

**ARIZONA CORRECTIONS OFFICER RETIREMENT PLAN
CONSOLIDATED REPORT**

JUNE 30, 2015

October 16, 2015

The Board of Trustees
Arizona Corrections Officer Retirement Plan
Phoenix, Arizona

Re: Arizona Corrections Officer Retirement Plan Actuarial Valuation as of June 30, 2015

Ladies and Gentlemen:

The results of the June 30, 2015 annual actuarial valuation of members covered by the Arizona Corrections Officer Retirement Plan (CORP) are presented in this report.

This report was prepared at the request of the Board and is intended for use by the Retirement Plan and those designated or approved by the Board. This report may be provided to parties other than the Retirement Plan only in its entirety and only with the permission of the Board. GRS is not responsible for unauthorized use of this report.

The purpose of the valuation was to measure the Retirement Plan's funding progress and to determine the employer contribution for the 2016-2017 fiscal year. The funding objective is stated in Article 4, Chapter 5, Title 38, Section 891A of the Arizona Revised Statutes. In addition, this consolidated report provides summary information for CORP participating employers. This report should not be relied on for any purpose other than the purposes described herein. Determinations of financial results, associated with the benefits described in this report, for purposes other than those identified above may be significantly different.

The findings in this report are based on data and other information through June 30, 2015. 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, or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. The scope of an actuarial valuation does not include an analysis of the potential range of such future measurements.

The valuation was based upon information furnished by the Retirement Plan, concerning Retirement Plan benefits, financial transactions, plan provisions and active members, terminated members, retirees and beneficiaries. We checked for internal reasonability and year-to-year consistency, but did not otherwise audit the data. We are not responsible for the accuracy or completeness of the information provided by the Retirement Plan.

In addition, this report was prepared using certain assumptions approved by the Board as described in the section of this report entitled Methods and Assumptions.

This report has been prepared by actuaries who have substantial experience valuing public employee retirement plans. To the best of our knowledge the information contained in this report is accurate and fairly presents the actuarial position of the Arizona Corrections Officer Retirement Plan as of the valuation date. All calculations have been made in conformity with generally accepted actuarial principles and practices, with the Actuarial Standards of Practice issued by the Actuarial Standards Board, and with applicable statutes.

Mark Buis, James D. Anderson and Francois Pieterse are Members of the American Academy of Actuaries (MAAA). These actuaries meet the Academy's Qualification Standards to render the actuarial opinions contained herein.

The signing actuaries are independent of the plan sponsor.

Gabriel, Roeder, Smith & Company will be pleased to review this valuation report with the Board of Trustees and to answer any questions pertaining to the valuation.

Respectfully submitted,

GABRIEL, ROEDER, SMITH & COMPANY



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TABLE OF CONTENTS

	<u>Page</u>
Executive Summary/Board Summary	1
Section A Introduction	
Funding Objective and Contribution Rates.....	1
Contribution Requirements.....	2
Historical Summary of Employer Rates	3
Employer Contribution Rate Changes	4
Employer Contribution Rates	5
Section B Funding Results	
Present Value of Future Benefits and Accrued Liability	1
Derivation of Experience Gain/(Loss).....	2
Unfunded Actuarial Accrued Liabilities Comparative Statement	3
Short Condition Test.....	4
Funded Percent Summary.....	6
Pension Contribution Projection.....	7
Section C Fund Assets	
Development of Pension Funding Value of Assets (7-Year Smoothing).....	1
Development of Health Funding Value of Assets (7-Year Smoothing).....	2
Revenues and Disbursements	3
Section D Census Data	
June 30, 2015 Valuation Data Summary	1
Active Members.....	2
Terminated Vested Members.....	3
Retirees and Beneficiaries.....	4
Pensions Being Paid – Historical Schedule	5
Section E Methods and Assumptions.....	1
Section F Plan Provisions.....	1
Section G Funding Policy	1
Section H Glossary	1
Appendix I Accounting Disclosures	
GASB Statement No. 67 Supplementary Information.....	1
Summary of Actuarial Methods and Assumptions	5
GASB Statement No. 43 Supplementary Information.....	6
Annual Required Contribution.....	7
Appendix II Summary of Population Data by Individual Employers	1

TABLE OF CONTENTS

	<u>Page</u>
Appendix III Summary of Pension Liability and Asset Information by Individual Employers.....	1
Appendix IV Summary of Pension Contribution Information by Individual Employers.....	1
Appendix V Summary of Health Liability and Asset Information by Individual Employers.....	1
Appendix VI Summary of Health Contribution Information by Individual Employers.....	1

EXECUTIVE SUMMARY/BOARD SUMMARY

1. Required Employer Contributions to Support Retirement Benefits

The computed employer contribution and funded status for the fiscal year beginning July 1, 2016 is shown below:

Averages	Pension	Health	Total
Employer Contribution Rate	18.51%	0.20%	18.71%
Funded Status	57.3%	110.4%	59.2%

2. Contribution Rate Comparison

The chart below compares the results for this valuation of the Retirement Plan with the results of the prior year’s valuation:

Valuation Date	Pension	Health	Total
6/30/2014 (prior to phase-in)	17.99%	0.22%	18.21%
6/30/2014 (after phase-in)	14.82%	0.22%	15.04%
6/30/2015 (prior to phase-in)	18.51%	0.20%	18.71%
6/30/2015 (after phase-in)	16.75%	0.20%	16.95%

Please note that the pension contribution rate increased significantly for most employers in the June 30, 2014 valuation. This arose primarily due to the repeal of certain aspects of SB 1609, which resulted in much larger recognition of liabilities related to Permanent Benefit Increases (PBI). While it is recommended that employers contribute the full amount, beginning with the June 30, 2014 valuation, the Board adopted a policy to allow employers to phase-in the pension contribution rate increase over 3 years, if necessary. Employers that have funded ratios below 50% are strongly encouraged to contribute the full amount prior to phase-in.

EXECUTIVE SUMMARY/BOARD SUMMARY

3. Reasons for Change

In aggregate, changes in the contribution rate and funded status are illustrated on the following charts. The impact of each change will be different for each employer.

Contribution Rate	Pension	Health	Total
Contribution Rate Last Valuation	17.99%	0.22%	18.21%
Asset Losses	0.48%	0.03%	0.51%
Tier 2	(0.14)%	(0.02)%	(0.16)%
Payroll Base	0.32%	(0.01)%	0.32%
PBI Gain/Loss	(0.24)%	0.00%	(0.24)%
Other	0.10%	(0.02)%	0.07%
Contribution Rate This Valuation	18.51%	0.20%	18.71%

Funded Status	Pension	Health	Total
Funded Status Last Valuation	57.3%	105.2%	59.0%
Asset Losses	(1.7)%	(3.0)%	(1.8)%
Tier 2	0.0%	0.0%	0.0%
Payroll Base	1.1%	0.0%	1.1%
PBI Gain/Loss	0.9%	0.0%	0.8%
Other	(0.2)%	8.2%	0.1%
Funded Status This Valuation	57.3%	110.4%	59.2%

Asset Losses – Asset losses are based on 7-year smoothing of assets and therefore primarily attributable to the market downturn in 2008-2009. Note that this is the last year for recognition of the large asset loss that occurred in 2008-2009.

EXECUTIVE SUMMARY/BOARD SUMMARY

Tier 2 – The decrease in the contribution rate is due to the fact that as current members retire, they are replaced by new members who have a less costly Tier of Benefits (for members hired on or after January 1, 2012). This will typically result in a declining normal cost rate that will occur gradually over time as the population mix (Tier 1 / Tier 2) changes.

Payroll Base – Under the current amortization policy, the contribution rate is developed based on a percentage of payroll. To the extent that overall payroll is lower/greater than last year's payroll projected at 4.0% payroll growth, the contribution rate will increase/decrease as a result. For example, if there were 2 active members in the Plan last year and one of the members retired, the existing unfunded liability would now be spread over the payroll of one member instead of 2 members and the resulting contribution rate would be much higher. Therefore, it is important to consider the overall dollar level of the contribution along with the contribution rate. The dollar contributions are also shown on Page A-2. The change in the funded status is primarily due to gain or losses on the overall salary assumption, which includes both the wage base assumption (4.0%) and the merit and longevity components of the salary assumption.

PBI Gain/(Loss) – Under the current structure, retired members will receive a PBI under certain conditions based on the current year excess asset return. The valuation assumes a resulting average PBI of approximately 2.25% per year. Since there was no PBI for CORP members this year, this resulted in a gain for the Retirement Plan with a corresponding reduction in the contribution rate and increase in the funded status.

Other – This is the combination of all factors other than those listed above and primarily reflect demographic gains and losses (i.e., retirement, turnover, disability, etc. experience that differs from the actuarial assumptions). While this number is small on a combined plan basis, it will vary considerably from employer to employer, especially for employers with a smaller number of members.

EXECUTIVE SUMMARY/BOARD SUMMARY

4. Plan Experience

Experience during the year ended June 30, 2015 was overall favorable. On a market value basis, the Plan's return for the year ended June 30, 2015 was 3.7%. However, the market value smoothing techniques used in this valuation of the System recognize both past and present investment gains and losses. The resulting actuarial asset yield for the year was 4.7%. The effects of the asset losses phased-in from prior years were fully offset by gains attributable to demographic experience. Detailed information related to Plan experience is shown on page B-2.

5. Looking Ahead

The continuing effect of prior asset losses was dampened by the 7-year smoothing period, and further offset by the effect of lower than expected pay increases. There remains \$31.5 million of unrecognized investment losses that will, in the absence of other gains, put upward pressure on the contribution rate next year.

In 2014, the Society of Actuaries published new mortality tables which include mortality improvement scales. While these tables were not developed specifically for the Public Sector, we recommend that the mortality assumption be reviewed in conjunction with the next regularly scheduled experience study.

The Board has adopted an investment return assumption of 7.5% for the June 30, 2016 actuarial valuation. If all other assumptions are realized, this change will result in upward pressure on the contribution rate.

6. Conclusion

The reversal of some of the provisions in SB 1609 due to the Fields decision resulted in a significant increase in the contribution rate last year. If pending litigation in the Hall case is ruled in favor of the plaintiffs, contribution rates will increase again yet further. In 2014, the Board adopted a provision allowing for up to a 3-year phase-in of the contribution rate. This is the second year of the 3-year period.

EXECUTIVE SUMMARY/BOARD SUMMARY

After accounting for active member contributions, the retired lives are less than fully funded on a funding value of assets basis, and much less than fully funded based upon the market value of assets (please see page B-4). It is most important that this Plan receive contributions at least equal to the rates shown in this report.

SECTION A
INTRODUCTION

FUNDING OBJECTIVE

The purpose of the annual actuarial valuation of the Arizona Corrections Officer Retirement Plan as of June 30, 2015 is to:

- Compute the liabilities associated with benefits likely to be paid on behalf of current retired and active members. This information is contained in Section B.
- Compare accrued assets with accrued liabilities to assess the funded condition. This information is contained in Section B.
- Compute the employers' recommended contribution rates for the fiscal year beginning July 1, 2016. This information is contained in Section A.

This objective is stated in Article 4, Chapter 5, Title 38, Section 891A of the Arizona Revised Statutes.

CONTRIBUTION RATES

The Retirement System is supported by member contributions, employer contributions and investment income from Retirement System assets.

Contributions which satisfy the funding objective are determined by the annual actuarial valuation and are sufficient to:

- (1) Cover the actuarial present value of benefits allocated to the current year by the actuarial cost method described in Section E (the normal cost); and
- (2) Finance over a period of future years the actuarial present value of benefits not covered by valuation assets and anticipated future normal costs (the unfunded actuarial accrued liability).

Computed contribution rates for the fiscal year beginning July 1, 2015 are shown on page A-2.

Pension contribution dollars are also shown, based on the valuation payroll information adjusted to reflect annual payroll increases between the valuation date and the beginning of the fiscal year for which the contribution is being determined.

CONTRIBUTION REQUIREMENTS

Development of Employer Contributions for the Indicated Valuation Date

	June 30,	
	2014 2016	2015 2017
Contribution for Fiscal Year Ending		
Pension		
Normal cost requirement		
Service pensions	10.45%	10.34%
Disability pensions	0.27	0.27
Survivors of active members	1.05	1.02
Refunds of members' accumulated contributions	<u>3.18</u>	<u>3.18</u>
Total normal cost requirement	14.95%	14.81%
Less member contributions	<u>8.40</u>	<u>8.41</u>
Employer normal cost requirement	6.55%	6.40%
Amortization of unfunded liabilities	<u>11.44%</u>	<u>12.11%</u>
Total recommended pension contribution rate (before phase-in)	17.99%	18.51%
Total pension contribution rate (after phase-in)	14.82%	16.75%
Total recommended pension contribution amount (before phase-in)	\$ 121,663,741	\$ 123,379,313
Health		
Normal cost requirement	0.33%	0.31%
Amortization of unfunded liabilities	<u>(0.11)%</u>	<u>(0.11)%</u>
Total health contribution requirement rate	0.22%	0.20%
Total health contribution requirement amount	\$ 1,487,828	\$ 1,333,110
Total contribution rate (before phase-in)	18.21%	18.71%
Total contribution rate (after phase-in)	15.04%	16.95%

Actuarial accrued liability, \$2,841,107,535, exceeded the funding value of assets, which was \$1,682,776,417. The unfunded actuarial accrued liabilities were amortized as a level percent-of-payroll over a closed period of 21 years ending on June 30, 2037 and added to the employer normal cost. The 21-year period is a one year decrease from last year. The results shown above are prior to the application of the statutory minimum of 6% of payroll.

An additional contribution of \$10,000,000 will reduce the recommended pension contribution rate (before phase-in) by 0.12% of payroll and will increase the funded status by 0.4%.

HISTORICAL SUMMARY OF EMPLOYER PENSION RATES

Valuation Date June 30	Fiscal Year Ending June 30	Normal Cost	Unfunded Actuarial Accrued Liability	Total
2006	2008	6.07%	0.65%	6.72%
2007	2009	7.10	1.55	8.65
2008	2010	6.10	1.39	7.49
2009	2011	6.43	2.14	8.57
2010	2012	6.67	2.83	9.50
2011	2013	6.47	4.84	11.31
2012	2014	7.50	6.18	13.68
2013	2015	7.12	7.34	14.46
2014* (before phase-in)	2016	6.55	11.44	17.99
2014* (after phase-in)	2016	6.55	8.27	14.82
2015* (before phase-in)	2017	6.40	12.11	18.51
2015* (after phase-in)	2017	6.40	10.35	16.75

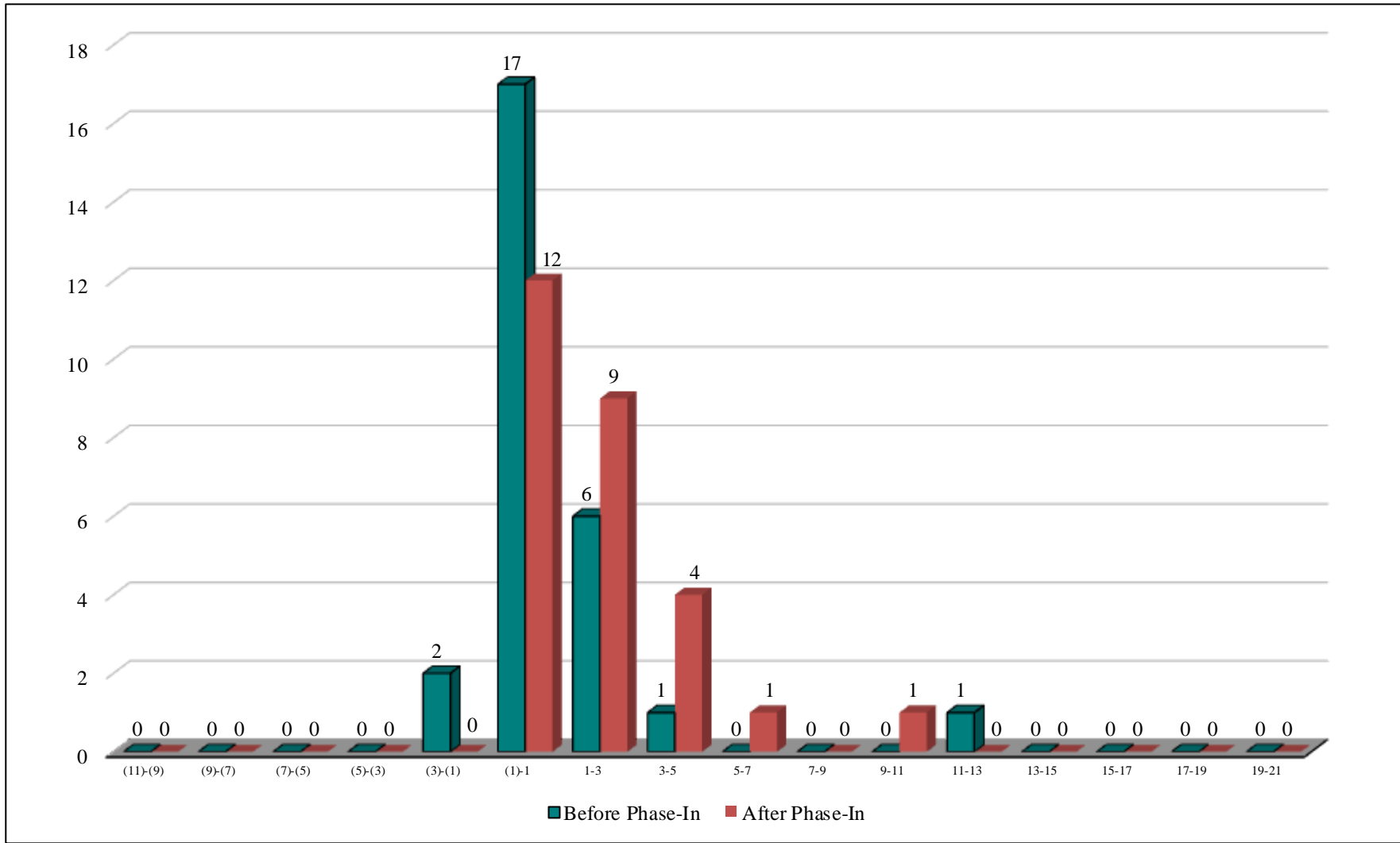
* Beginning with the June 30, 2014 valuation the rates are for pension only.

Results prior to 2009 were calculated by the prior actuary.

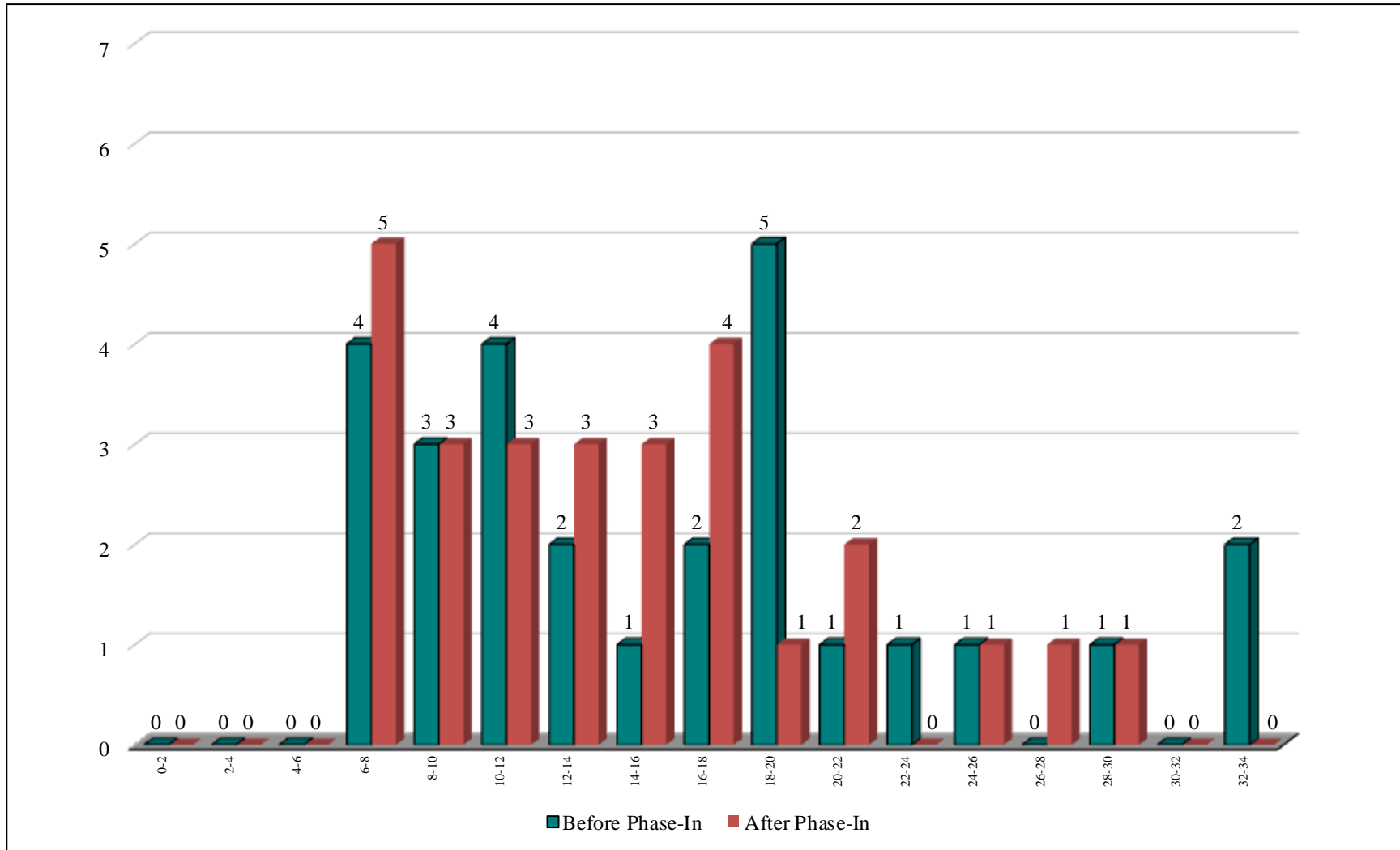
HISTORICAL SUMMARY OF EMPLOYER HEALTH RATES

Valuation Date June 30	Fiscal Year Ending June 30	Normal Cost	Unfunded Actuarial Accrued Liability	Total
2014	2016	0.33%	(0.11)%	0.22%
2015	2017	0.31	(0.11)	0.20

**EMPLOYER CONTRIBUTION RATE CHANGES AT JUNE 30, 2015
ALL EMPLOYERS**



EMPLOYER CONTRIBUTION RATES - ALL EMPLOYERS AT JUNE 30, 2015



SECTION B
FUNDING RESULTS

PRESENT VALUE OF FUTURE BENEFITS AND ACCRUED LIABILITY

	June 30,	
	2014	2015
Pension		
A. Accrued Liability		
1. For retirees and beneficiaries	\$ 1,269,514,650	\$ 1,351,258,733
2. For vested terminated members	25,011,171	32,620,312
3. For present active members		
a. Value of expected future benefit payments	1,950,420,130	1,950,470,072
b. Value of future normal costs	607,400,787	594,112,734
c. Active member accrued liability: (a) - (b)	1,343,019,343	1,356,357,338
4. Total accrued liability	2,637,545,164	2,740,236,383
B. Present Assets (Funding Value)	1,511,211,514	1,571,430,528
C. Unfunded Accrued Liability: (A.4) - (B)	1,126,333,650	1,168,805,855
D. Stabilization Reserve	674,367	745,540
E. Net Unfunded Accrued Liability: (C) + (D)	\$ 1,127,008,017	\$ 1,169,551,395
F. Funding Ratio: (B) / (A.4)	57.3%	57.3%
Health		
A. Accrued Liability		
1. For retirees and beneficiaries	\$ 32,793,109	\$ 36,787,041
2. For present active members		
a. Value of expected future benefit payments	76,869,369	75,977,917
b. Value of future normal costs	12,647,270	11,893,806
c. Active member accrued liability: (a) - (b)	64,222,099	64,084,111
3. Total accrued liability	97,015,208	100,871,152
B. Present Assets (Funding Value)	102,100,399	111,345,889
C. Net Unfunded Accrued Liability: (A.3) - (B)	\$ (5,085,191)	\$ (10,474,737)
D. Funding Ratio: (B) / (A.3)	105.2%	110.4%

DERIVATION OF EXPERIENCE GAIN/(LOSS)

Actual experience will never (except by coincidence) exactly match assumed experience. Gains and losses often cancel each other over a period of years, but sizable year-to-year fluctuations are common. Detail on the derivation of the experience gain/(loss) is shown below, along with a year-by-year comparative schedule.

	June 30,	
	2014**	2015
(1) UAAL* at start of year	\$ 771,793,536	\$1,126,333,650
(2) Normal cost from last valuation	96,352,744	93,510,233
(3) Actual contributions	130,000,717	135,487,374
(4) Interest accrual	59,265,109	86,769,590
(5) Expected UAAL before changes: (1) + (2) - (3) + (4)	797,410,672	1,171,126,099
(6) Changes from benefit increases, methods and assumptions	258,620,730	-
(7) Change in reserve for future pension increases	-	-
(8) Expected UAAL after changes: (5) + (6) + (7)	1,056,031,402	1,171,126,099
(9) Actual UAAL at end of year	1,126,333,650	1,168,805,855
(10) Experience Gain/(Loss): (8) - (9)	\$ (70,302,248)	\$ 2,320,244

* *Unfunded Actuarial Accrued Liability.*

** *Pension only beginning with the June 30, 2014 valuation.*

FY 2015 Gains and Losses by Source

	Gain/(Loss)	% of Liability
Investment Return	\$ (46,763,913)	-1.8%
Salary Increases	29,875,930	1.1%
Retirement	2,086,482	0.1%
Turnover	6,673,311	0.3%
Disability	185,390	0.0%
Death-in-Service	1,620,736	0.1%
PBI	23,677,511	0.9%
Retiree Mortality	(4,924,462)	-0.2%
Other	(10,110,741)	-0.4%
Total	\$ 2,320,244	0.1%

**UNFUNDED ACTUARIAL ACCRUED LIABILITIES
COMPARATIVE STATEMENT**

(Dollar amounts in \$'000s)

Pension

Valuation Date	(1) Actuarial Accrued Liabilities (AAL)	(2) Valuation Assets	(3) Unfunded AAL	(4) Funded Ratio (2)/(1)	(5) Financing Period	(6) Payroll	Liability Ratio	
							(7) Unfunded (3)/(6)	(8) Total (1)/(6)
2006	\$ 981,208	\$ 919,868	\$ 61,340	93.7%	30 yrs.	\$ 437,744	14.0%	224.2%
2007	1,110,801	940,126	170,675	84.6	29	515,428	33.1	215.5
2008	1,390,363	1,207,026	183,337	86.8	28	642,621	28.5	216.4
2009	1,584,293	1,309,124	275,169	82.6	27	630,825	43.6	251.1
2010	1,722,006	1,382,144	339,862	80.3	26	616,481	55.1	279.3
2011	2,008,569	1,466,750	541,819	73.0	25	609,243	88.9	329.7
2012	2,231,544	1,512,989	718,555	67.8	24	626,223	114.7	356.3
2013	2,330,238	1,559,583	770,655	66.9	23	604,068	127.6	385.8
2014*	2,637,545	1,511,212	1,126,333	57.3	22	625,264	180.1	421.8
2015*	2,740,236	1,571,431	1,168,805	57.3	21	616,267	189.7	444.7

* Pension only beginning with the June 30, 2014 valuation.

Health

Valuation Date	(1) Actuarial Accrued Liabilities (AAL)	(2) Valuation Assets	(3) Unfunded AAL	(4) Funded Ratio (2)/(1)	(5) Financing Period	(6) Payroll	Liability Ratio	
							(7) Unfunded (3)/(6)	(8) Total (1)/(6)
2014	\$ 97,015	\$ 102,100	\$ (5,085)	105.2%	22 yrs.	\$ 625,264	(0.8)%	15.5%
2015	100,871	111,346	(10,475)	110.4	21	616,267	(1.7)	16.4

The Unfunded Liability ratio gives a general measure of the ability to collect contributions to pay off the unfunded liabilities. The Total Liability ratio gives a longer term indication of the volatility of the contribution rate.

Results prior to 2009 were calculated by the prior actuary.

SHORT CONDITION TEST

If the contributions to CORP are soundly executed, the System will *pay all promised benefits when due -- the ultimate test of financial soundness.*

A short condition test is one means of checking a system’s progress under its funding program. In a short condition test, the plan’s present assets (cash and investments) are compared with:

- 1) Member contributions on deposit;
- 2) The liabilities for future benefits to present retired lives; and
- 3) The liabilities for service already rendered by active and inactive members.

In a plan that has been following the discipline of pre-funding, the liabilities for member contributions on deposit (liability 1) and the liabilities for future benefits to present retired lives (liability 2) will be fully covered by present assets (except in rare circumstances). In addition, the liabilities for service already rendered by active and inactive members (liability 3) will be partially covered by the remainder of present assets. The larger the funded portion of liability 3, the stronger the condition of the plan.

Short Condition Test

(in \$'000s)

Pension

Calendar Year	Aggregate Actuarial Liabilities For			Actuarial Assets	Portion of Actuarial Liabilities Covered by Assets		
	(1) Non-Retired Contributions	(2) Annuitants	(3) Non-Retired Members (Employer Financed Portion)		(1)	(2)	(3)
2009	\$314,100	\$ 586,596	\$683,597	\$1,309,124	100%	100%	59.7%
2010	345,122	689,910	686,973	1,382,144	100%	100%	50.5%
2011	353,892	823,664	831,013	1,466,750	100%	100%	34.8%
2012	373,726	918,771	939,047	1,512,989	100%	100%	23.5%
2013	382,417	1,011,478	936,343	1,559,583	100%	100%	17.7%
2014*	396,381	1,269,515	971,649	1,511,212	100%	88%	0.0%
2015*	406,641	1,351,259	982,336	1,571,431	100%	86%	0.0%

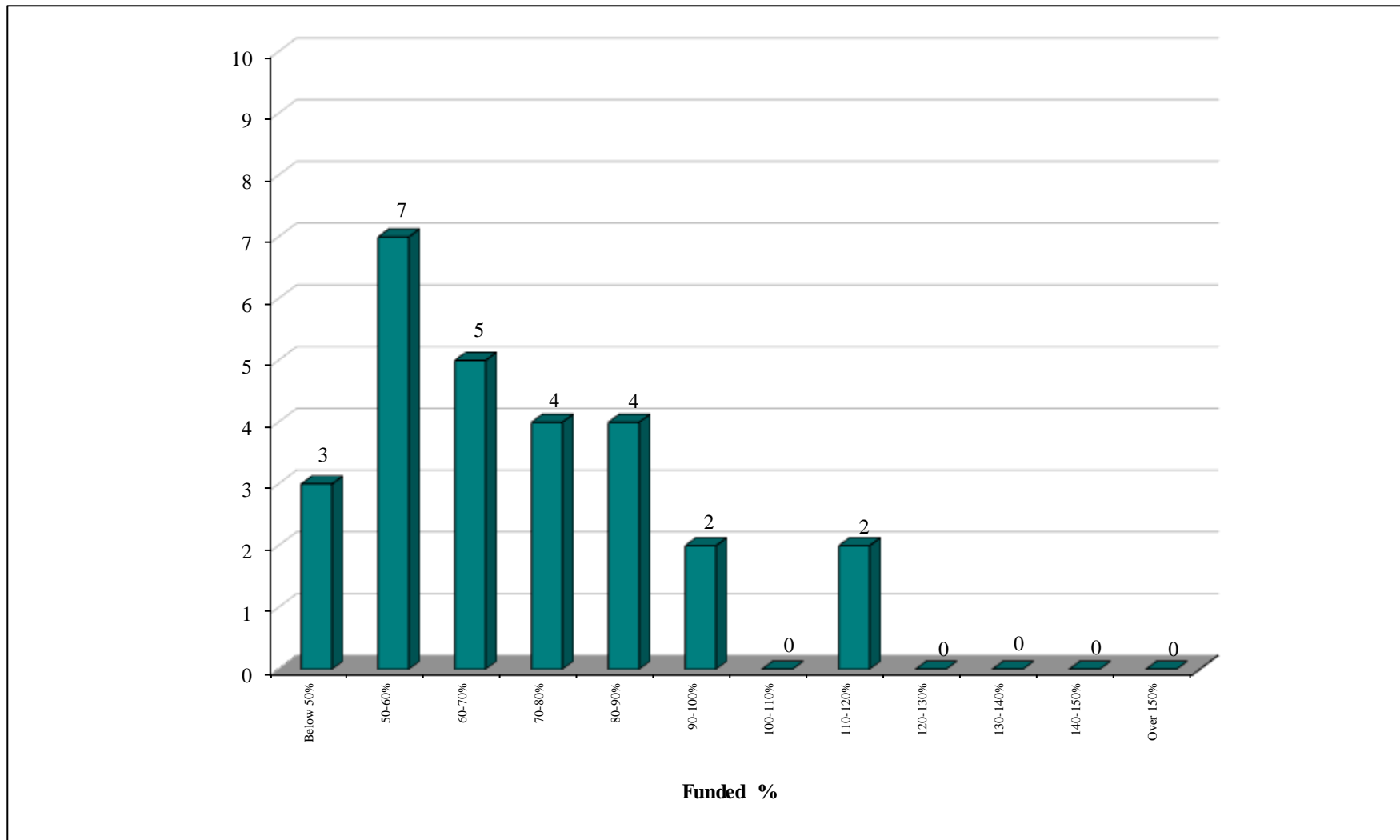
* Pension only beginning with the June 30, 2014 valuation.

SHORT CONDITION TEST

Health

Calendar Year	Aggregate Actuarial Liabilities For			Actuarial Assets	Portion of Actuarial Liabilities covered by Assets		
	(1) Non-Retired Contributions	(2) Annuitants	(3) Non-Retired Members (Employer Financed Portion)		(1)	(2)	(3)
2014	\$ 0	\$32,793	\$64,222	\$102,100	100%	100%	107.9%
2015	0	36,787	64,084	111,346	100%	100%	116.3%

FUNDED PERCENTS - ALL EMPLOYERS AT JUNE 30, 2015



PENSION CONTRIBUTION PROJECTION

Without Contribution Phase-In during FYE17

Fiscal Year	Contribution	Contribution
Ending	Rate	Amount (Estimate)
June 30		
2017	18.51%	\$123,379,311
2018	18.34	127,035,379
2019	18.25	131,425,540
2020	18.28	136,883,009
2021	18.15	141,238,243
2022	18.06	146,041,933
2023	18.07	151,881,003
2024	17.99	157,234,209
2025	17.91	162,785,869
2026	17.84	168,616,955
2027	17.75	174,485,272

With Contribution Phase-In during FYE17

Fiscal Year	Contribution	Contribution
Ending	Rate	Amount (Estimate)
June 30		
2017	16.75%	\$111,647,945
2018	18.58	128,697,783
2019	18.61	134,018,044
2020	18.65	139,653,617
2021	18.51	144,039,662
2022	18.42	148,953,068
2023	18.44	154,990,907
2024	18.36	160,468,042
2025	18.28	166,148,837
2026	18.20	172,019,540
2027	18.12	178,122,430

Contribution Rate and Amount estimated based on June 30, 2015 valuation data, methods, and assumptions, including 7.85% investment return and 4% payroll growth.

SECTION C
FUND ASSETS

DEVELOPMENT OF PENSION FUNDING VALUE OF ASSETS (7-YEAR SMOOTHING)

Year Ended June 30:	2015	2016	2017	2018	2019	2020	2021
A. Funding Value Beginning of Year	\$ 1,511,211,514						
B. Market Value End of Year	1,539,868,120						
C. Market Value Beginning of Year	1,497,245,001						
D. Non Investment Net Cash Flow	(11,207,291)						
E. Investment Income							
E1. Total: B-C-D	53,830,410						
E2. Amount for Immediate Recognition: (7.85%)	118,190,218						
E3. Amount for Phased-in Recognition: E1-E2	(64,359,808)						
F. Phased-in Recognition of Investment Income							
F1. Current Year: E3 / 7	(9,194,258)						
F2. First Prior Year	8,714,006	\$ (9,194,258)					
F3. Second Prior Year	2,691,222	8,714,006	\$ (9,194,258)				
F4. Third Prior Year	(17,588,811)	2,691,222	8,714,006	\$ (9,194,258)			
F5. Fourth Prior Year	9,960,661	(17,588,811)	2,691,222	8,714,006	\$ (9,194,258)		
F6. Fifth Prior Year	2,113,337	9,960,661	(17,588,811)	2,691,222	8,714,006	\$ (9,194,258)	
F7. Sixth Prior Year	(43,460,070)	2,113,335	9,960,661	(17,588,811)	2,691,224	8,714,004	\$ (9,194,260)
F8. Total Recognized Investment Gain	(46,763,913)	(3,303,845)	(5,417,180)	(15,377,841)	2,210,972	(480,254)	(9,194,260)
G. Funding Value End of Year							
G1. Preliminary Funding Value End of Year: (A+D+E2+F1:F7)	1,571,430,528						
G2. Upper Corridor: (120% x B)	1,847,841,744						
G3. Lower Corridor: (80% x B)	1,231,894,496						
G4. End of Year: (G1 subject to max of G2 and min of G3)	1,571,430,528						
H. Difference Between Market Value & Funding Value: (B-G4)	(31,562,408)	(28,258,563)	(22,841,383)	(7,463,542)	(9,674,514)	(9,194,260)	0
I. Market Rate of Return	3.6%						
J. Recognized Rate of Return	4.7%						
K. Ratio of Funding Value to Market Value	102.0%						

The funding value of assets recognizes assumed investment return (line E2) fully each year. Differences between actual and assumed investment return (line E3) are phased-in over a closed 7-year period. During periods when investment performance exceeds the assumed rate, funding value of assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, funding value of assets will tend to be greater than market value. The funding value of assets is **unbiased** with respect to market value. At any time it may be either greater or less than market value. If actual and assumed rates of investment return are exactly equal for 7 consecutive years, the funding value will become equal to market value.

DEVELOPMENT OF HEALTH FUNDING VALUE OF ASSETS (7-YEAR SMOOTHING)

Year Ended June 30:	2015	2016	2017	2018	2019	2020	2021
A. Funding Value Beginning of Year	\$ 102,100,399						
B. Market Value End of Year	109,237,632						
C. Market Value Beginning of Year	101,323,221						
D. Non Investment Net Cash Flow	4,100,133						
E. Investment Income							
E1. Total: B-C-D	3,814,278						
E2. Amount for Immediate Recognition: (7.85%)	8,175,812						
E3. Amount for Phased-in Recognition: E1-E2	(4,361,534)						
F. Phased-in Recognition of Investment Income							
F1. Current Year: E3 / 7	(623,076)						
F2. First Prior Year	584,150	\$ (623,076)					
F3. Second Prior Year	173,946	584,150	\$ (623,076)				
F4. Third Prior Year	(1,136,847)	173,946	584,150	\$ (623,076)			
F5. Fourth Prior Year	643,804	(1,136,847)	173,946	584,150	\$ (623,076)		
F6. Fifth Prior Year	136,595	643,804	(1,136,847)	173,946	584,150	\$ (623,076)	
F7. Sixth Prior Year	(2,809,027)	136,595	643,804	(1,136,847)	173,947	584,154	\$ (623,078)
F8. Total Recognized Investment Gain	(3,030,455)	(221,428)	(358,023)	(1,001,827)	135,021	(38,922)	(623,078)
G. Funding Value End of Year							
G1. Preliminary Funding Value End of Year: (A+D+E2+F1:F7)	111,345,889						
G2. Upper Corridor: (120% x B)	131,085,158						
G3. Lower Corridor: (80% x B)	87,390,106						
G4. End of Year: (G1 subject to max of G2 and min of G3)	111,345,889						
H. Difference Between Market Value & Funding Value: (B-G4)	(2,108,257)	(1,886,829)	(1,528,806)	(526,979)	(662,000)	(623,078)	0
I. Market Rate of Return	3.7%						
J. Recognized Rate of Return	4.9%						
K. Ratio of Funding Value to Market Value	101.9%						

The funding value of assets recognizes assumed investment return (line E2) fully each year. Differences between actual and assumed investment return (line E3) are phased-in over a closed 7-year period. During periods when investment performance exceeds the assumed rate, funding value of assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, funding value of assets will tend to be greater than market value. The funding value of assets is **unbiased** with respect to market value. At any time it may be either greater or less than market value. If actual and assumed rates of investment return are exactly equal for 7 consecutive years, the funding value will become equal to market value.

REVENUES AND DISBURSEMENTS

	Pension	
	<u>2014</u>	<u>2015</u>
Market Value at the Beginning of Year:	\$1,330,784,684	\$1,497,245,001
Revenues:		
a. Member contributions	\$ 52,202,793	\$ 52,909,951
b. Employer contributions	77,797,924	82,577,422
c. Investment income (net of expenses)	175,632,667	53,830,411
d. Net transfers	(201,856)	(544,809)
e. Total	<u>\$ 305,431,528</u>	<u>\$ 188,772,975</u>
Disbursements:		
a. Refunds of member contributions	\$ 30,446,708	\$ 28,388,926
b. Pension benefits (including DROP)	107,086,812	116,382,685
c. Administrative Expenses	1,437,691	1,378,245
d. Totals	<u>\$ 138,971,211</u>	<u>\$ 146,149,856</u>
Reserve Increase:		
Total revenues minus total disbursements	\$ 166,460,317	\$ 42,623,119
Market Value at the End of Year:	\$1,497,245,001	\$1,539,868,120

	Health	
	<u>2014</u>	<u>2015</u>
Market Value at the Beginning of Year:	\$ 86,014,832	\$ 101,323,221
Revenues:		
a. Health contributions	6,681,242	7,587,137
b. Interest income (net of expenses)	11,664,710	3,814,278
c. Total	<u>\$ 18,345,952</u>	<u>\$ 11,401,415</u>
Disbursements:	\$ 3,037,563	\$ 3,487,004
Reserve Increase:		
Total revenues minus total disbursements	15,308,389	7,914,411
Market Value at the End of Year:	\$ 101,323,221	\$ 109,237,632

SECTION D
CENSUS DATA

JUNE 30, 2015 VALUATION DATA SUMMARY

For purposes of the June 30, 2015 valuation, information on 20,912 covered persons was furnished. These people may be briefly described as follows:

	No.	Averages			
		Age	Years of Service	Annual Pay or Retirement Allowance	
				2015	2014
Actives	14,184	39.5	8.3	\$43,448	\$42,841
Retirees & Beneficiaries	4,410	63.8		26,353	26,299
Inactive Vested	2,318	38.1			
	20,912				

ACTIVE MEMBERS

**Members in Active Service as of June 30, 2015
by Years of Service**

Age	Years of Service							Total Count	Total Pay	Average Pay
	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 & Up			
Under 25	1,056	9						1,065	\$ 37,674,166	\$35,375
25 - 29	2,019	360	8					2,387	88,539,618	37,092
30 - 34	1,025	839	271	2				2,137	86,857,901	40,645
35 - 39	580	565	548	168				1,861	82,405,413	44,280
40 - 44	465	496	473	535	41			2,010	93,318,017	46,427
45 - 49	318	381	378	375	193	27		1,672	80,484,467	48,137
50 - 54	229	262	277	277	131	98	2	1,276	61,174,785	47,943
55 - 59	151	173	235	233	99	63	22	976	47,363,880	48,529
60 - 64	79	123	152	132	52	39	13	590	28,302,077	47,970
65 and over	18	57	56	36	20	15	8	210	10,147,153	48,320
Total	5,940	3,265	2,398	1,758	536	242	45	14,184	\$ 616,267,477	\$43,448

TERMINATED VESTED MEMBERS

Age	Years of Service					Total Count
	0 - 4	5 - 9	10 - 14	15 - 19	20 & Up	
Under 30	687	32				719
30 - 39	559	115	28	3		705
40 - 44	195	36	26	4		261
45 - 49	149	26	20	3		198
50 - 54	108	18	22	9	1	158
55 - 59	75	25	34	10	1	145
60 - 69	68	11	35	12		126
70 and over	3	1		1	1	6
Total	1,844	264	165	42	3	2,318

RETIREES AND BENEFICIARIES

Attained Ages	Males		Females		Total	
	No.	Annual Pension Benefits	No.	Annual Pension Benefits	No.	Annual Pension Benefits
Under 25	4	\$ 60,635	3	\$ 42,057	7	\$ 102,692
25-29	0	0	4	56,143	4	56,143
30-34	2	41,657	11	159,454	13	201,111
35-39	7	116,546	13	202,704	20	319,250
40-44	69	1,691,611	41	851,781	110	2,543,392
45-49	207	5,484,467	82	2,071,359	289	7,555,826
50-54	366	10,735,686	166	4,824,448	532	15,560,134
55-59	405	12,912,513	191	5,999,600	596	18,912,113
60-64	463	14,616,239	246	6,862,101	709	21,478,340
65-69	565	16,174,083	304	7,451,335	869	23,625,418
70-74	417	9,976,095	200	4,085,520	617	14,061,615
75-79	236	4,769,471	136	2,481,731	372	7,251,202
80-84	124	2,172,385	67	1,041,757	191	3,214,142
85-89	38	644,619	27	402,914	65	1,047,533
90-94	9	149,935	6	93,199	15	243,134
95-99	0	0	1	45,214	1	45,214
100 and Over	0	0	0	0	0	0
Totals	2,912	\$79,545,942	1,498	\$36,671,317	4,410	\$116,217,259

Pension Being Paid		Number	Annual Pensions	Average Pensions
Retired Members	Service Pensions	3,702	\$103,357,645	\$27,919
	Disability Pensions	130	2,658,204	20,448
Totals		3,832	106,015,849	27,666
Survivors of Members	Spouses	544	9,730,765	17,887
	Children with Guardians	34	470,645	13,843
Total		578	10,201,410	17,649
Total Pension being Paid		4,410	\$116,217,259	\$26,353
		Average Age	Average Service	Average Age at Retirement
Normal Retired Members		63.9	19.9	56.6
Disability Retired Members		56.5	9.7	45.9
Spouse Beneficiaries		66.5	12.6	52.2

**PENSIONS BEING PAID
HISTORICAL SCHEDULE**

Valuation Date June 30	No.	Annual Pensions	% Incr. in Annual Pensions	Average Pension	Present Value of Pensions	
					Total	Average
1990	115	\$ 765,738	34.0%	\$ 6,659	\$ 7,150,080	\$ 62,175
1995	435	3,456,705	27.5	7,946	34,140,660	78,484
2000	925	11,042,151	14.5	11,937	107,650,253	116,379
2001	1,040	13,446,069	21.8	12,929	124,247,094	119,468
2002	1,218	17,660,065	31.3	14,499	166,073,532	136,349
2003	1,363	21,653,042	22.6	15,886	201,489,450	147,828
2004	1,536	26,261,143	21.3	17,097	255,272,652	166,193
2005	1,733	31,329,225	19.3	18,078	332,199,210	191,690
2006	1,955	37,272,183	19.0	19,065	384,512,841	196,682
2007	2,123	42,666,000	14.5	20,097	430,172,373	202,625
2008	2,428	51,062,647	19.7	21,031	504,461,674	207,768
2009	2,591	59,089,591	15.7	22,806	566,228,807	218,537
2010	2,908	69,769,056	18.1	23,992	666,416,976	229,167
2011	3,256	81,637,650	17.0	25,073	796,704,561	244,688
2012	3,476	87,918,348	7.7	25,293	889,093,751	255,781
2013	3,810	96,465,575	9.7	25,319	980,669,280	257,394
2014	4,090	107,562,143	11.5	26,299	1,269,514,650	310,395
2015	4,410	116,217,259	8.0	26,353	1,351,258,733	306,408

Results prior to 2009 were calculated by the prior actuary.

SECTION E
METHODS AND ASSUMPTIONS

VALUATION METHODS

Actuarial Cost Method – Normal cost and the allocation of benefit values between service rendered before and after the valuation date were determined using an individual entry-age actuarial cost method having the following characteristics:

- (i) the annual normal costs for each individual active member, payable from the date of hire to the date of retirement, are sufficient to accumulate to the value of the member's benefits.
- (ii) each annual normal cost is a constant percentage of the member's year-by-year projected covered pay.

The entry-age actuarial cost method allocates the actuarial present value of each member's projected benefits on a level basis over the member's compensation between the entry age of the member and the assumed exit ages.

Actuarial Accrued Liability – The actuarial accrued liability is the portion of actuarial present value allocated to service rendered prior to the valuation date, including experience gains and losses. The actuarial accrued liability was computed using the assumptions summarized in this report.

Actuarial Value of System Assets – The actuarial value of assets recognizes assumed investment income fully each year. Differences between actual and assumed investment income are phased-in over a closed 7-year period subject to a 20% corridor. During periods when investment performance exceeds the assumed rate, actuarial value of assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, the actuarial value of assets will tend to be greater than market value.

Financing of Unfunded Actuarial Accrued Liabilities – The actuarial value of assets were subtracted from the computed actuarial accrued liability. Any unfunded amount would be amortized as level percent-of-payroll over a closed period of 21 years. If the actuarial value of assets exceeded the actuarial accrued liability, the excess was amortized over an open period of 20 years and applied as a credit to reduce the normal cost which otherwise would be payable.

Active member payroll was assumed to increase 4.00% annually for the purpose of computing the amortization payment (credit) as a level percent-of-payroll.

VALUATION ASSUMPTIONS

Beginning with the June 30, 2007 valuation and with each subsequent valuation, if the actuarial value of assets exceeds the actuarial accrued liabilities, one half of this excess in each year is allocated to a Stabilization Reserve. The Stabilization Reserve is excluded from the calculation of the employer contribution rates. The Stabilization Reserve continues to accumulate as long as the plan is over-funded. Once the plan becomes under-funded, the Stabilization Reserve will be used to dampen increases in the employer contribution rates.

The rate of investment return was 7.85% a year, compounded annually net of investment and administrative expenses.

The assumed real return is the rate of return in excess of wage growth. Considering other assumptions used in the valuation, the 7.85% nominal rate translates to a net real return over wage growth of 3.85% a year.

The rates of pay increase used for individual members are shown below. This assumption is used to project a member’s current pay to the pay upon which Plan benefits will be based.

Sample Ages	Salary Increase Assumptions For an Individual Member		
	Merit & Seniority	Base (Economy)	Increase Next Year
20	3.3%	4.0%	7.3%
25	3.0%	4.0%	7.0%
30	2.2%	4.0%	6.2%
35	1.3%	4.0%	5.3%
40	0.7%	4.0%	4.7%
45	0.5%	4.0%	4.5%
50	0.4%	4.0%	4.4%
55	0.2%	4.0%	4.2%
60	0.0%	4.0%	4.0%
Ref:	382		

Active member payroll is assumed to grow at 4.00% per year. Although no specific price inflation assumption is required to perform this valuation, since no benefits are linked to prices, a price inflation assumption on the order of 3.0% would be consistent with the other economic assumptions.

VALUATION ASSUMPTIONS

The healthy mortality table used to evaluate death after retirement in this valuation of the Plan was the RP 2000 Mortality table (adjusted by 105% for both males and females). This assumption was first used for the June 30, 2012 valuation of the Plan. Sample rates of mortality and years of life expectancy are shown below:

Sample Attained Ages	Probability of Dying Next Year		Future Life Expectancy (years)	
	Males	Females	Males	Females
50	0.22%	0.18%	30.37	33.14
55	0.38	0.29	25.76	28.47
60	0.71	0.53	21.35	23.95
65	1.34	1.02	17.24	19.72
70	2.33	1.76	13.54	15.86
75	3.97	2.95	10.27	12.40
80	6.76	4.82	7.50	9.38
Ref:	506 x 1.05 0 year set forward	507 x 1.05 0 year set forward		

This assumption is used to measure the probabilities of each benefit payment being made after retirement. For disabled members, non-disability rates with a 5-year set forward were used.

The disabled mortality table used to evaluate death after retirement in this valuation of the Plan was the RP 2000 Mortality table (set forward 10 years for both males and females). This assumption was first used for the June 30, 2012 valuation of the Plan. Sample rates of mortality and years of life expectancy are shown below:

Sample Attained Ages	Probability of Dying Next Year		Future Life Expectancy (years)	
	Males	Females	Males	Females
50	0.67%	0.51%	21.74	24.38
55	1.27	0.97	17.61	20.12
60	2.22	1.67	13.88	16.23
65	3.78	2.81	10.57	12.74
70	6.44	4.59	7.75	9.68
75	11.08	7.74	5.49	7.09
80	18.34	13.17	3.86	5.15
Ref:	506 x 1.00 10 year set forward	507 x 1.00 10 year set forward		

VALUATION ASSUMPTIONS

For actives, the sample rates of mortality for death-in-service are shown below, and were first used for the June 30, 2012 valuation of the Plan.

Sample Attained Ages	Probability of Dying Next Year	
	Males	Females
50	0.17%	0.13%
55	0.29	0.22
60	0.54	0.40
65	1.02	0.78
Ref:	506 x 0.80 0 year set forward	507 x 0.80 0 year set forward

The rates of regular retirement used to measure the probability of eligible members retiring during the next year are shown below. These assumptions was first used for the June 30, 2012 valuation of the System.

Retirement Rates: Age-related rates for members hired before January 1, 2012 are shown below:

Age at Retirement	Rates
60	60%
61	60%
62	60%
63	60%
64	60%
65	60%
66	60%
67	60%
68	60%
69	60%
70	60%
71	60%
72	60%
73	60%
74	60%
75	100%
Ref.	2153

These retirement rates are applicable to employees attaining age 62 before attaining 20 (25 for dispatchers) years of service.

VALUATION ASSUMPTIONS

Service-related rates for members hired before January 1, 2012 are shown below:

Service at Retirement	CORP
20	28%
21	28%
22	22%
23	20%
24	17%
25	33%
26	33%
27	25%
28	17%
29	17%
30	30%
31	30%
32	50%
33	50%
34	75%
35	75%
36	75%
37	100%
Ref.	2154

These retirement rates are applicable to employees attaining 20 (25 for dispatchers) years of service before attaining age 62.

Age-related rates for members hired after January 1, 2012 are shown below:

Age at Retirement	CORP
53	40%
54	40%
55	30%
56	15%
57	15%
58	30%
59	30%
60	65%
61	65%
62	100%
Ref.	1744

VALUATION ASSUMPTIONS

Rates of separation from active membership used in the valuation are shown below (rates do not apply to members eligible to retire and do not include separation on account of death or disability). This assumption measures the probabilities of members remaining in employment. This assumption was first used for the June 30, 2012 valuation of the Plan.

Sample Ages	Years of Service	% of Active Members Separating Within Next Year
All	0	25.00%
	1	20.00%
	2	16.00%
	3	14.00%
	4	12.00%
	5	9.00%
	6	9.00%
	7	9.00%
	8	8.00%
	9	8.00%
	10	8.00%
	11	5.00%
	12	4.00%
	13	4.00%
	14	3.00%
	15	3.00%
	16	3.00%
	17	2.00%
	18	2.00%
19	2.00%	
Ref.		729

VALUATION ASSUMPTIONS

Rates of disability among active members used in the valuation are shown below, and were first used for the June 30, 2012 valuation of the Plan.

Sample Ages	% of Active Members Becoming Disabled within Next Year
20	0.03%
25	0.03%
30	0.03%
35	0.04%
40	0.05%
45	0.06%
50	0.08%
55	0.08%
Ref	592 75%

SUMMARY OF ASSUMPTIONS USED
JUNE 30, 2015
MISCELLANEOUS AND TECHNICAL ASSUMPTIONS

Marriage Assumption:	80% of males and females are assumed to be married for purposes of death-in-service benefits. Male spouses are assumed to be three years older than female spouses for active member valuation purposes.
Pay Increase Timing:	Six months after the valuation date. This means that the pays received are assumed to be annual rates of pay on the valuation date as opposed to W-2 type earnings for the prior 12 months.
Decrement Timing:	Decrements of all types are assumed to occur mid-year.
Eligibility Testing:	Eligibility for benefits is determined based upon the age nearest birthday and service nearest whole year on the date the decrement is assumed to occur.
Decrement Relativity:	Decrement rates are used directly from the experience study, without adjustment for multiple decrement table effects.
Decrement Operation:	Disability and turnover decrements do not operate during retirement eligibility.
Service Credit Accruals:	It is assumed that members accrue one year of service credit per year.
Incidence of Contributions:	Contributions are assumed to be received continuously throughout the year based upon the computed percent of payroll shown in this report, and the actual payroll payable at the time contributions are made.
Normal Form of Benefit:	A straight life payment is the assumed normal form of benefit for members who are not married, and the 80% Joint and Survivor form of payment with no reduction, for married members. 80% of members are assumed to be married at the time of retirement.
Benefit Service:	Exact fractional service is used to determine the amount of benefit payable.
Health Care Utilization:	70% of future retirees are expected to utilize retiree health care. 80% of those are assumed to be married.
Assumed Future Permanent Benefit Increases (PBI):	Members retired on or before July 1, 2011: 2.25% of benefit. Members retired on or after August 1, 2011: 0.5% of benefit.

SECTION F
PLAN PROVISIONS

SUMMARY OF PLAN PROVISIONS VALUED AND/OR CONSIDERED

Membership: Designated positions for the following employers that elect to join the Plan are eligible to participate in the CORP if the employee's customary employment is for at least forty (40) hours per week, or as defined by statute. A.R.S. § 38-881(13):

- For a County: A county detention officer and non-uniformed employees of a sheriff's department whose primary duties require direct inmate contact.
- For the State Department of Corrections and the Department of Juvenile Correction: Specific positions are eligible to participate. Refer to the statute for specific positions.
- For a City or Town, a City or Town Detention Officer.
- For an employer of an eligible group as defined in A.R.S. § 38-842, full-time dispatchers.
- For the judiciary, probation, surveillance, and juvenile detention officers and those positions designated by the Local Board.
- For the Department of Public Safety, state detention officers.

Dispatchers hired after November 24, 2009 must participate in the Arizona State Retirement System. A.R.S. § 38-902(C).

Average Monthly Compensation

For members hired before January 1, 2012:

One-thirty-sixth of total compensation paid to member during the three years, out of the last 10 years of credited service, in which the amount paid was highest. Compensation is the amount including base salary, overtime pay, shift differential pay and holiday pay, paid to an employee on a regular payroll basis and longevity pay paid at least every six months for which contributions are made to the System.

For members hired after January 1, 2012:

One-sixtieth of total compensation paid to member during the five years, out of the last 10 years of credited service, in which the amount paid was highest. Compensation is the amount including base salary, overtime pay, shift differential pay and holiday pay, paid to an employee on a regular payroll basis and longevity pay paid at least every six months for which contributions are made to the System.

Normal Retirement (no reduction for age)

For members hired before January 1, 2012:

A corrections officer may retire upon meeting one of the following age and service requirements:

- a) Any age with 20 (25 for dispatchers) or more years of credited service (effective August 9, 2001);
- b) Age 62 years with 10 or more years of credited service; or
- c) A combination of age and credited service equal to 80 (effective July 1, 1995).

The amount of normal pension at 20 years of credited service is 50% of average monthly salary with 2% increments for every year over 20 years of credited service up to 25 years of credited service. With 25 or more years of credited service the accrual rate is 2.5% for each year.

**SUMMARY OF PLAN PROVISIONS
VALUED AND/OR CONSIDERED**

The maximum amount payable as a normal retirement pension is 80% of the average monthly compensation.

For members hired after January 1, 2012:

First day of month following the attainment of age 52.5 and completion of 25 years of service or the attainment of age 62 and completion of 10 years of service.

The amount of monthly normal pension is based on credited service and average monthly compensation as follows:

- *Age 62 and 10 years of service*, 2.5% of average monthly compensation per year of credited service.
- *Age 52.5 with 25 or more years of credited service*, 62.5% of average monthly compensation, plus 2.5% of average monthly compensation for each year of credited service over 25.
- *Age 52.5 with 25 years of service, but less than 25 years of credited service*, 2.5% of average monthly compensation multiplied total credited service.

The maximum amount payable as a normal retirement pension is 80% of the average monthly compensation.

Early Retirement (reduction for age): No provision.

Vested Termination (deferred retirement): Termination of covered position employment with 10 or more years of credited service. Pension is calculated based on twice the member's accumulated contributions with payments commencing at age 62. Benefit is forfeited if accumulated contributions are refunded. The following schedule shows additional money which would be payable to members who receive a refund of their accumulated member contributions.

<u>Years of Credited Service</u>	<u>Additional Monies (% of Contributions)</u>
0-4	0%
5-6	25-40
7-8	55-70
9-10	85-100

For members hired on or after January 1, 2012 that cease to hold office for any reason other than death or retirement, member can withdraw their accumulated contributions less any benefit payments already received or any amount the member owes the Plan (no employer match of refund contributions) with interest at rate set by Board.

Disability Retirement. A member who is injured in the performance of his duties which totally and permanently prevent him from performing a reasonable range of duties in his department and was the

**SUMMARY OF PLAN PROVISIONS
VALUED AND/OR CONSIDERED**

result of either physical contact with an inmate, responding to a confrontational situation with an inmate or a job-related motor vehicle accident may be retired under accidental disability. A corrections officer who becomes incapacitated for any gainful employment, as the direct and proximate result of performance of duty as a corrections officer, may be retired by the Board of Trustees under total and permanent disability. The amount of pension for both types of disability is 50 percent of average monthly salary.

A member who has a total and permanent disability that prevents the performance of a reasonable range of duties in his department may be retired by the Board of Trustees under an ordinary disability (non-duty related). The amount of the pension is a percentage of normal retirement benefit. The percentage based on credited service divided by 20 (25 for dispatchers).

DROP. Beginning July 1, 2006 and through June 30, 2016, the CORP shall offer the Reverse Deferred Retirement Option Plan (Reverse DROP) to members that are eligible for a normal pension (based on service and age) applicable to a membership date that is either prior to, or after January 1, 2012 (who is not awarded an accidental, ordinary or total and permanent disability pension). Under the Reverse DROP, the member must voluntarily and irrevocably elect to terminate employment and receive a normal retirement upon participation in the Reverse DROP. The Reverse DROP date is the first day of the month immediately following completion of required credited service, or a date not more than sixty (60) consecutive months before the date the member elects to participate in the Reverse DROP, whichever is later.

The member's pension will be calculated using the factors of credited service and average monthly benefit compensation in effect on the Reverse DROP Date. The lump sum distribution is credited as though it accrued monthly from the Reverse DROP date to the date the member elected to participate in the Reverse DROP (plus interest equal to the yield on a five (5) year Treasury note as of the first day of the month as published by the Federal Reserve Board).

Survivor Pensions. Payable to the eligible beneficiary of a retired corrections officer or an active corrections officer. An eligible beneficiary is a surviving spouse who was married to the retired or active corrections officer for at least two years. A surviving spouse's pension terminates upon death. The amount of a surviving spouse's pension is 80% of the pension being paid the deceased retired corrections officer and 40% (100% if duty-related) of the average monthly salary of the deceased active corrections officer. Eligible surviving children are paid equal shares of the pension which would have been payable to a surviving spouse if a surviving spouse pension is not being paid. If no pension is payable because of the death of an active member, a refund of twice the member's accumulated contributions is paid to the beneficiary.

Other Terminations. The member is paid a refund of accumulated member contributions, plus an additional amount if the member has at least five years of service credited. The additional amount is a percent, based on service credit, of the member contribution amount, ranging from 25% (with five years of service credited) to 100% (with 10 or more years of service credited).

SUMMARY OF PLAN PROVISIONS VALUED AND/OR CONSIDERED

Post-Retirement Adjustments

For members retired on or before July 1, 2011:

Contingent upon the excess investment earnings, effective July 1 of each year, eligible retired members or survivors may be entitled to a permanent benefit increase in their base benefit. To be eligible for the increase, the retired member or survivor must be either age 55 or older on July 1 of the current year and receiving benefits on or before July 31 of the previous year, or the retired member or survivor has been receiving benefits on or before July 31 of the previous two years. The maximum amount of the increase is 4% of the average normal benefit being received on the preceding June 30.

Prior to July 1, 2013 a PBI reserve is maintained and used to pay for the post-retirement adjustment. The investment return on the PBI reserve is the same as the return on the market value of assets (whether the return is positive or negative). Additional amounts are added to the PBI reserve in years when the investment return on the market value of assets exceeds 9.0%. Each year the present value of that year's post-retirement adjustment is subtracted from the PBI reserve. A post-retirement adjustment is paid as long as there is a positive balance in the PBI reserve.

For members retired on or after August 1, 2011:

A PBI is only paid in a year when the annual return on the market value of assets of the prior fiscal year exceeds 10.5% and the plan is at least 60% funded. 100% of the excess earnings is used to determine whether a PBI can be paid and the size of the PBI for that year. No PBI reserve will accumulate and the present value of that year's PBI for eligible retirees cannot exceed 100% of the earnings in excess of 10.5%. If the excess earnings is high enough to exceed the present value of that year's PBI, the excess stays in the fund.

To be eligible for an increase the retiree or the survivor must be:

- In the case of a retired member who became a member of the plan before January 1, 2012, the retired member or survivor was receiving benefits on or before July 31 of the two previous years; or
- In the case of a retired member who became a member of the plan before January 1, 2012, the retired member or survivor was 55 or older on July 1 of the current year and was receiving benefits on or before July 31 of the previous year.
- In the case of a retired member who became a member of the plan on or after January 1, 2012, the retired member or survivor was at least 55 or older on July 1 and receiving benefits.
- In the case of a retired member who became a member of the plan on or after January 1, 2012, if under 55 on July 1, was receiving accidental disability benefits for the preceding 2 years.
- In the case of a member who became a member of the plan on or after January 1, 2012, if the survivor is under 55 on July 1, is the survivor of the member who was killed in the line of duty, and has been receiving a survivor benefits for the preceding 2 years.

**SUMMARY OF PLAN PROVISIONS
VALUED AND/OR CONSIDERED**

The amount of the PBI to be paid is determined as follows:

- Funded ratio is 60-64%, PBI is 2%
- Funded ratio is 65-69%, PBI is 2.5%
- Funded ratio is 70-74%, PBI is 3%
- Funded ratio is 75-79%, PBI is 3.5%
- Funded ratio is 80% or more, PBI is 4%

Post-Retirement Health Insurance Subsidy. Payable on behalf of retired members and survivors who elect coverage provided by the state or participating employer. The monthly amounts cannot exceed:

Member Only		With Dependents		
Not Medicare Eligible	Medicare Eligible	All Not Medicare Eligible	All Medicare Eligible	One With Medicare
\$150	\$100	\$260	\$170	\$215

Member Contributions. 8.50% of base salary. For fiscal years 2007/2008 and 2008/2009, the member contribution rate is 7.96% pursuant to legislation adopted in 2005. Effective after 9/26/2008, non-dispatcher members contribute 8.41%, or a 50/50 split between employer and employee, whichever is lower, until the Plan is 100% funded. Minimum employee contribution rate of 7.65%, minimum employer contribution rate of 6%. Dispatcher contribution rate is .45% less than the non-dispatcher rate until the plan is 100% funded then rates are equal thereafter.

Employer Contributions. Percent of payroll normal cost plus 30-year (21 years remaining as of June 30, 2015) amortization of unfunded actuarial accrued liability (20-year amortization for credit). The minimum employer contribution rate is 6% for fiscal years beginning with FY 2007/2008 (5% for units under 5% as of June 30, 2005 valuation).

SECTION G
FUNDING POLICY

ACTUARIAL FUNDING POLICY

Introduction

The purpose of this Actuarial Funding Policy is to record the funding objectives and policy set by the Board for the Arizona Public Safety Personnel Retirement System (PSPRS). The Board establishes this Funding Policy to help ensure the systematic funding of future benefit payments for members of the Retirement System.

In 2012, the Governmental Accounting Standards Board (GASB) approved two new financial reporting standards. GASB Statement No. 67, "Financial Reporting for Pension Plans" replaces the requirements of Statement No. 25. GASB Statement No. 68, "Accounting and Financial Reporting for Pensions" replaces the requirements of Statements No. 27 and No. 50. Prior to the changes, the Annual Required Contribution (ARC) rate was used as a basis for funding decisions. The new GASB statements separate accounting cost (expense) from funding cost (contributions), necessitating the creation of this funding policy.

This funding policy shall be reviewed by the Board annually for several years following initial adoption until the next experience study. Subsequently, it shall be reviewed every five years in conjunction with the experience study.

Funding Objectives

1. Maintain adequate assets so that current plan assets plus future contributions and investment earnings are sufficient to fund all benefits expected to be paid to members and their beneficiaries.
2. Maintain stability of employer contribution rates, consistent with other funding objectives.
3. Maintain public policy goals of accountability and transparency. Each policy element is clear in intent and effect, and each should allow an assessment of whether, how and when the funding requirements of the plan will be met.
4. Promote intergenerational equity. Each generation of members and employers should incur the cost of benefits for the employees who provide services to them, rather than deferring those costs to future members and employers.
5. Provide a reasonable margin for adverse experience to help offset risks.
6. Continue progress of systematic reduction of the Unfunded Actuarial Accrued Liabilities (UAAL).

ACTUARIAL FUNDING POLICY

Elements of Actuarial Funding Policy

1. Actuarial Cost Method

- a. The Individual Entry Age Normal level percent-of-pay actuarial cost method of valuation shall be used in determining Actuarial Accrued Liability (AAL) and Normal Cost. Differences in the past between assumed experience and actual experience (“actuarial gains and losses”) shall become part of the AAL. The Normal Cost shall be determined on an individual basis for each active member.

2. Asset Smoothing Method

- a. The investment gains or losses of each valuation period, resulting from the difference between actual investment return and assumed investment return, shall be recognized annually in level amounts over 7 years in calculating the Funding Value of Assets
- b. The Funding Value of Assets so determined shall be subject to a 20% corridor relative to Market Value of Assets.

3. Amortization Method

- a. The Funding Value of Assets are subtracted from the computed AAL. Any unfunded amount is amortized as a level percent-of-payroll over a closed period. If the Funding Value of Assets exceeds the AAL, the excess is amortized over an open period of 20 years and applied as a credit to reduce the Normal Cost otherwise payable.

4. Funding Target

- a. The targeted funded ratio shall be 100%.
- b. The maximum amortization period shall be 30 years.
- c. If the funded ratio is between 100% and 120%, a minimum contribution equal to the Normal Cost will be made.

ACTUARIAL FUNDING POLICY

Elements of Actuarial Funding Policy

5. Risk Management

a. Assumption Changes

- The actuarial assumptions used shall be those last adopted by the PSPRS Board based on the most recent experience study and upon the advice and recommendation of the actuary. In accordance with best practices, the actuary shall conduct an experience study every five years. The results of the study shall be the basis for the actuarial assumption changes recommended to the PSPRS Board.
- The actuarial assumptions can be updated during the 5-year period if significant plan design changes or other significant events occur, as advised by the actuary.

b. Amortization Method

- The amortization method, Level Percent Closed, will ensure full payment of the UAAL over a finite, systematically decreasing period not to exceed 30 years. The amortization period will be reviewed once the period reaches 15 years.

c. Risk Measures

- The following risk measures will be annually determined to provide quantifiable measurements of risk and their movement over time.

(i) Classic measures currently determined

- Funded ratio (assets/liability)

(ii) UAAL/Total Payroll

- Measures the risk associated with contribution decreases relative impact on the ability to fund the UAAL. An increase in this measure indicates a increase in contribution risk.

(iii) Total Liability/Total Payroll

- Measures the risk associated with the ability to respond to liability experience through adjustments in contributions. An increase in this measure indicates an increase in experience risk.

ACTUARIAL FUNDING POLICY

Glossary

1. **Actuarial Accrued Liability (AAL):** The difference between (i) the actuarial present value of future plan benefits, and (ii) the actuarial present value of future normal cost. Sometimes referred to as “accrued liability” or “past service liability.”
2. **Actuarial Assumptions:** Estimates of future plan experience with respect to rates of mortality, disability, turnover, retirement, rate or rates of investment income and salary increases. Decrement assumptions (rates of mortality, disability, turnover and retirement) are generally based on past experience, often modified for projected changes in conditions. Economic assumptions (salary increases and investment income) consist of an underlying rate in an inflation-free environment plus a provision for a long-term average rate of inflation.
3. **Actuarial Cost Method:** A mathematical budgeting procedure for allocating the dollar amount of the “actuarial present value of future plan benefits” between the actuarial present value of future normal cost and the actuarial accrued liability. Sometimes referred to as the “actuarial funding method.”
4. **Actuarial Gain (Loss):** A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions during the period between two actuarial valuation dates, in accordance with the actuarial cost method being used. For example, if during a given year the assets earn more than the investment return assumption, the amount of earnings above the assumption will cause an unexpected reduction in UAAL, or “actuarial gain” as of the next valuation. These include contribution gains and losses that result from actual contributions made being greater or less than the level determined under the policy.
5. **Actuary:** A person who is trained in the applications of probability and compound interest to problems in business and finance that involve payment of money in the future, contingent upon the occurrence of future events. Most actuaries in the United States are Members of the American Academy of Actuaries (MAAA). The Society of Actuaries (SOA) is an international research, education and membership organization for actuaries in the life and health insurance, employee benefits, and pension fields. The SOA administers a series of examinations leading initially to Associateship and the designation ASA and ultimately to Fellowship with the designation FSA.
6. **Amortization:** Paying off an interest-bearing liability by means of periodic payments of interest and principal, as opposed to paying it off with a lump sum payment.
7. **Entry Age Normal Actuarial Cost Method:** A funding method that calculates the Normal Cost as a level percentage-of-pay over the working lifetime of the plan’s members.
8. **Experience Study:** An actuarial investigation of demographic and economic experiences of the system during the period studied. The investigation is made for the purpose of updating the actuarial assumptions used in valuing the actuarial liabilities.

ACTUARIAL FUNDING POLICY

9. **Funding Value of Assets:** The value of current plan assets recognized for valuation purposes. Generally based on a phased-in recognition of all or a portion of market related investment return. Sometimes referred to as Actuarial Value of Assets.
10. **Market Value of Assets:** The fair value of plan assets as reported in the plan's audited financial statements.
11. **Normal Cost (NC):** The annual cost assigned, under the actuarial funding method, to current and subsequent plan years. Sometimes referred to as "current service cost." Any payment toward the unfunded actuarial accrued liability is not part of the normal cost.
12. **Unfunded Actuarial Accrued Liability (UAAL):** The positive difference, if any, between the actuarial accrued liability and valuation assets. Sometimes referred to as "unfunded accrued liability."

SECTION H
GLOSSARY

<i>Actuarial Accrued Liability</i>	The difference between (i) the actuarial present value of future plan benefits, and (ii) the actuarial present value of future normal cost. Sometimes referred to as “accrued liability” or “past service liability.”
<i>Accrued Service</i>	The service credited under the plan which was rendered before the date of the actuarial valuation.
<i>Actuarial Assumptions</i>	Estimates of future plan experience with respect to rates of mortality, disability, turnover, retirement, rate or rates of investment income and salary increases. Decrement assumptions (rates of mortality, disability, turnover and retirement) are generally based on past experience, often modified for projected changes in conditions. Economic assumptions (salary increases and investment income) consist of an underlying rate in an inflation-free environment plus a provision for a long-term average rate of inflation.
<i>Actuarial Cost Method</i>	A mathematical budgeting procedure for allocating the dollar amount of the “actuarial present value of future plan benefits” between the actuarial present value of future normal cost and the actuarial accrued liability. Sometimes referred to as the “actuarial funding method.”
<i>Actuarial Equivalent</i>	A single amount or series of amounts of equal value to another single amount or series of amounts, computed on the basis of the rate(s) of interest and mortality tables used by the plan.
<i>Actuarial Present Value</i>	The amount of funds presently required to provide a payment or series of payments in the future. It is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.
<i>Amortization</i>	Paying off an interest-bearing liability by means of periodic payments of interest and principal, as opposed to paying it off with a lump sum payment.
<i>Experience Gain/(Loss)</i>	A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions during the period between two actuarial valuation dates, in accordance with the actuarial cost method being used.
<i>Normal Cost</i>	The annual cost assigned, under the actuarial funding method, to current and subsequent plan years. Sometimes referred to as “current service cost.” Any payment toward the unfunded actuarial accrued liability is not part of the normal cost.

<i>Reserve Account</i>	An account used to indicate that funds have been set aside for a specific purpose and is not generally available for other uses.
<i>Unfunded Actuarial Accrued Liability</i>	The difference between the actuarial accrued liability and valuation assets. Sometimes referred to as “unfunded accrued liability.”
<i>Valuation Assets</i>	The value of current plan assets recognized for valuation purposes. Generally based on market value plus a portion of unrealized appreciation or depreciation.

APPENDIX I

ACCOUNTING DISCLOSURES

This information is presented in draft form for review by the Plan's auditor. Please let us know if there are any items that the auditor changes so that we may maintain consistency with the Plan's financial statements. Please note Plan reporting under GASB Statement No. 25 has been replaced by GASB Statement No. 67.

INFORMATION REQUIRED BY GASB STATEMENT NO. 67

The Governmental Accounting Standards Board Statement No. 67 (GASB 67) contains certain requirements regarding the accounting and disclosure of financial information. In addition to disclosing the system's fiduciary net position, retirement systems are also required to disclose information regarding the plan's total pension liability, net pension liability, and change in net pension liability from the prior year. In actuarial terms, these are the plan's actuarial accrued liability and unfunded actuarial accrued liability on a market value of asset basis. This section of the report contains information that is part of the Retirement System's disclosure requirements under this accounting standard.

Determination of the Total Pension Liability

The total pension liability shown in this subsection is also shown as of the last date of the pension plan's fiscal year, June 30, 2015.

A single discount rate of 7.85% was used to measure the total pension liability. This single discount rate was based on the expected rate of return on pension plan investments of 7.85%. The projection of cash flows used to determine this single discount rate assumed that plan member contributions will be made at the current contribution rate and that employer contributions will be made at rates equal to the difference between actuarially determined contribution rates and the member rate. Based on these assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

An exhibit providing the projections and calculations used to determine the single equivalent discount rate under GASB Statement No. 67 can be provided upon request.

Measurement of Net Pension Liability

The net pension liability is to be measured as the total pension liability, less the amount of the pension plan's fiduciary net position. As of the plan year ending June 30, 2015, the net pension liability is \$1,200,368,263.

The following exhibit provides information regarding the total pension liability, net pension liability, and change in the net pension liability since the prior plan year (and related ratios).

SCHEDULES OF REQUIRED SUPPLEMENTARY INFORMATION

SCHEDULE OF CHANGES IN THE EMPLOYERS' NET PENSION LIABILITY AND RELATED RATIOS

Last 10 Fiscal Years (which may be built prospectively)

Fiscal year ending June 30,	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006
Total Pension Liability										
Service Cost	\$ 89,411,480	\$ 96,352,744								
Interest on the Total Pension Liability	204,874,410	173,964,089								
Benefit and Assumption Changes	-	259,052,776								
Difference between expected and actual experience of the Total Pension Liability	(46,823,060)	9,015,638								
Benefit Payments and Refunds	(144,771,611)	(137,533,520)								
Net Change in Total Pension Liability	102,691,219	400,851,727								
Total Pension Liability - Beginning	2,637,545,164	2,236,693,437								
Total Pension Liability - Ending (a)	\$ 2,740,236,383	\$ 2,637,545,164								
Plan Fiduciary Net Position										
Employer Contributions	\$ 82,577,422	\$ 77,797,924								
Employee Contributions	52,909,951	52,202,793								
Pension Plan Net Investment Income	32,312,069	160,350,224								
Benefit Payments and Refunds	(144,771,611)	(137,533,520)								
Pension Plan Administrative Expense	(1,378,245)	(1,437,691)								
Other	20,973,533	15,080,587								
Net Change in Plan Fiduciary Net Position	42,623,119	166,460,317								
Plan Fiduciary Net Position - Beginning	1,497,245,001	1,330,784,684								
Plan Fiduciary Net Position - Ending (b)	\$ 1,539,868,120	\$ 1,497,245,001								
Net Pension Liability - Ending (a) - (b)	1,200,368,263	1,140,300,163								
Plan Fiduciary Net Position as a Percentage of Total Pension Liability	56.19 %	56.77 %								
Covered Employee Payroll	\$ 616,267,477	\$ 625,263,855								
Net Pension Liability as a Percentage of Covered Employee Payroll	194.78 %	182.37 %								
Notes to Schedule:										
N/A										

**SCHEDULES OF REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF THE EMPLOYERS' NET PENSION LIABILITY**

Last 10 Fiscal Years (which may be built prospectively starting from 2014)

FY Ending June 30,	Total Pension Liability	Plan Net Position	Net Pension Liability	Plan Net Position as a % of Total Pension Liability	Covered Payroll	Net Pension Liability as a % of Covered Payroll
2006			-			
2007			-			
2008			-			
2009			-			
2010			-			
2011			-			
2012			-			
2013			-			
2014	\$2,637,545,164	\$1,497,245,001	\$1,140,300,163	56.77%	\$625,263,855	182.37%
2015	2,740,236,383	1,539,868,120	1,200,368,263	56.19%	616,267,477	194.78%

SCHEDULE OF CONTRIBUTIONS

Last 10 Fiscal Years (which may be built prospectively starting from 2014)

FY Ending June 30,	Actuarially Determined Contribution	Actual Contribution	Contribution Deficiency (Excess)	Covered Payroll	Actual Contribution as a % of Covered Payroll
2006					
2007					
2008					
2009					
2010					
2011					
2012					
2013					
2014	\$ 86,853,695	\$ 77,797,924	\$ 9,055,771	\$ 625,263,855	12.44%
2015	87,272,617	82,577,422	4,695,195	616,267,477	13.40%

GASB STATEMENT NO. 67 SUPPLEMENTARY INFORMATION

**SUMMARY OF ACTUARIAL METHODS AND ASSUMPTIONS USED TO
DETERMINE CONTRIBUTION RATES**

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

Valuation date	June 30, 2015
Actuarial cost method	Entry-Age Normal
Amortization method	Level percent-of-pay, Closed
Remaining amortization period	21 years
Asset valuation method	7-year smoothed market 80%/120% market corridor
Inflation	4.00%; no explicit price inflation assumption is used in this valuation.
Actuarial assumptions:	
Investment rate of return	7.85%
Projected salary increases	4.00% - 7.25%
Payroll growth	4.00%
Retirement Age	Experience-based table of rates that is specific to the type of eligibility condition.
Mortality	RP-2000 mortality table (adjusted by 105% for both males and females).
Assumed Future Permanent Benefit Increases	Members retired on or before July 1, 2011: 2.25% of benefit. Members retired on or after August 1, 2011: 0.5% of benefit.

GASB STATEMENT NO. 43 SUPPLEMENTARY INFORMATION

The following information is presented concerning the post-retirement health insurance subsidy. The liabilities and computed contribution for the post-retirement health insurance subsidy were based on the same assumptions and actuarial cost methods as indicated for GASB Statement No. 25.

SCHEDULE OF FUNDING PROGRESS

Valuation Date June 30	Actuarial Value of Assets (a)	Actuarial Liability (AAL) (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Annual Covered Payroll (c)	UAAL as a % of Covered Payroll ((b-a)/c)
2006	\$ 0	\$45,454,331	\$45,454,331	0.00%	\$437,743,658	10.4%
2007	0	48,990,212	48,990,212	0.00	515,427,641	9.5%
2008	0	53,700,864	53,700,864	0.00	642,621,478	8.4%
2009	0	68,730,755	68,730,755	0.00	630,824,994	10.9%
2010	0	73,272,493	73,272,493	0.00	616,481,375	11.9%
2011	0	94,105,048	94,105,048	0.00	609,243,354	15.4%
2012	0	90,881,845	90,881,845	0.00	626,223,066	14.5%
2013	0	93,544,324	93,544,324	0.00	604,067,645	15.5%
2014	102,100,399	97,015,208	(5,085,191)	105.24	625,263,855	(0.8)%
2015	111,345,889	100,871,152	(\$10,474,737)	110.38	616,267,477	(1.7)%

ANNUAL REQUIRED CONTRIBUTION

Valuation Date June 30	Fiscal Year Ended June 30	Normal Cost (a)	Actuarial Accrued Liability (b)	Total (a+b)	Dollar Amount
2005	2007	0.59%	0.59%	1.18%	\$5,742,051
2006	2008	0.43%	0.41%	0.84%	5,398,020
2007	2009	0.51%	0.44%	0.95%	6,245,994
2008	2010	0.43%	0.41%	0.84%	5,178,444
2009	2011	0.61%	0.54%	1.15%	8,074,426
2010	2012	0.62%	0.60%	1.22%	8,371,142
2011	2013	0.39%	0.83%	1.22%	8,194,628
2012	2014	0.33%	0.77%	1.10%	7,594,520
2013	2015	0.34%	0.89%	1.23%	8,113,781
2014	2016	0.33%	(0.11)%	0.22%	1,487,828
2015	2017	0.31%	(0.11)%	0.20%	1,333,110

Fiscal Years prior to 2011 provided by the prior actuary.

Health Insurance Subsidy Payment Reported for FY 2015: \$3,487,004

Note: GASB Statement No. 45 Supplementary information is shown individually in the separate reports for each participating unit.

APPENDIX II

SUMMARY OF POPULATION DATA BY INDIVIDUAL EMPLOYERS

Arizona Corrections Officer Retirement Plan Annual Actuarial Valuation

Division Number	Employer Name	Number of Actives	Active Payroll	Number of Retirees	Annual Retiree Benefits	Number of Vested Inactive	Annual Vested Benefits
575	ADMINISTRATIVE OFFICE OF THE COURTS	2,130	\$ 110,362,697	491	\$ 18,529,122	337	\$ 5,045,905
520	APACHE COUNTY - Detention	23	695,661	4	78,196	9	20,121
506	CITY OF AVONDALE - Detention	8	480,078	1	11,584	4	33,666
562	CITY OF SOMERTON - Dispatchers	4	143,534	1	32,389	2	55,326
525	COCHISE COUNTY - Detention	59	2,110,883	27	463,343	24	214,255
530	COCONINO COUNTY - Detention	93	3,670,869	9	226,991	54	290,913
500	DEPARTMENT OF CORRECTIONS - Detention	8,027	326,597,870	2,821	68,140,780	970	15,390,962
501	DEPT OF JUVENILE CORRECTIONS - Detention	471	18,415,544	252	6,547,454	171	2,718,946
563	DEPARTMENT OF PUBLIC SAFETY - Dispatchers	39	2,035,189	10	353,816	7	280,627
564	DEPARTMENT OF PUBLIC SAFETY - Detention	2	96,721	-	-	2	24,070
503	GILA COUNTY - Detention	55	2,081,145	7	116,208	22	230,319
558	GILA COUNTY - Dispatchers	6	254,418	3	80,128	4	55,340
504	GRAHAM COUNTY - Detention	34	1,257,699	5	112,896	19	178,275
560	GRAHAM COUNTY - Dispatchers	5	183,228	-	-	4	63,177
505	MARICOPA COUNTY - Detention	2,076	100,248,585	462	13,328,390	287	3,236,202
535	MOHAVE COUNTY - Detention	122	3,991,615	15	258,504	53	250,943
545	NAVAJO COUNTY - Detention	45	1,493,854	10	186,699	28	163,577
515	PIMA COUNTY - Detention	465	20,055,492	182	5,077,667	102	1,185,755
502	PINAL COUNTY - Detention	168	8,438,863	26	770,276	54	1,256,128
555	PINAL COUNTY - Dispatchers	12	486,499	2	54,943	9	147,118
540	SANTA CRUZ COUNTY - Detention	30	945,419	4	105,711	20	144,153
557	TOWN OF MARANA - Dispatchers	8	430,892	-	-	3	9,488
556	TOWN OF ORO VALLEY - Dispatchers	5	272,189	4	109,459	3	24,031
559	TOWN OF WICKENBURG - Dispatchers	3	127,859	3	48,252	1	2,322
550	YAVAPAI COUNTY - Detention	158	6,401,405	40	775,745	81	591,639
561	YAVAPAI COUNTY - Dispatchers	5	203,000	1	39,324	1	6,208
510	YUMA COUNTY - Detention	131	4,786,269	30	769,382	47	1,000,846
TOTAL		14,184	\$ 616,267,477	4,410	\$ 116,217,259	2,318	\$ 32,620,312

APPENDIX III

SUMMARY OF PENSION LIABILITY AND ASSET INFORMATION BY INDIVIDUAL EMPLOYERS

Arizona Corrections Officer Retirement Plan Annual Actuarial Valuation

Division Number	Employer Name	Pension AAL	Pension Assets	Reserve for Future Pension Increases	Net Assets	Funded Percent	Unfunded Liability
575	ADMINISTRATIVE OFFICE OF THE COURTS	\$ 577,419,466	\$ 341,161,380	-	\$ 341,161,380	59.10%	\$ 236,258,086
520	APACHE COUNTY - Detention	1,863,669	1,331,652	-	1,331,652	71.50%	532,017
506	CITY OF AVONDALE - Detention	1,515,076	1,203,301	-	1,203,301	79.40%	311,775
562	CITY OF SOMERTON - Dispatchers	1,037,736	473,387	-	473,387	45.60%	564,349
525	COCHISE COUNTY - Detention	9,594,037	5,212,967	-	5,212,967	54.30%	4,381,070
530	COCONINO COUNTY - Detention	9,563,279	7,260,337	-	7,260,337	75.90%	2,302,942
500	DEPARTMENT OF CORRECTIONS - Detention	1,436,586,227	805,098,762	-	805,098,762	56.00%	631,487,465
501	DEPT OF JUVENILE CORRECTIONS - Detention	112,545,437	59,595,041	-	59,595,041	53.00%	52,950,396
563	DEPARTMENT OF PUBLIC SAFETY - Dispatchers	13,020,221	8,937,800	-	8,937,800	68.60%	4,082,421
564	DEPARTMENT OF PUBLIC SAFETY - Detention	39,486	35,750	-	35,750	90.50%	3,736
503	GILA COUNTY - Detention	4,650,206	4,118,537	-	4,118,537	88.60%	531,669
558	GILA COUNTY - Dispatchers	1,833,989	1,292,166	-	1,292,166	70.50%	541,823
504	GRAHAM COUNTY - Detention	2,401,147	1,944,938	-	1,944,938	81.00%	456,209
560	GRAHAM COUNTY - Dispatchers	448,910	532,284	-	532,284	118.60%	(83,374)
505	MARICOPA COUNTY - Detention	377,837,502	217,969,937	-	217,969,937	57.70%	159,867,565
535	MOHAVE COUNTY - Detention	6,383,484	7,084,829	-	7,084,829	111.00%	(701,345)
545	NAVAJO COUNTY - Detention	3,945,690	3,371,128	-	3,371,128	85.40%	574,562
515	PIMA COUNTY - Detention	102,337,321	50,211,220	-	50,211,220	49.10%	52,126,101
502	PINAL COUNTY - Detention	29,852,941	24,599,169	-	24,599,169	82.40%	5,253,772
555	PINAL COUNTY - Dispatchers	2,271,955	1,483,199	-	1,483,199	65.30%	788,756
540	SANTA CRUZ COUNTY - Detention	2,453,101	2,303,478	-	2,303,478	93.90%	149,623
557	TOWN OF MARANA - Dispatchers	1,435,344	997,481	-	997,481	69.50%	437,863
556	TOWN OF ORO VALLEY - Dispatchers	2,362,604	1,229,767	-	1,229,767	52.10%	1,132,837
559	TOWN OF WICKENBURG - Dispatchers	816,780	398,554	-	398,554	48.80%	418,226
550	YAVAPAI COUNTY - Detention	19,636,292	11,026,685	-	11,026,685	56.20%	8,609,607
561	YAVAPAI COUNTY - Dispatchers	986,049	653,684	-	653,684	66.30%	332,365
510	YUMA COUNTY - Detention	17,398,434	11,903,095	-	11,903,095	68.40%	5,495,339
TOTAL		\$ 2,740,236,383	\$ 1,571,430,528	-	\$ 1,571,430,528		\$ 1,168,805,855

APPENDIX IV

SUMMARY OF PENSION CONTRIBUTION
INFORMATION BY INDIVIDUAL EMPLOYERS

Arizona Corrections Officer Retirement Plan Annual Actuarial Valuation

Division Number	Employer Name	Pension ER NC%	Pension UAL Pmt %	Calculated ER Cont	Recommended ER Cont	Phase-In ER Cont	Statutory Minimum
575	ADMINISTRATIVE OFFICE OF THE COURTS	6.40%	13.68%	20.08%	20.08%	18.35%	N/A
520	APACHE COUNTY - Detention	6.13%	4.70%	10.83%	10.83%	10.33%	N/A
506	CITY OF AVONDALE - Detention	6.44%	4.09%	10.53%	10.53%	10.12%	N/A
562	CITY OF SOMERTON - Dispatchers	6.98%	25.29%	32.27%	32.27%	28.78%	N/A
525	COCHISE COUNTY - Detention	6.18%	13.35%	19.53%	19.53%	17.25%	N/A
530	COCONINO COUNTY - Detention	6.05%	3.99%	10.04%	10.04%	9.35%	N/A
500	DEPARTMENT OF CORRECTIONS - Detention	6.42%	12.32%	18.74%	18.74%	16.88%	N/A
501	DEPT OF JUVENILE CORRECTIONS - Detention	6.46%	18.40%	24.86%	24.86%	21.69%	N/A
563	DEPARTMENT OF PUBLIC SAFETY - Dispatchers	6.20%	12.91%	19.11%	19.11%	17.00%	N/A
564	DEPARTMENT OF PUBLIC SAFETY - Detention	5.69%	0.17%	5.86%	6.00%	6.00%	6.00%
503	GILA COUNTY - Detention	7.08%	1.61%	8.69%	8.69%	8.50%	N/A
558	GILA COUNTY - Dispatchers	6.25%	13.62%	19.87%	19.87%	17.25%	N/A
504	GRAHAM COUNTY - Detention	5.74%	2.32%	8.06%	8.06%	7.94%	N/A
560	GRAHAM COUNTY - Dispatchers	6.25%	-0.42%	5.83%	6.25%	6.11%	6.00%
505	MARICOPA COUNTY - Detention	6.43%	10.17%	16.60%	16.60%	15.23%	N/A
535	MOHAVE COUNTY - Detention	5.84%	-0.05%	5.79%	6.00%	6.00%	6.00%
545	NAVAJO COUNTY - Detention	5.96%	2.46%	8.42%	8.42%	8.13%	N/A
515	PIMA COUNTY - Detention	6.06%	16.52%	22.58%	22.58%	20.56%	N/A
502	PINAL COUNTY - Detention	6.92%	3.99%	10.91%	10.91%	10.31%	N/A
555	PINAL COUNTY - Dispatchers	6.05%	10.45%	16.50%	16.50%	14.79%	N/A
540	SANTA CRUZ COUNTY - Detention	6.20%	1.00%	7.20%	7.20%	7.10%	N/A
557	TOWN OF MARANA - Dispatchers	6.15%	6.51%	12.66%	12.66%	12.06%	N/A
556	TOWN OF ORO VALLEY - Dispatchers	6.10%	27.17%	33.27%	33.27%	27.79%	N/A
559	TOWN OF WICKENBURG - Dispatchers	7.45%	20.85%	28.30%	28.30%	24.02%	N/A
550	YAVAPAI COUNTY - Detention	6.31%	8.60%	14.91%	14.91%	13.83%	N/A
561	YAVAPAI COUNTY - Dispatchers	7.53%	10.57%	18.10%	18.10%	15.53%	N/A
510	YUMA COUNTY - Detention	6.16%	7.36%	13.52%	13.52%	12.08%	N/A
TOTAL		6.40%	12.11%	18.50%	18.51%	16.75%	

APPENDIX V

**SUMMARY OF HEALTH LIABILITY AND ASSET
INFORMATION BY INDIVIDUAL EMPLOYERS**

Arizona Corrections Officer Retirement Plan Annual Actuarial Valuation

Division Number	Employer Name	Health AAL	Health Assets	Funded Percent	Unfunded Liability
575	ADMINISTRATIVE OFFICE OF THE COURTS	\$ 17,048,294	\$ 7,763,891	45.50%	\$ 9,284,403
520	APACHE COUNTY - Detention	110,931	166,431	150.00%	(55,500)
506	CITY OF AVONDALE - Detention	53,519	28,247	52.80%	25,272
562	CITY OF SOMERTON - Dispatchers	26,709	16,743	62.70%	9,966
525	COCHISE COUNTY - Detention	273,366	627,308	229.50%	(353,942)
530	COCONINO COUNTY - Detention	402,809	444,438	110.30%	(41,629)
500	DEPARTMENT OF CORRECTIONS - Detention	60,882,411	71,995,878	118.30%	(11,113,467)
501	DEPT OF JUVENILE CORRECTIONS - Detention	4,227,749	6,059,810	143.30%	(1,832,061)
563	DEPARTMENT OF PUBLIC SAFETY - Dispatchers	501,643	153,125	30.50%	348,518
564	DEPARTMENT OF PUBLIC SAFETY - Detention	333	1,549	465.20%	(1,216)
503	GILA COUNTY - Detention	220,543	306,989	139.20%	(86,446)
558	GILA COUNTY - Dispatchers	38,213	81,404	213.00%	(43,191)
504	GRAHAM COUNTY - Detention	64,395	68,249	106.00%	(3,854)
560	GRAHAM COUNTY - Dispatchers	15,793	17,053	108.00%	(1,260)
505	MARICOPA COUNTY - Detention	11,296,234	15,289,434	135.30%	(3,993,200)
535	MOHAVE COUNTY - Detention	259,587	596,823	229.90%	(337,236)
545	NAVAJO COUNTY - Detention	129,078	329,954	255.60%	(200,876)
515	PIMA COUNTY - Detention	3,091,537	3,532,231	114.30%	(440,694)
502	PINAL COUNTY - Detention	973,888	1,282,347	131.70%	(308,459)
555	PINAL COUNTY - Dispatchers	68,230	140,366	205.70%	(72,136)
540	SANTA CRUZ COUNTY - Detention	116,565	213,138	182.80%	(96,573)
557	TOWN OF MARANA - Dispatchers	47,755	35,178	73.70%	12,577
556	TOWN OF ORO VALLEY - Dispatchers	48,723	85,050	174.60%	(36,327)
559	TOWN OF WICKENBURG - Dispatchers	14,269	36,179	253.50%	(21,910)
550	YAVAPAI COUNTY - Detention	565,727	1,068,117	188.80%	(502,390)
561	YAVAPAI COUNTY - Dispatchers	20,895	22,388	107.10%	(1,493)
510	YUMA COUNTY - Detention	371,956	983,569	264.40%	(611,613)
TOTAL		\$ 100,871,152	\$ 111,345,889		\$ (10,474,737)

APPENDIX VI

SUMMARY OF HEALTH CONTRIBUTION INFORMATION BY INDIVIDUAL EMPLOYERS

Arizona Corrections Officer Retirement Plan Annual Actuarial Valuation

Division Number	Employer Name	Health ER NC%	Health UAL Pmt %	Calculated ER Cont	Required ER Cont
575	ADMINISTRATIVE OFFICE OF THE COURTS	0.27%	0.53%	0.80%	0.80%
520	APACHE COUNTY - Detention	0.45%	-0.45%	0.00%	0.00%
506	CITY OF AVONDALE - Detention	0.23%	0.33%	0.56%	0.56%
562	CITY OF SOMERTON - Dispatchers	0.29%	0.44%	0.73%	0.73%
525	COCHISE COUNTY - Detention	0.35%	-0.35%	0.00%	0.00%
530	COCONINO COUNTY - Detention	0.30%	-0.07%	0.23%	0.23%
500	DEPARTMENT OF CORRECTIONS - Detention	0.33%	-0.22%	0.11%	0.11%
501	DEPT OF JUVENILE CORRECTIONS - Detention	0.36%	-0.36%	0.00%	0.00%
563	DEPARTMENT OF PUBLIC SAFETY - Dispatchers	0.20%	1.10%	1.30%	1.30%
564	DEPARTMENT OF PUBLIC SAFETY - Detention	0.21%	-0.09%	0.12%	0.12%
503	GILA COUNTY - Detention	0.46%	-0.28%	0.18%	0.18%
558	GILA COUNTY - Dispatchers	0.24%	-0.24%	0.00%	0.00%
504	GRAHAM COUNTY - Detention	0.31%	-0.02%	0.29%	0.29%
560	GRAHAM COUNTY - Dispatchers	0.27%	-0.05%	0.22%	0.22%
505	MARICOPA COUNTY - Detention	0.28%	-0.26%	0.02%	0.02%
535	MOHAVE COUNTY - Detention	0.35%	-0.35%	0.00%	0.00%
545	NAVAJO COUNTY - Detention	0.37%	-0.37%	0.00%	0.00%
515	PIMA COUNTY - Detention	0.27%	-0.15%	0.12%	0.12%
502	PINAL COUNTY - Detention	0.31%	-0.25%	0.06%	0.06%
555	PINAL COUNTY - Dispatchers	0.24%	-0.24%	0.00%	0.00%
540	SANTA CRUZ COUNTY - Detention	0.45%	-0.45%	0.00%	0.00%
557	TOWN OF MARANA - Dispatchers	0.20%	0.19%	0.39%	0.39%
556	TOWN OF ORO VALLEY - Dispatchers	0.20%	-0.20%	0.00%	0.00%
559	TOWN OF WICKENBURG - Dispatchers	0.40%	-0.40%	0.00%	0.00%
550	YAVAPAI COUNTY - Detention	0.32%	-0.32%	0.00%	0.00%
561	YAVAPAI COUNTY - Dispatchers	0.46%	-0.05%	0.41%	0.41%
510	YUMA COUNTY - Detention	0.33%	-0.33%	0.00%	0.00%
	TOTAL	0.31%	-0.11%	0.20%	0.20%

October 16, 2015

Mr. Jared A. Smout, Deputy Administrator
Arizona Corrections Officer Retirement Plan (CORP)
3010 E. Camelback Road, Suite 200
Phoenix, Arizona 85016

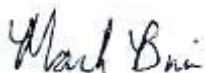
Re: Report of the June 30, 2015 Actuarial Valuation of CORP

Dear Mr. Smout:

Enclosed please find five copies of this report.

Any questions or comments you may develop will be welcome.

Sincerely,



Mark Buis, FSA, EA, FCA, MAAA

MB:dj
Enclosures