding of the pension plan.

Sincerely

Scott A. Miller

Retirement Program Administrator



Description of Plan

COPERS is a single-employer, defined benefit pension plan established by the City Charter (Chapter XXIV). 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. All full-time classified civil service employees and full-time appointive officials of the City with the exception of sworn police and fire fighters are required, as a condition of employment, to contribute to COPERS.

Membership Data

	Jur	ne 30
	2016	2015
Current retirees, beneficiaries and survivors	6,734	6,541
Alternate payees	[^] 151	147
Terminated vested members	885	901
Active members:		
Tier 1	6,416	6,741
Tier 2	953	722
Tier 3	414	-
Total Members	15,553	14,837

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 plus 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 for Tier 1 employees and 87 for Tier 2 and 3 employees. The benefit for Tier 1 employees 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. The benefit for Tier 2 employees is based on 2.10% of final average compensation multiplied by years of service credit for those with less than 20 years, 2.15% for 20-24.9 years, 2.20% for 25-29.9 years and 2.30% thereafter. Tier 3 employees receive a benefit based on 2.10% of final average compensation multiplied by years of service credit for those with less than 20 years, 2.15% for 20-24.9 years, 2.20% for 25-29.9 years and 2.30% thereafter; further, Tier 3 employees have a limit to the annual compensation to the first 125,000, indexed to inflation (CPI-U) each January 1, beginning January 1, 2017. 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 in Tiers 1 and 2 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%.

Actuarial Methods and Assumption Changes

The entry age (EA) actuarial cost method was used for active employees, whereby the normal cost is computed as the level annual percentage of pay required to fund the retirement benefits between each member's date of entry and assumed retirement. The actuarial liability is the difference between the present value of future benefits and the present value of future normal cost. Or, equivalently, it is the accumulation of normal costs for all periods prior to the valuation date. The normal cost and actuarial liability are calculated on an individual basis. The sum of the individual amounts is the normal cost and actuarial liability for the System.

The unfunded actuarial liability (UAL) is the difference between the actuarial liability and the actuarial value of assets. The UAL is amortized over periods in accordance with the following amortization methods.

• The UAL as of June 30, 2013, developed prior to implementing the September 2013 assumption changes, is amortized over a closed 25-year period as a level percentage of payroll.

Actuarial Methods and Assumption Changes (continued)

- The impact of the September 2013 assumption changes on the UAL is amortized over a closed 25-year period as a level percentage of payroll with a four-year phase-in to the full amortization rate. The phase-in is calculated by multiplying the first year amortization payment by 25 percent. For the second year, the amortization schedule is recalculated reflecting the 25 percent payment in the first year and the remaining 24-year period and the calculated amortization payment is then multiplied by 50 percent. The process is repeated until the full amortization payment is made beginning in the fourth year of the 25-year period.
- The impact of the August 2015 assumption changes on the UAL is amortized over a closed 20-year period as a level percentage of payroll with a four-year phase-in to the full amortization rate. The phase-in is calculated by multiplying the first year amortization payment by 25 percent. For the second year, the amortization schedule is recalculated reflecting the 25 percent payment in the first year and the remaining 24-year period and the calculated amortization payment is then multiplied by 50 percent. The process is repeated until the full amortization payment is made beginning in the fourth year of the 25-year period.
- Future gains and losses are amortized over closed 20-year periods as a level percentage of payroll from the valuation date in which they are first recognized. However, gains will not be amortized over a shorter period than the remaining period on the amortization of the 2013 UAL.

The total contribution rate is the sum of the normal cost rate (including assumed administrative expenses) and the UAL rate. The normal cost rate is determined by dividing the total normal cost determined under the actuarial cost method by the payroll expected for members active on the valuation date. The UAL rate is determined by dividing the UAL payments determined under the amortization method described above by the total expected payroll for the year (including members active on the valuation date and new entrants expected to replace active members who are expected to leave employment). These rates are determined for the fiscal year immediately following the valuation date, but are applied one year later without adjustment.

For Tier 1, members contribute 5 percent of pay and the City contributes the remainder of the total contribution rate. For Tier 2, the members and the City each pay half of the total contribution rate until January 1, 2016. Currently, Tier 2 and Tier 3 members contribute half the total contribution rate, not to exceed 11 percent of pay, and the City contributes the remainder of the total contribution rate.

The actuarial assumptions employed as of June 30, 2016 include the following:

- 1) Salary Scale Projected salary increases of 3.0% per year compounded annually attributable to inflation, with another 0.5% to competition and productivity. Additional projected salary increases ranging from 0.0% to 6.6% per year, depending on age, attributable to merit and longevity.
- 2) Multiple Decrement Tables:
 - Death For determination of member, retiree and beneficiary mortality, the MP-2015 Mortality Improvement Scale.
 - Disability Based upon 0.960 times the CalPERS Public Agency: Miscellaneous Ordinary Disability Incidence table for males.
 - Withdrawal Based upon COPERS' experience, measures the probability of members terminating employment for reasons other than retirement, death or disability.

A smoothed fair value of assets was used for the June 30, 2016 valuation. This method, which is unchanged from last year, spreads the difference between the actual and expected investment return over four years. For purposes of determining contribution rates, an actuarial value of assets is used that dampens the volatility in fair values that occur because of the fluctuations in market conditions. Use of an asset smoothing method reduces the volatility of contribution rates and is consistent with the long-term process of funding a pension plan.

The actuarial value of assets is calculated by recognizing the deviation of actual investment returns compared to the expected return on the actuarial value of assets over a four-year period. The dollar amount of expected return on the actuarial value of assets is determined using the actual contributions and benefit payments during the year. Any difference between this amount and the actual net investment earnings is considered a gain or loss.

Actuarial Methods and Assumption Changes (continued)

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.

Funded Status and Funding Progress (as of most recent valuation)

Unfunded actuarial liabilities are determined annually by the consulting actuary and reported to the COPERS Board.

Unfunded Actuarial Liability as of June 30, 2016 and June 30, 2015 (in thousands)

	2016	2015
Actuarial Value of Assets	\$ 2,283,216	\$ 2,202,923
Actuarial Liability		
Active Members	1,396,578	1,442,839
Retirees and Beneficiaries Currently Receiving Benefits	2,522,989	2,465,862
Terminated Members Not Yet Receiving Benefits	 64,570	67,206
Total Actuarial Liability	3,984,137	3,975,908
Unfunded Actuarial Liability	\$ (1,700,921)	\$ (1,772,985)
Funded Ratio (actuarial value of assets to unfunded actuarial liability)	57.3%	55.4%
Covered Payroll	496,333	484,853
UAL (as a percentage of covered payroll)	342.7%	365.7%

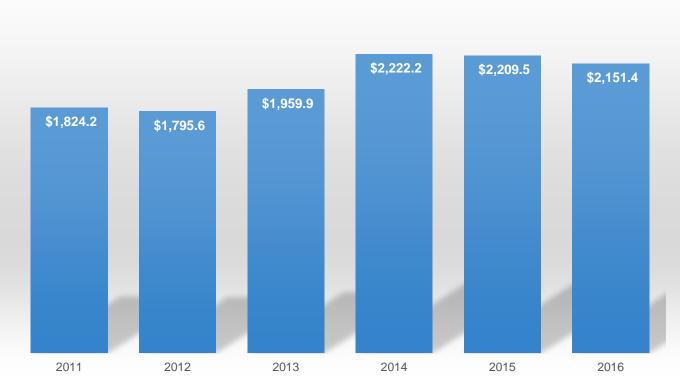
Statements of Fiduciary Net Position

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. A summary of COPERS' net position held for benefits is shown below:

COPERS' Fiduciary Net Position for Benefits for June 30, 2016 and 2015 (in thousands)

	2016 2015		Change		% Change		
Cash & Cash Equivalents	\$	19,231	\$ 50,557	\$	(31,326)	(62.0)	%
Total Receivables		143,698	190,532		(46,834)	(24.6)	
Total Investments		2,266,574	2,299,851		(33,277)	(1.4)	
Total Assets		2,429,503	2,540,940		(111,437)	(4.4)	
Total Liabilities		278,082	331,414		(53,332)	(16.1)	
COPERS' Net Position	\$	2,151,421	\$ 2,209,526	\$	(58,105)	(2.6)	%

Total Plan Net Position (in thousands)



Statements of Changes in Fiduciary Net Position:

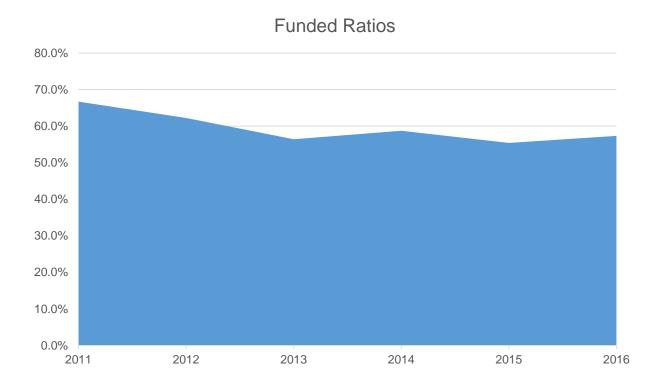
The Statements of Changes in Fiduciary Net Position differ from the Statements of Fiduciary Net Position by providing the reader with the Plan's additions and deductions for the current year and the previous year. The statements provide the net increases or decreases realized during the years. COPERS is funded through a combination of employer contributions, member contributions, inter-system transfers and investment earnings.

Additions and Deductions to/from Fiduciary Net Position for the fiscal years ended June 30, 2016 and June 30, 2015 (in thousands)

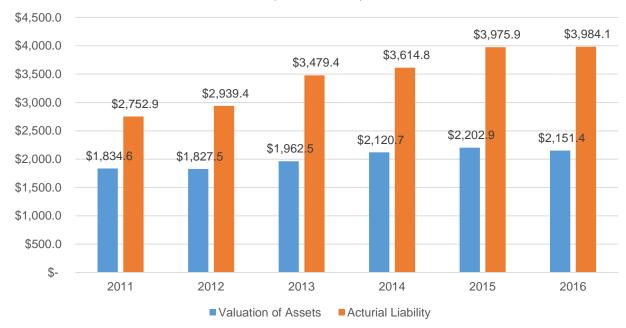
		2016 2015		Change		% Change		
Additions								
Employer Contributions	\$	119,844	\$	117,092	\$	2,752	2.4	%
Members' Contributions		29,306		27,861		1,445	5.2	
Inter-System Transfers		217		199		18	9.0	
Investment Income		8,919		46,978		(38,059)	(81.0)	
Net Securities Lending Income		252		171		81	47.4	
Total		158,538		192,301		(33,763)	(17.6)	
Deductions								
Benefit Payments	\$	213,047	\$	201,178	\$	11,869	5.9	
Refunds		3,047		3,004		43	1.4	
Inter-System Transfers		315		421		(106)	(25.2)	
Administrative Expense		234		414		(180)	(43.5)	
Total		216,643		205,017		11,626	5.7	
Change in Net Position Restricted for Pensions		(58,105)		(12,716)		(45,389)	356.9	
Ending Net Position Restricted for Pensions	\$	2,151,421	\$	2,209,526	\$	(58,105)	(2.6)	%

Assets and Accrued Liabilities

The funded ratio is an actuarial estimate which measures the ratio of assets to liabilities. An accrued liability is an expense incurred but not yet paid. For the June 30, 2016 valuation, the actuary determined COPERS' funded ratio was 57.3%.



Assets and Liabilities (in thousands)



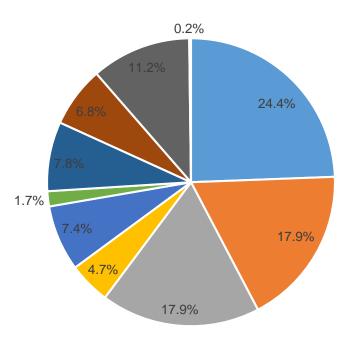
Investments Summary

For the fiscal year ended June 30, 2016, the Plan's investment portfolio produced a gross return of 0.9%. The chart below summarizes investment performance.

Schedule of Investment Results For the Fiscal Year Ended June 30, 2015

			Annualized			
	_	1-Year	3-Years	5-Years		
TOTAL PORTFOLIO:						
	COPERS	0.90%	6.30%	6.00%		
	Target Benchmark	2.40	7.10	6.60		

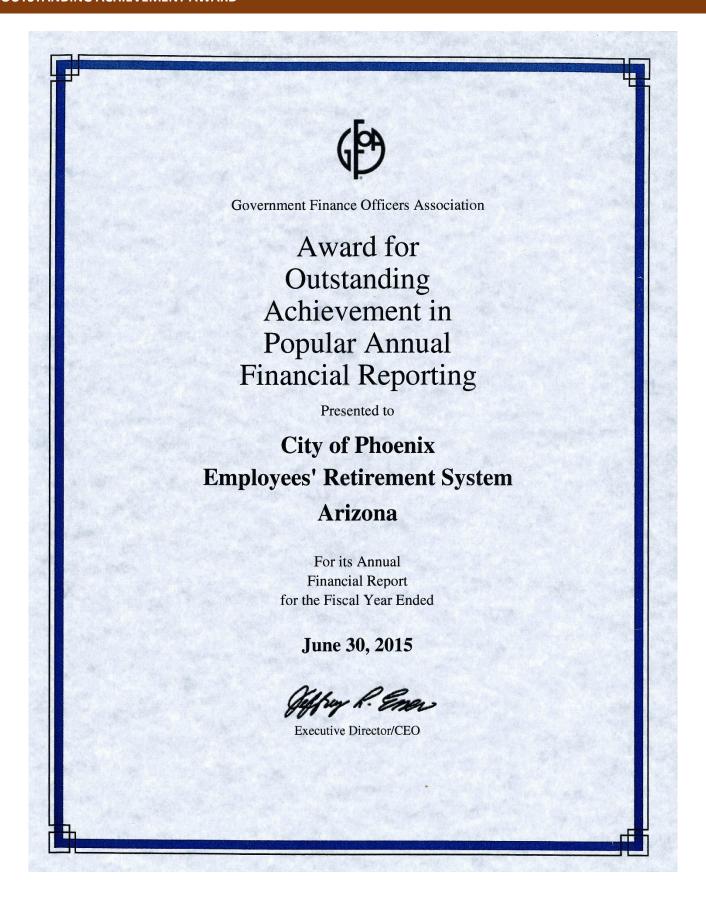
Actual Asset Allocation as of June 30, 2016



- US Equities
- International Equities
- Fixed Income
- Emerging Markets Debt Hard Real Return
- Private Equity

- Non-Core Real Estate
- Core Real Estate
- Absolute Return

Cash



Visit COPERS at: www.phoenix.gov/copers

COPERS 200 W. Washington St., 10th Floor Phoenix, AZ 85003 Phone: 602-534-4400 Fax: 602-495-2008

Email: copers@phoenix.gov

Data presented in this report was derived from our June 30, 2016 Comprehensive Annual Financial Report (CAFR). The Popular Annual Financial Report (PAFR) and CAFR were prepared in accordance with Generally Accepted Accounting Principles (GAAP). The CAFR provides in-depth information about the financial, investments, actuarial and statistical aspects of the pension plan. This PAFR and the CAFR are available at www.phoenix.gov/copers, by phone at (602)534-4400 or by email at copers@phoenix.gov.