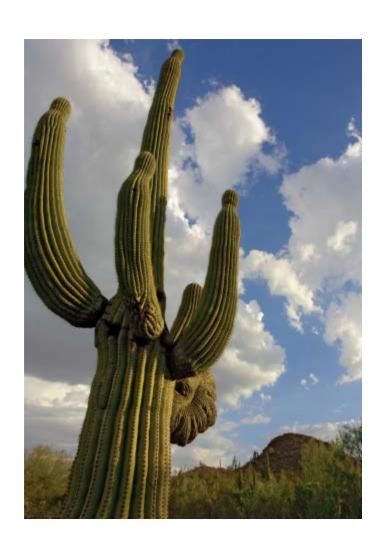
City of Phoenix Employees' Retirement System (COPERS)





Popular Annual Financial Report For Fiscal Year Ended June 30, 2017 City of Phoenix, Arizona

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Charlene Reynolds Chairperson



David Nieto Board Member



Kathleen Gitkin Board Member

COPERS Board



Susan Perkins Vice Chairperson



Denise Olson Board Member



Toni Maccarone Board Member



John Hedblom Board Member



Lori Bays Board Member

Vacant Board Member

MESSAGE FROM THE ADMINISTRATOR

Dear Reader:

I am pleased to present the 2017 Popular Annual Financial Report (PAFR) for the City of Phoenix Employees' Retirement System (COPERS) for the fiscal year ended June 30, 2017. The information presented here is a summary of the more detailed 2017 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, 2017 was \$2.353 billion. The fiscal year net return for the Plan was 7.30%, which was 0.05% over the assumed rate of return of 7.25%. The five year annualized return, net of fees, was 8.0%.

Through the hard work and cooperation of the Retirement office, the Retirement Board, the City Manager's office, the City Attorney's office, and outside tax counsel, COPERS was successful in applying for an IRS Determination Letter prior to the IRS terminating the Determination Letter program. On April 28, 2017, the IRS issued COPERS that Determination Letter. The Determination Letter affirms that the COPERS plan documents comply with the Internal Revenue Code's requirements for a qualified public pension plan and that COPERS remains a tax-qualified plan. While that is, of course, of utmost importance, the Determination Letter will also significantly help our investment program as we work with both domestic and international investment managers by providing outside confirmation that COPERS is a tax-qualified plan.

The Board conducted three Requests for Proposals (RFP) for consultants during the fiscal year. Following the RFP processes, the Board retained the services of Gabriel Roeder Smith & Company (GRS) to provide actuarial consulting services, Alignium LLC to provide real estate investment consulting services, and Managed Medical Review Organization, Inc., for independent medical evaluation services.

The Board engaged in a year-long effort to educate themselves regarding the investable universe as the Trustees considered significant changes to the investment program's asset allocation. In March of 2017, the Board adopted a revised asset allocation that more closely aligns the Board's risk tolerance with expected returns. Following the adoption of the new asset allocation, the Board significantly revised its Investment Policy Statement.

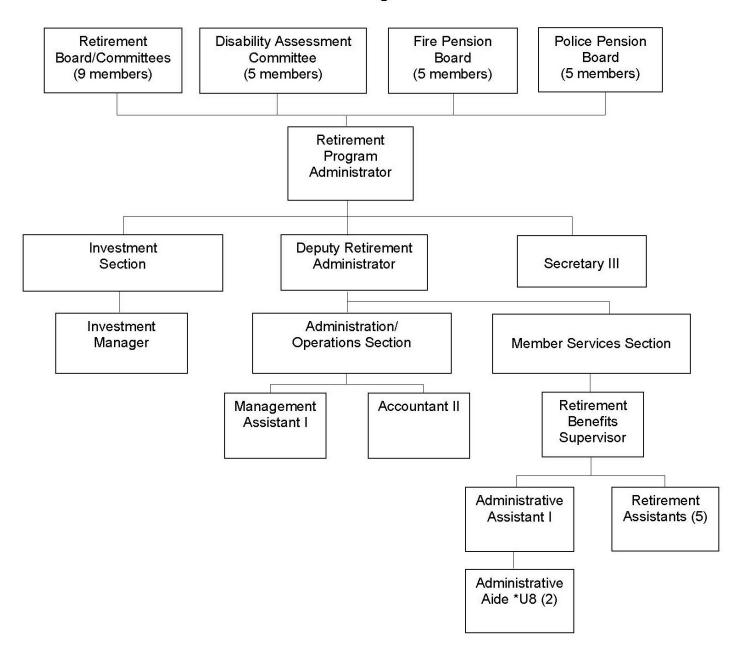
I would like to acknowledge the guidance provided by the Retirement Board. I would also like to acknowledge the hard work of the COPERS staff and the Finance Department for their collaboration on the information provided in the COPERS CAFR and PAFR. This report is intended to provide important information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

Sincerely,

Scott A. Miller

Retirement Program Administrator

Retirement Department Administrative Organization



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 firefighters are required, as a condition of employment, to contribute to COPERS.

Membership Data

	Jur	ne 30
	2017	2016
Current retirees, beneficiaries and survivors	6,822	6,734
Alternate payees	[^] 158	¹ 151
Terminated vested members	925	885
Active members:		
Tier 1	6,030	6,416
Tier 2	823	953
Tier 3	1,177	414
Total Members	15,935	15,553

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 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

ACTUARIAL SUMMARY

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.

A smoothed fair value of assets was used for the June 30, 2017 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 which 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.

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, 2017 and June 30, 2016 (in thousands)

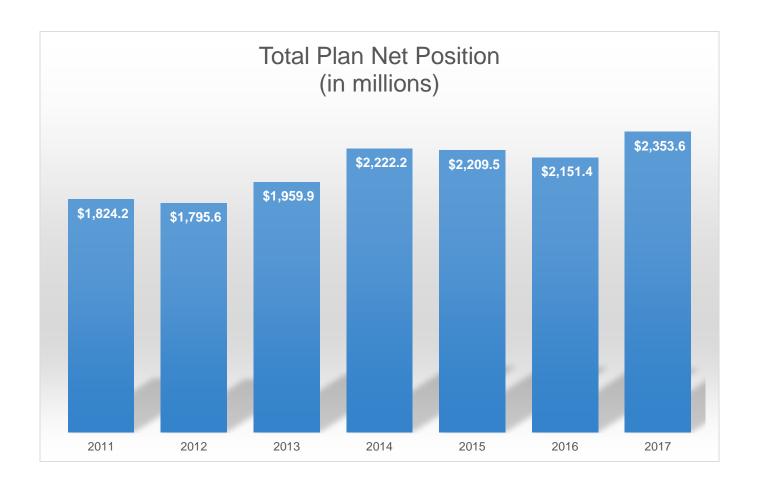
	 2017	2016
Actuarial Value of Assets	\$ 2,402,707	\$ 2,283,216
Total Actuarial Liability	4,129,452	3,984,137
Unfunded Actuarial Liability	\$ (1,726,745)	\$ (1,700,921)
Funded Ratio (actuarial value of assets to unfunded actuarial liability)	58.2%	57.3%

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, 2017 and 2016 (in thousands)

	2017	2016	Change	% Change	
Cash & Cash Equivalents	\$ 38,582	\$ 19,231	\$ 19,351	100.6%	%
Total Receivables	130,948	143,698	\$ (12,750)	(8.9)	
Total Investments	2,456,239	2,266,574	\$ 189,665	8.4	
Total Assets	2,625,769	2,429,503	\$ 196,266	8.1	
Total Liabilities	272,162	278,082	\$ (5,920)	(2.1)	
COPERS' Net Position	\$ 2,353,607	\$ 2,151,421	\$ 202,186	9.4	%



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.

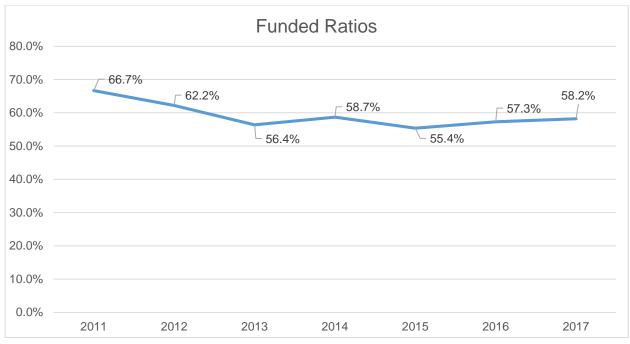
Additions and Deductions to/from Fiduciary Net Position for the fiscal years ended June 30, 2017 and June 30, 2016 (in thousands)

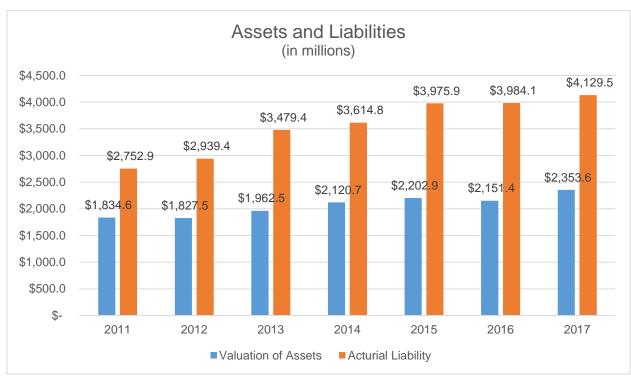
	2017	2017 2016		Change		% Change	
Additions							
Employer Contributions	\$ 152,153	\$	119,844	\$	32,309	27.0 %	
Members' Contributions	30,870		29,306		1,564	5.3	
Inter-System Transfers	43		217		(174)	(80.2)	
Investment Income	242,888		8,919		233,969	2,623.3	
Net Securities Lending Income	322		252		70	27.8	
Total	426,276		158,538		267,738	168.9	
Deductions							
Benefit Payments	\$ 220,276	\$	213,047	\$	7,229	3.4	
Refunds	3,227		3,047		180	5.9	
Inter-System Transfers	207		315		(108)	(34.3)	
Administrative Expense	380		234		146	62.4	
Total	 224,090		216,643		7,447	3.4	
Change in Net Position Restricted for Pensions	202,186		(58,105)		260,291	(448.0)	
Ending Net Position Restricted for Pensions	\$ 2,353,607	\$	2,151,421	\$	202,186	9.4 %	

FINANCIAL SUMMARY

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, 2017 valuation, the actuary determined COPERS' funded ratio was 58.2%.





INVESTMENTS SUMMARY

Investments Summary and Asset Allocation

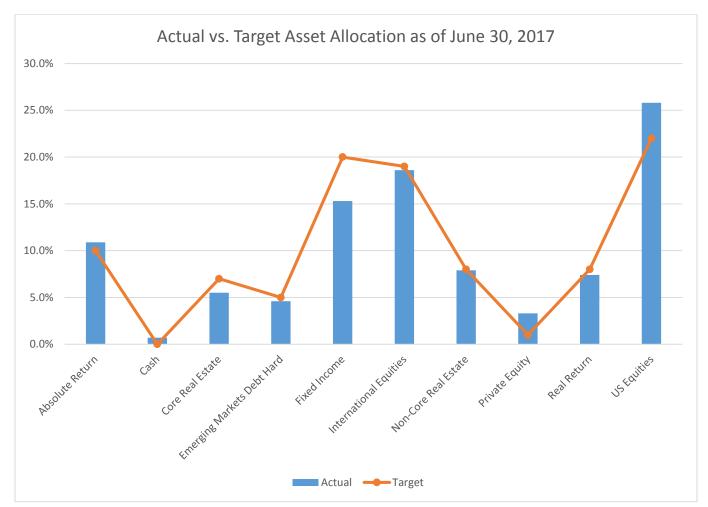
For the fiscal year ended June 30, 2017, the Plan's investment portfolio produced a net return of 7.3%. The charts below summarize investment performance and asset allocation.

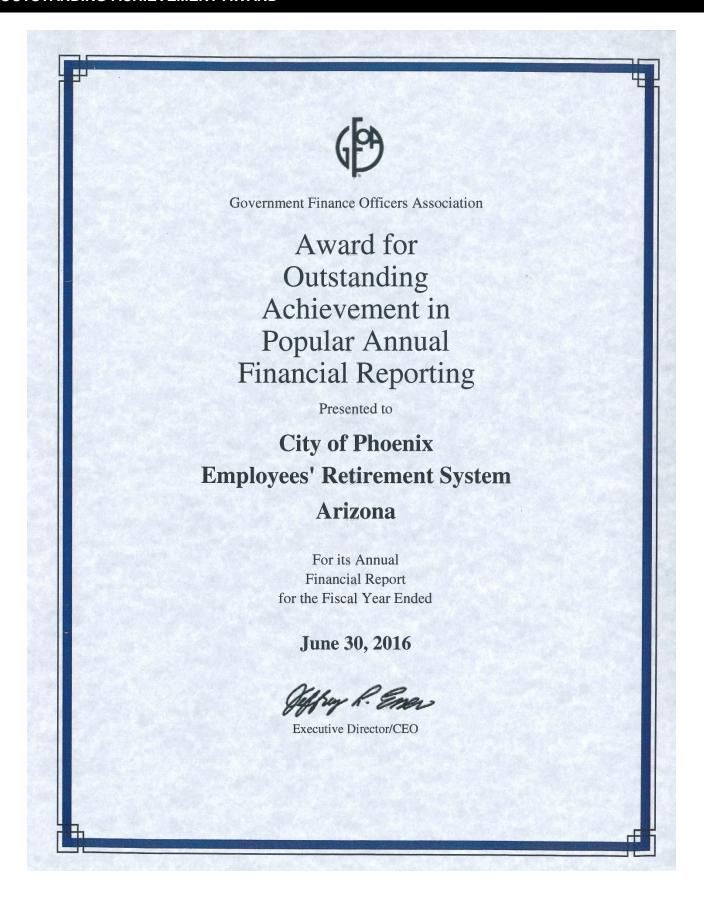
Schedule of Investment Results For the Fiscal Year Ended June 30, 2015

			Annualized			
	_	1-Year	3-Years	5-Years		
TOTAL PORTFOLIO:	_					
	COPERS	7.30%	4.70%	8.00%		
	Target Benchmark	6.90	5.40	8.40		

The COPERS Policy Benchmark is composed of 22% Russell 3000, 19% MSCI ACWI (ex. U.S.) IMI, 20% Barclays U.S. Aggregate Bond, 5% JP Morgan CEMBI Global Diversified Total Return (USD), 8% Consumer Price Index + 4%, 15% NCREIF ODCE, 1% Russell 3000 + 3%, 10% ARS Custom Benchmark.

The Custom Benchmark represents how the System is currently invested and will be modified as the System invests in new asset classes. Each asset class benchmark is weighted monthly based on the actual asset allocation.





Visit COPERS at: www.phoenix.gov/copers

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Email: copers@phoenix.gov

Data presented in this report was derived from our June 30, 2017 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.