

**ARIZONA PUBLIC SAFETY PERSONNEL RETIREMENT  
SYSTEM CONSOLIDATED REPORT**

**JUNE 30, 2012**

October 12, 2012

The Board of Trustees  
Arizona Public Safety Personnel Retirement System  
Phoenix, Arizona

**Re: Arizona Public Safety Personnel Retirement System Actuarial Valuation as of  
June 30, 2012**

Ladies and Gentlemen:

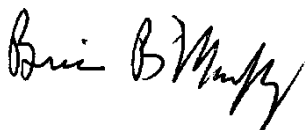
The results of the June 30, 2012 annual actuarial valuation of members covered by the Arizona Public Safety Personnel Retirement System (PSPRS) are presented in this report. The purpose of the valuation was to measure the System's funding progress, provide actuarial information in connection with applicable Governmental Accounting Standards Board Statements and to determine the employer contribution for the 2013-2014 fiscal year. This report should not be relied upon for any other purpose. This report may be distributed to parties other than the System only in its entirety and only with the permission of the Board.

The valuation was based upon information, furnished by the State Retirement System, concerning Retirement System benefits, financial transactions, and individual members, terminated members, retirees and beneficiaries. Data was checked for internal and year to year consistency, but was not otherwise audited by us. As a result, we are unable to assume responsibility for the accuracy or completeness of the data provided.

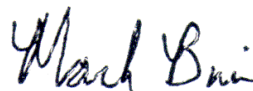
Future actuarial measurements may differ significantly from those presented in this report due to such factors as experience differing from that anticipated by actuarial assumptions, changes in plan provisions, actuarial assumptions/methods or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements.

To the best of our knowledge, this report is complete and accurate and the valuation was conducted in accordance with standards of practice prescribed by the Actuarial Standards Board and in compliance with the applicable state statutes. The undersigned are independent of the plan sponsor and are Members of the American Academy of Actuaries (MAAA) who meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein. It is our opinion that the actuarial assumptions used for the valuation produce results which are reasonable.

Respectfully submitted,



Brian B. Murphy, FSA, EA, MAAA



Mark Buis, FSA, EA, MAAA

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**EXECUTIVE SUMMARY/BOARD SUMMARY**

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**1. Required Employer Contributions to Support Retirement Benefits**

The computed employer contribution and funded status for the fiscal year beginning July 1, 2013 is shown below.

	<b>Contribution</b>	<b>Funded Status</b>
Averages	30.44%	58.6%

**2. Contribution Rate Comparison**

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

<b>Valuation Date</b>	<b>Contribution</b>	<b>Funded Status</b>
6/30/2011	27.18%	61.9%
6/30/2012	30.44%	58.6%

**3. Reasons for Change**

There are three general reasons why contribution rates change from one valuation to the next. The first is a change in the benefits or eligibility conditions of the plan. The second is a change in the valuation assumptions or methods used to predict future occurrences. The third is the difference during the year between the plan's actual experience and what the assumptions predicted.

The following benefit changes were reflected in the valuation:

- Member contributions are increased from 9.55% to 10.35% of pay for the fiscal year 2013-2014 with a maintenance of effort provision. The entire schedule is shown on page F-4.

## EXECUTIVE SUMMARY/BOARD SUMMARY

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The following method and assumption changes were reflected in the valuation:

- The recommendations of the assumption study completed in May 2012, including demographic assumption changes.
- The investment return assumption was decreased to 8.00% from 8.25%.
- For the June 30, 2013 valuation the Board adopted an investment return of 7.85% and wage inflation of 4.50%.

The contribution rate increased from 27.18% of payroll last year to 30.39% of payroll this year for the following reasons:

- Continued phase-in of asset losses from prior years.
- Cost-of-living increases granted for retirees.
- Changes in the actuarial assumptions.

#### 4. Plan Experience

Experience during the year ended June 30, 2012 was overall unfavorable. On a market value basis, the System's return for the year ended June 30, 2012 was -0.8%. 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 3.2%. The effects of the asset losses were partially offset by gains attributable to demographic experience. Detailed information related to System experience is shown on page B-2.

## EXECUTIVE SUMMARY/BOARD SUMMARY

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### 5. Looking Ahead

If the Market Value of Assets were used as the basis of our calculations (instead of the smoothed value), the employer contribution would have been approximately 35% of payroll (instead of 30.39% of payroll) and the funded status would have been about 49% (instead of 58.6%). If equity markets do not improve significantly, the June 30, 2013 valuation will likely show yet another increase in the employer contribution amount (absent any liability gains).

### 6. Conclusion

The continuing effect of prior losses was dampened by the 7-year smoothing period, and further offset by the effect of lower than expected pay increases. There remains \$977 million of unrecognized investment losses that will, in the absence of other gains, drive the contribution rate up over the next several years.

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.

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**SECTION A**  
INTRODUCTION

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## FUNDING OBJECTIVE

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The purpose of the annual actuarial valuation of the Arizona Public Safety Personnel Retirement System as of June 30, 2012 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, 2013. This information is contained in Section A.

This objective is stated in Article 4, Chapter 5, Title 38, Sections 843B and 848N of the Arizona Revised Statutes.

## CONTRIBUTION RATES

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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, 2013 are shown on page A-2.



**CONTRIBUTION REQUIREMENTS**

**Development of Employer Contributions for the Indicated Valuation Date**

Contribution for Fiscal Year	June 30,	
	2011 2013	2012 2014
<b>Pension</b>		
Normal cost requirement		
Service pensions	15.68%	17.28%
Disability pensions	2.15	1.73
Survivors of active members	1.02	0.59
Refunds of members' accumulated contributions	<u>1.03</u>	<u>1.09</u>
Total normal cost requirement	19.88%	20.69%
Employee contributions		
Total employee rate	9.55	10.35
Less maintenance of effort	1.90	2.70
Adjusted employee rate	<u>7.65%</u>	<u>7.65%</u>
Employer normal cost requirement	12.23%	13.04%
Amortization of unfunded liabilities	<u>13.47%</u>	<u>16.01%</u>
Total pension contribution requirement	25.70%	29.05%
<b>Health</b>		
Normal cost requirement	0.38%	0.33%
Amortization of unfunded liabilities	<u>1.10%</u>	<u>1.06%</u>
Total health contribution requirement	1.48%	1.39%
<b>Total contribution requirement</b>	<b>27.18%</b>	<b>30.44%</b>

Actuarial accrued liability, \$10,325,529,986, exceeded the funding value of assets, which was \$6,051,595,012. The resulting unfunded actuarial accrued liabilities (net of the maintenance of effort reserve of \$13,492,515) were amortized as a level percent of payroll over a closed period of 24 years and added to the employer normal cost. The 24 year period is a one year decrease from last year. The results shown above are prior to the application of the statutory minimum of 8% of payroll (5% of payroll if the actual employer contribution rate is less than 5% for the 2006/2007 fiscal Year).

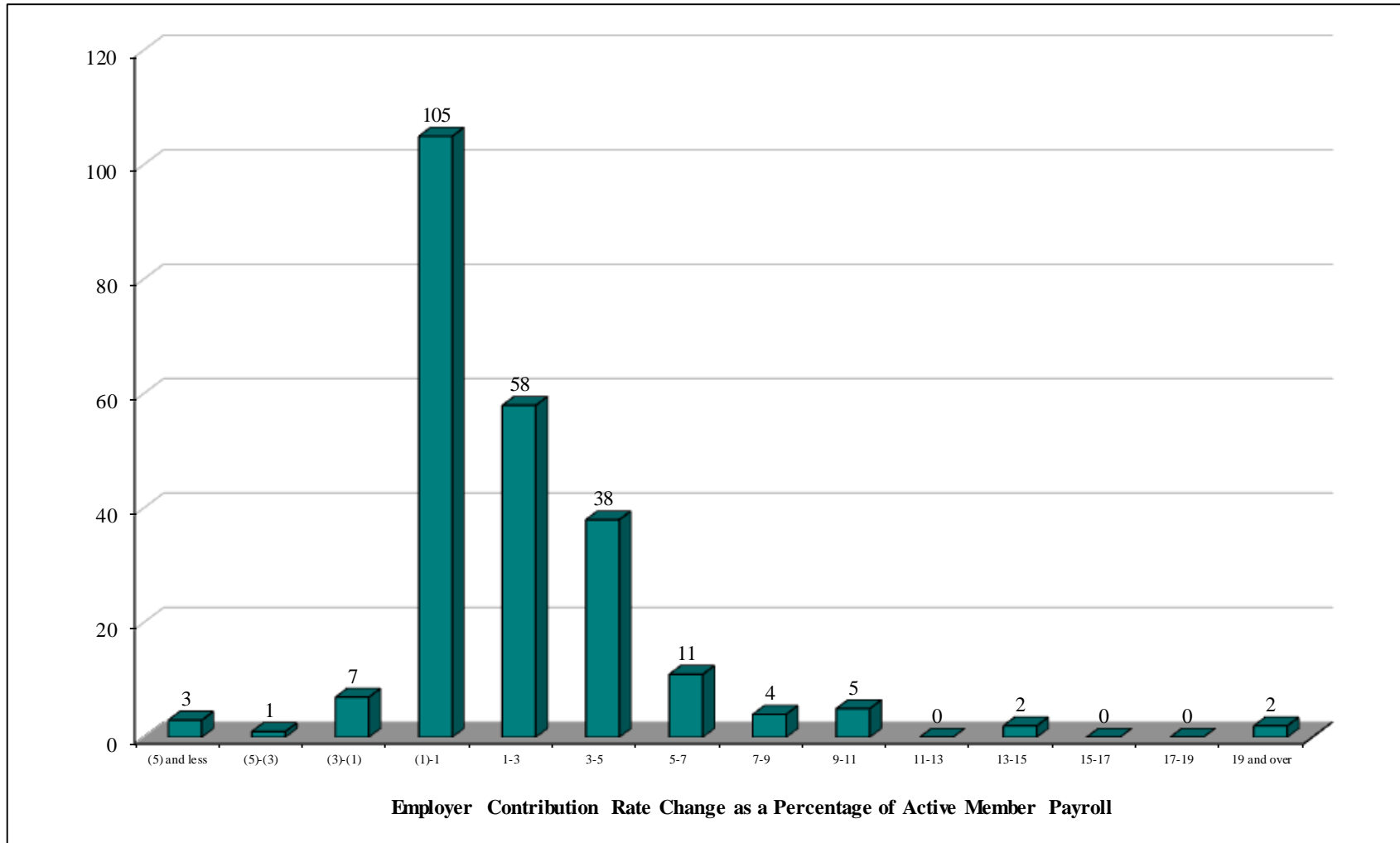
**HISTORICAL SUMMARY OF EMPLOYER RATES**

<b>Valuation Date</b>	<b>Fiscal Year</b>		<b>Unfunded Actuarial</b>	
<b>June 30</b>	<b>Ending June 30</b>	<b>Normal Cost</b>	<b>Accrued Liability</b>	<b>Total</b>
2003	2005	10.32%	(0.27)%	10.05%
2004	2006	10.29	2.51	12.80
2005	2007	10.71	6.38	17.09
2006	2008	10.08	6.44	16.52
2007	2009	12.33	9.38	21.71
2008	2010	11.80	8.97	20.77
2009	2011	12.08	8.81	20.89
2010	2012	12.17	10.51	22.68
2011	2013	12.61	14.57	27.18
<b>2012</b>	<b>2014</b>	<b>13.37</b>	<b>17.07</b>	<b>30.44</b>

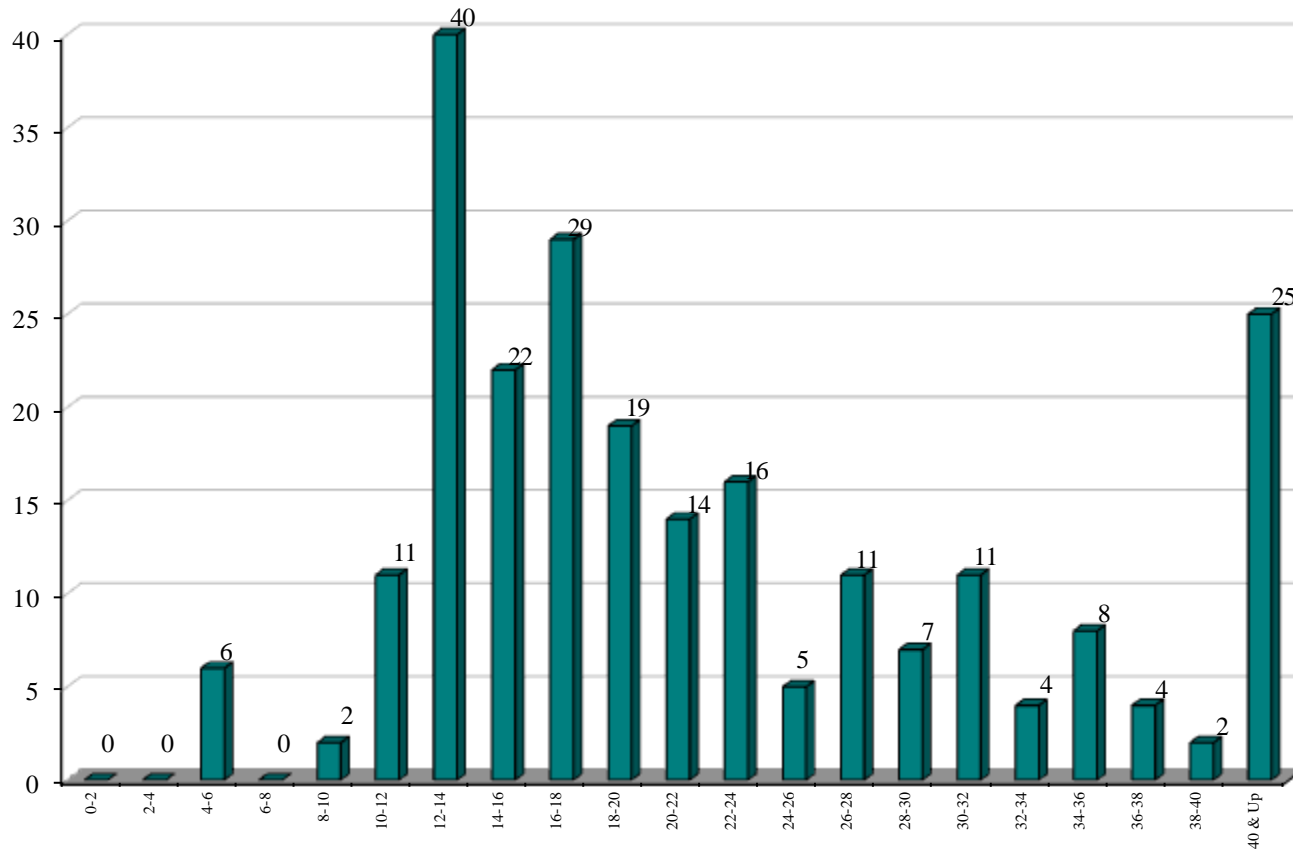
2005 results were revised pursuant to changes enacted by the 2006 Legislature and the PSPRS Board of Trustees.

Results prior to 2009 were calculated by the prior actuary.

**EMPLOYER CONTRIBUTION RATE CHANGES AT JUNE 30, 2012**  
**ALL EMPLOYERS**



**EMPLOYER CONTRIBUTION RATES - ALL EMPLOYERS AT JUNE 30, 2012**



**Employer Contribution Rate as a Percentage of Active Member Payroll**

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**SECTION B**  
FUNDING RESULTS

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**PRESENT VALUE OF FUTURE BENEFITS AND ACCRUED LIABILITY**

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	June 30,	
	2011	2012
A. Accrued Liability		
1. For retirees and beneficiaries	\$ 4,626,018,712	\$ 5,045,392,933
2. For DROP members	1,164,704,969	1,318,879,833
3. For vested terminated members	14,498,057	22,200,487
4. For present active members		
a. Value of expected future benefit payments	5,860,040,575	6,456,407,513
b. Value of future normal costs	2,300,001,436	2,517,350,780
c. Active member accrued liability: (a) - (b)	3,560,039,139	3,939,056,733
5. Total accrued liability	9,365,260,877	10,325,529,986
B. Present Assets (Funding Value)	5,795,944,673	6,051,595,012
C. Unfunded Accrued Liability: (A.5) - (B)	3,569,316,204	4,273,934,974
D. Stabilization Reserve	10,146,302	13,132,786
E. Net Unfunded Accrued Liability: (C) + (D)	\$ 3,579,462,506	\$ 4,287,067,760
F. Funding Ratio: (B) / (A.5)	61.9%	58.6%

**DERIVATION OF EXPERIENCE GAIN/(LOSS)**

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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.

**(Dollar amounts in \$'000s)**

	<b>June 30,</b>	
	<b>2011</b>	<b>2012</b>
(1) UAAL at start of year	\$2,900,518	\$3,569,316
(2) Normal cost from last valuation	267,461	278,249
(3) Actual contributions	406,045	437,210
(4) Interest accrual	240,654	287,911
(5) Expected UAAL before changes: (1) + (2) - (3) + (4)	3,002,588	3,698,266
(6) Changes from benefit increases	154,777	167,001
(7) Changes in actuarial methods and assumptions	381,347	347,081
(8) Change in reserve for future pension increases	(130,358)	(182,218)
(9) Expected UAAL after changes: (5) + (6) + (7) + (8)	3,408,354	4,030,130
(10) Actual UAAL at end of year	3,569,316	4,273,935
(11) Experience Gain/(Loss): (9) - (10)	\$ (160,962)	\$ (243,805)

**FY 2012 Gains and Losses by Source**

	<b>Gain/(Loss)</b>	<b>% of Liability</b>
Investment Return	\$(300,302)	-3.2%
Salary Increases	64,397	0.7%
Retirement	7,278	0.1%
Turnover	(4,412)	0.0%
Disability	12,509	0.1%
Death-in-Service	3,923	0.0%
Retiree Mortality	10,206	0.1%
Other	(37,404)	-0.4%
<b>Total</b>	<b>(243,805)</b>	<b>-2.6%</b>

**UNFUNDED ACTUARIAL ACCRUED LIABILITIES  
COMPARATIVE STATEMENT**

(Dollar amounts in \$'000s)

Valuation Date	(1) Actuarial Accrued Liabilities (AAL)	(2) Valuation Assets	(3) Unfunded AAL	(5) Funded Ratio (2)/(1)	(6) Financing Period	(7) Payroll	Liability Ratio	
							(8) Unfunded (3)/(7)	(9) Total (1)/(7)
2003	\$4,739,613	\$4,781,377	\$ 0	100.9%	20	\$ 881,285	0.0%	537.8%
2004	5,167,333	4,774,313	393,020	92.4	20	911,718	43.1	566.8
2005	5,951,937	4,886,963	1,064,974	82.1	20	974,863	109.2	610.5
2006	6,495,012	4,999,911	1,495,101	77.0	30	1,073,685	139.2	604.9
2007	7,268,291	4,829,521	2,438,770	66.4	29	1,228,037	198.6	591.9
2008	7,662,779	5,095,645	2,567,134	66.5	28	1,383,332	185.6	553.9
2009	7,989,451	5,445,497	2,543,954	68.2	27	1,415,643	179.7	564.4
2010	8,491,822	5,591,304	2,900,518	65.8	26	1,400,544	207.1	606.3
2011	9,365,261	5,795,945	3,569,316	61.9	25	1,325,350	269.3	706.6
<b>2012</b>	<b>10,325,530</b>	<b>6,051,595</b>	<b>4,273,935</b>	<b>58.6</b>	<b>24</b>	<b>1,349,252</b>	<b>316.8</b>	<b>765.3</b>

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.

2005 Results revised pursuant to changes in assumptions and methods enacted by the 2006 Legislature and the PSPRS Board of Trustees. Results prior to 2009 were calculated by the prior actuary.



**SHORT CONDITION TEST**

If the contributions to PSPRS 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:

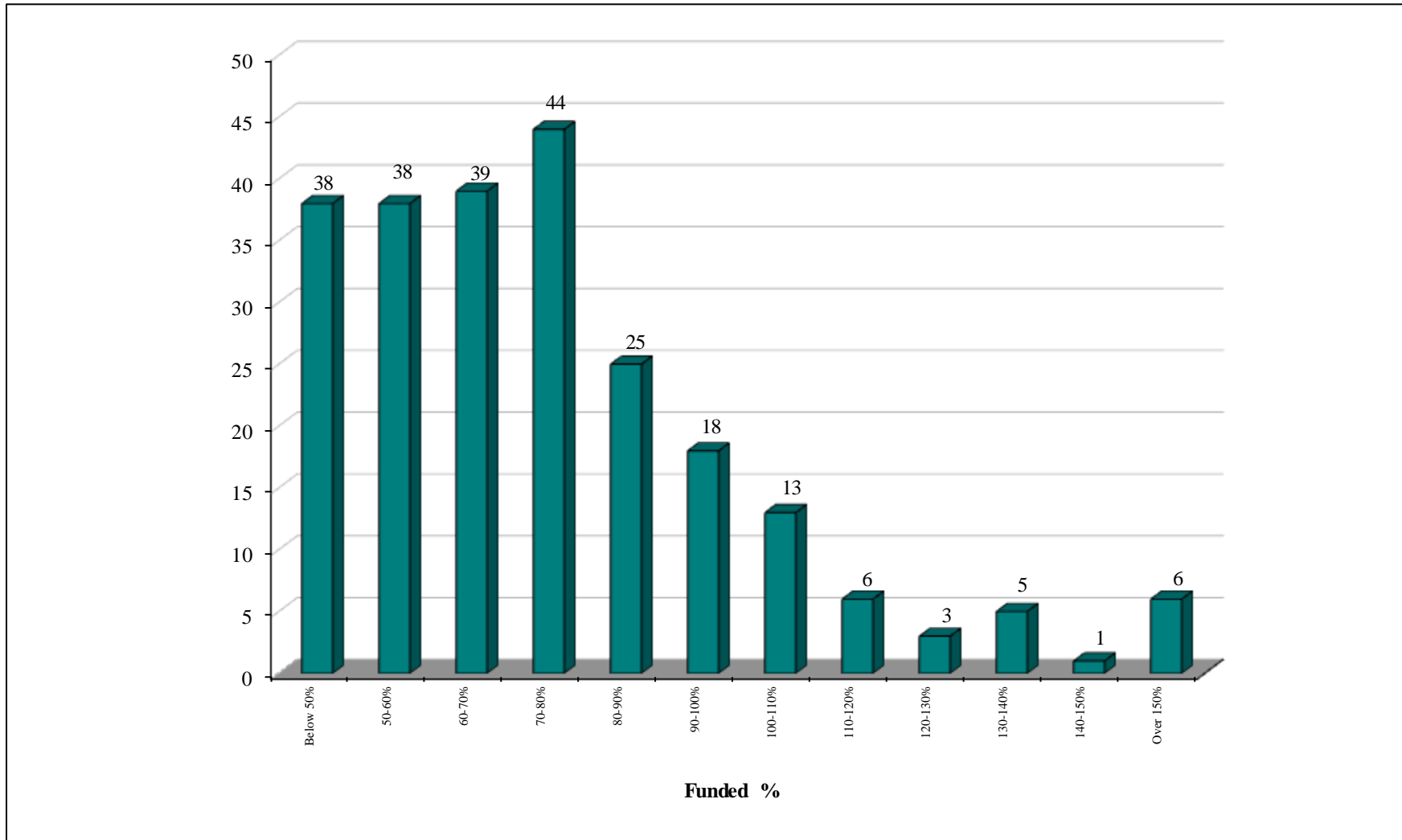
- 1) Member contributions on deposit;
- 2) The liabilities for future benefits to present retired lives; and
- 3) The liabilities for service already rendered by active and inactive members.

In a system 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 system.

**Short Condition Test  
(Including Health Insurance Subsidy)  
(in \$'000s)**

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	\$737,839	\$4,622,427	\$2,629,185	\$5,445,497	100%	100%	3.2%
2010	808,207	4,993,382	2,690,233	5,591,304	100	96	0.0
2011	819,996	5,790,724	2,754,541	5,795,945	100	86	0.0
<b>2012</b>	<b>897,597</b>	<b>6,364,273</b>	<b>3,063,659</b>	<b>6,051,595</b>	<b>100</b>	<b>81</b>	<b>0.0</b>

**FUNDED PERCENTS - ALL EMPLOYERS AT JUNE 30, 2012**



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**SECTION C**  
FUND ASSETS

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

<b>Year Ended June 30:</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
A. Funding Value Beginning of Year (Including Future Benefit Increases)	\$ 5,964,275,117						
B. Market Value End of Year	5,074,687,874						
C. Market Value Beginning of Year	5,216,642,852						
D. Non Investment Net Cash Flow	(100,293,628)						
E. Investment Income							
E1. Total: B-C-D	(41,661,350)						
E2. Amount for Immediate Recognition: (8.25%)	487,915,585						
E3. Amount for Phased in Recognition: E1-E2	(529,576,935)						
F. Phased in Recognition of Investment Income							
F1. Current Year: E3 / 7	(75,653,848)						
F2. First Prior Year	42,476,982	\$ (75,653,848)					
F3. Second Prior Year	9,922,277	42,476,982	\$ (75,653,848)				
F4. Third Prior Year	(192,391,612)	9,922,277	42,476,982	\$ (75,653,848)			
F5. Fourth Prior Year	(124,481,914)	(192,391,612)	9,922,277	42,476,982	\$ (75,653,848)		
F6. Fifth Prior Year	50,985,948	(124,481,914)	(192,391,612)	9,922,277	42,476,982	\$ (75,653,848)	
F7. Sixth Prior Year	(11,159,895)	50,985,946	(124,481,913)	(192,296,967)	9,922,277	42,476,985	\$ (75,653,847)
F8. Funding Value Corridor Adjustment	0						
F9. Total Recognized Investment Gain	(300,302,062)	(289,142,169)	(340,128,114)	(215,551,556)	(23,254,589)	(33,176,863)	(75,653,847)
G. Funding Value End of Year							
G1. Preliminary Funding Value End of Year: (A+D+E2+F1:F7)	6,051,595,012						
G2. Upper Corridor: (120% x B)	6,089,625,449						
G3. Lower Corridor: (80% x B)	4,173,314,282						
G4. End of Year: (G1 subject to max of G2 and min of G3)	6,051,595,012						
H. Difference Between Market Value & Funding Value: (B-G4)	(976,907,138)	(687,764,969)	(347,636,855)	(132,085,299)	(108,830,710)	(75,653,847)	0
I. Market Rate of Return	-0.8%						
J. Recognized Rate of Return	3.2%						
K. Ratio of Funding Value to Market Value	119.3%						

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**

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	2011	2012
<b>Market Value at the Beginning of Year:</b>	\$ 4,585,863,403	\$ 5,216,642,852
<b>Revenues:</b>		
a. Member contributions	\$ 120,198,465	\$ 126,380,896
b. Employer contributions	285,846,496	310,829,503
c. Interest income (net of expenses)	784,487,339	(46,551,714)
d. Net transfers	11,186	458,256
e. Total	\$ 1,190,543,486	\$ 391,116,941
<b>Disbursements:</b>		
a. Refunds of member contributions	11,976,416	12,376,688
b. Pension benefits	422,113,671	460,700,737
c. DROP benefits	112,273,060	46,481,278
d. Health subsidy	13,400,890	13,513,216
e. Total	559,764,037	533,071,919
<b>Reserve Increase:</b>		
Total revenues minus total disbursements	\$ 630,779,449	\$ (141,954,978)
<b>Market Value at the End of Year:</b>	\$ 5,216,642,852	\$ 5,074,687,874

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**SECTION D**  
CENSUS DATA

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**JUNE 30, 2012 VALUATION DATA SUMMARY**

For purposes of the June 30, 2012 valuation, information on 31,104 covered persons was furnished. These people may be briefly described as follows.

	No.	Averages			
		Age	Years of Service	Annual Pay or Retirement Allowance	
				2012	2011
Actives	18,542	39.1	10.6	\$72,767	\$71,110
Retirees & Beneficiaries	9,802	62.8		49,480	47,739
DROP	1,496	53.0		62,308	61,467
Inactive Vested	1,264	37.6			
	31,104				

**ACTIVE MEMBERS**

**Members in Active Service as of June 30, 2012  
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	276	1						277	\$ 13,326,932	\$48,112
25 - 29	1,401	765	1					2,167	124,066,551	57,253
30 - 34	1,090	1,952	405					3,447	221,952,989	64,390
35 - 39	583	1,382	1,599	264				3,828	273,147,428	71,355
40 - 44	381	809	1,444	1,298	178	2		4,112	323,108,418	78,577
45 - 49	161	345	593	838	601	144	1	2,683	223,080,375	83,146
50 - 54	69	161	276	376	284	248	33	1,447	123,441,513	85,309
55 - 59	23	58	78	136	80	57	20	452	36,857,942	81,544
60 - 64	7	17	25	28	16	10	4	107	8,583,954	80,224
65 and over	2	3	5	5	6	1		22	1,685,442	76,611
<b>Total</b>	<b>3,993</b>	<b>5,493</b>	<b>4,426</b>	<b>2,945</b>	<b>1,165</b>	<b>462</b>	<b>58</b>	<b>18,542</b>	<b>\$ 1,349,251,544</b>	<b>\$72,767</b>



**TERMINATED VESTED MEMBERS**

Age	Years of Service					Total Count
	0 - 4	5 - 9	10 - 14	15 - 19	20 & Up	
Under 30	254	13				267
30 - 39	450	91	23	2		566
40 - 44	127	30	32	4		193
45 - 49	68	23	16	8		115
50 - 54	40	7	11	7	2	67
55 - 59	12	9	14	1	2	38
60 - 69	6	3	7	1		17
70 and over	1					1
<b>Total</b>	<b>958</b>	<b>176</b>	<b>103</b>	<b>23</b>	<b>4</b>	<b>1,264</b>

**RETIREES AND BENEFICIARIES**

Attained Ages	Males		Females		Total	
	No.	Annual Benefits	No.	Annual Benefits	No.	Annual Benefits
Under 25	2	\$ 23,510	5	\$ 171,105	7	\$ 194,615
25-29	4	115,461	9	313,725	13	429,186
30-34	11	317,895	23	833,601	34	1,151,496
35-39	43	1,432,124	44	1,636,816	87	3,068,940
40-44	140	5,687,512	61	2,294,172	201	7,981,684
45-49	476	21,216,340	133	5,491,027	609	26,707,367
50-54	914	44,357,075	214	9,708,793	1,128	54,065,868
55-59	1,552	82,177,875	238	10,531,742	1,790	92,709,617
60-64	1,921	103,489,562	215	9,719,232	2,136	113,208,794
65-69	1,423	75,757,920	213	9,389,925	1,636	85,147,845
70-74	765	39,849,820	180	7,277,403	945	47,127,223
75-79	466	22,366,378	148	5,785,784	614	28,152,162
80-84	248	11,364,954	132	5,087,849	380	16,452,803
85-89	82	3,406,173	75	2,749,685	157	6,155,858
90-94	18	731,545	40	1,464,903	58	2,196,448
95-99	4	150,461	3	102,739	7	253,200
100 and Over	0	0	0	0	0	0
<b>Totals</b>	<b>8,069</b>	<b>\$412,444,605</b>	<b>1,733</b>	<b>\$72,558,501</b>	<b>9,802</b>	<b>\$485,003,106</b>

Pension Being Paid		Number	Annual Pensions	Average Pensions
Retired Members	Service Pensions	7,219	\$378,844,612	\$52,479
	Disability Pensions	1,344	55,975,335	41,648
Totals		8,563	434,819,947	50,779
Survivors of Members	Spouses	1,185	48,901,672	41,267
	Children with Guardians	54	1,281,487	23,731
Total		1,239	50,183,159	40,503
<b>Total Pension being Paid</b>		<b>9,802</b>	<b>\$485,003,106</b>	<b>\$49,480</b>
		<b>Average Age</b>	<b>Average Service</b>	<b>Average Age at Retirement</b>
Normal retired members		63.2	23.6	51.3
Disability retired members		56.7	14.3	43.8
Spouse beneficiaries		68.1	18.8	44.1

**DROP MEMBERS**

Attained Ages	Males		Females		Total	
	No.	Annual Benefits	No.	Annual Benefits	No.	Annual Benefits
Under 45	50	\$ 2,377,326	8	\$ 349,904	58	\$ 2,727,230
45-49	291	16,434,461	43	2,446,156	334	18,880,617
50-54	565	37,882,233	45	2,535,775	610	40,418,008
55-59	385	25,158,968	13	646,039	398	25,805,007
60-64	84	4,732,392	4	206,949	88	4,939,341
65 and Over	8	443,130	0	0	8	443,130
<b>Totals</b>	<b>1,383</b>	<b>\$87,028,510</b>	<b>113</b>	<b>\$6,184,823</b>	<b>1,496</b>	<b>\$93,213,333</b>

**PENSIONS BEING PAID  
HISTORICAL SCHEDULE**

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<b>Valuation Date June 30</b>	<b>No.</b>	<b>Annual Pensions</b>	<b>% Incr. in Annual Pensions</b>	<b>Average Pension</b>	<b>Present Value of Pensions</b>	
					<b>Total</b>	<b>Average</b>
2003	7,195	\$ 256,503,012	19.1	\$ 35,650	\$ 2,794,848,306	\$ 388,443
2004	7,663	286,346,220	11.6	37,367	2,995,380,537	390,889
2005	8,160	317,771,553	11.0	38,943	3,607,372,524	442,080
2006	8,720	353,932,939	11.4	40,589	4,028,016,095	461,928
2007	8,958	375,472,203	6.1	41,915	4,266,600,730	476,289
2008	9,422	404,386,274	7.7	42,919	4,404,386,241	467,458
2009	9,653	435,480,427	7.7	45,113	4,513,524,906	467,577
2010	10,047	472,656,961	8.5	47,045	4,863,374,108	484,062
2011	10,941	541,794,019	14.6	49,520	5,648,799,031	516,296
<b>2012</b>	<b>11,298</b>	<b>578,216,439</b>	<b>6.7</b>	<b>51,179</b>	<b>6,218,323,756</b>	<b>550,392</b>

Results prior to 2009 were calculated by the prior actuary.

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**SECTION E**  
METHODS AND ASSUMPTIONS

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## VALUATION METHODS

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**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 seven 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 24 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 5.0% annually for the purpose of computing the amortization payment (credit) as a level percent of payroll.

**VALUATION ASSUMPTIONS**

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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 8.00% 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 8.00% nominal rate translates to a net real return over wage growth of 3.00% 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 System benefits will be based.

Salary Increase Assumptions For An Individual Member									
Sample Ages	Merit & Seniority				Base (Economy)	Increase Next Year			
	Police Large	Police Small	Fire Large	Fire Small		Police Large	Police Small	Fire Large	Fire Small
20	4.00%	4.00%	4.00%	4.00%	5.00%	9.00%	9.00%	9.00%	9.00%
25	3.70%	3.16%	3.70%	3.70%	5.00%	8.70%	8.16%	8.70%	8.70%
30	2.60%	2.12%	2.90%	2.66%	5.00%	7.60%	7.12%	7.90%	7.66%
35	1.22%	1.17%	1.54%	1.32%	5.00%	6.22%	6.17%	6.54%	6.32%
40	0.52%	0.36%	0.48%	0.41%	5.00%	5.52%	5.36%	5.48%	5.41%
45	0.28%	0.10%	0.14%	0.12%	5.00%	5.28%	5.10%	5.14%	5.12%
50	0.14%	0.07%	0.04%	0.07%	5.00%	5.14%	5.07%	5.04%	5.07%
55	0.04%	0.02%	0.00%	0.02%	5.00%	5.04%	5.02%	5.00%	5.02%
60	0.00%	0.00%	0.00%	0.00%	5.00%	5.00%	5.00%	5.00%	5.00%
65	0.00%	0.00%	0.00%	0.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Ref	383	384	385	386	5.00%				

Active Member Payroll is assumed to grow at 5.0% 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% to 4.0% 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 System was the RP 2000 Mortality table projected to 2015 using projection scale AA (adjusted by 105% for males and females). This assumption was first used for the June 30, 2012 valuation of the System and include margin for future improvements in mortality. Sample rates of mortality and years of life expectancy are shown below:

Sample Attained Ages	Probability of Dying Next Year		Future Life Expectancy (years)	
	Men	Women	Men	Women
50	0.16%	0.13%	31.88	33.93
55	0.27	0.24	27.19	29.20
60	0.53	0.47	22.67	24.66
65	1.03	0.90	18.43	20.39
70	1.77	1.55	14.56	16.49
75	3.06	2.49	11.04	12.95
80	5.54	4.13	8.00	9.80
Ref:	397 x 1.05 0 year set forward	398 x 1.05 0 year set forward		

This assumption is used to measure the probabilities of each benefit payment being made after retirement.

*The disabled mortality table* used to evaluate death after retirement in this valuation of the System was the RP 2000 Mortality table projected to 2015 using projection scale AA set forward 10 years for both males and females. This assumption was first used for the June 30, 2012 valuation of the System. Sample rates of mortality and years of life expectancy are shown below:

Sample Attained Ages	Probability of Dying Next Year		Future Life Expectancy (years)	
	Men	Women	Men	Women
50	0.53%	0.47%	23.05	25.08
55	1.03	0.90	18.79	20.80
60	1.77	1.55	14.89	16.86
65	3.06	2.49	11.34	13.29
70	5.54	4.13	8.25	10.09
75	9.97	7.08	5.81	7.35
80	17.27	12.59	4.02	5.30
Ref:	397 x 1.00 10 year set forward	398 x 1.00 10 year set forward		



**VALUATION ASSUMPTIONS**

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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 System.

Sample Attained Ages	Probability of Dying Next Year	
	Men	Women
50	0.16%	0.13%
55	0.27	0.24
60	0.53	0.47
65	1.03	0.90
Ref:	397 x 0.60 0 year set back	398 x 0.60 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. This assumption was first used for the June 30, 2012 valuation of the System.

**Retirement/DROP Rates:** Age-related rates for employees who were hired before January 1, 2012 are shown below:

Age at Retirement	Rates			
	Police Large	Police Small	Fire Large	Fire Small
62	75%	75%	75%	75%
63	60%	60%	60%	60%
64	60%	60%	60%	60%
65	60%	60%	60%	60%
66	60%	60%	60%	60%
67	60%	60%	60%	60%
68	60%	60%	60%	60%
69	60%	60%	60%	60%
70	100%	100%	100%	100%
Ref.	2145	2145	2145	2145

These retirement rates are applicable to employees attaining age 62 before attaining 20 years of service.

**VALUATION ASSUMPTIONS**

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Service-related rates for employees who were hired before January 1, 2012 are shown below:

Service at Retirement	Rates			
	Police Large	Police Small	Fire Large	Fire Small
20	25%	37%	14%	20%
21	17%	33%	12%	20%
22	17%	20%	7%	10%
23	10%	13%	7%	10%
24	10%	10%	7%	8%
25	40%	35%	27%	25%
26	40%	35%	30%	25%
27	35%	30%	25%	25%
28	32%	30%	37%	25%
29	32%	30%	37%	25%
30	38%	30%	37%	35%
31	42%	30%	40%	35%
32	75%	75%	50%	35%
33	75%	75%	50%	35%
34	100%	100%	100%	100%
Ref.	2146	2147	2148	2149

These retirement rates are applicable to employees attaining 20 years of service before attaining age 62.

Age-related rates for employees who were hired after January 1, 2012 are shown below:

Age at Retirement	Rates			
	Police Large	Police Small	Fire Large	Fire Small
53	10%	15%	10%	10%
54	10%	10%	10%	10%
55	45%	40%	30%	20%
56	45%	40%	45%	30%
57	45%	30%	30%	30%
58	45%	30%	45%	30%
59	45%	30%	45%	30%
60	50%	30%	45%	45%
61	50%	30%	50%	45%
62	80%	65%	50%	45%
63	80%	65%	50%	45%
64	100%	100%	100%	100%
Ref.	1737	1738	1739	1740

## VALUATION ASSUMPTIONS

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*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 System.

Sample Ages	Service Index	% of Active Members Separating Within Next Year			
		Police Large	Police Small	Fire Large	Fire Small
All	1	16.00%	15.00%	8.50%	7.50%
	2	7.00%	10.00%	2.50%	6.00%
	3	4.00%	9.00%	1.00%	5.00%
	4	3.00%	7.00%	1.00%	5.00%
	5	2.50%	6.00%	1.00%	5.00%
	10	2.00%	5.30%	1.00%	3.00%
	15	0.60%	1.80%	0.10%	1.00%
	20	0.50%	1.80%	0.10%	1.00%
Ref.		757	603	758	605

*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 System.

Sample Ages	% of Active Members Becoming Disabled Within Next Year			
	Police Large	Police Small	Fire Large	Fire Small
20	0.08%	0.12%	0.02%	0.03%
25	0.08%	0.12%	0.02%	0.03%
30	0.17%	0.23%	0.04%	0.03%
35	0.22%	0.28%	0.09%	0.07%
40	0.36%	0.46%	0.16%	0.16%
45	0.51%	0.63%	0.16%	0.44%
50	0.78%	1.60%	0.40%	0.60%
55	1.02%	1.60%	0.93%	1.04%
Ref	588	589	590	591
	80%	80%	80%	80%

**SUMMARY OF ASSUMPTIONS USED  
JUNE 30, 2012**

**MISCELLANEOUS AND TECHNICAL ASSUMPTIONS**

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<b>Marriage Assumption:</b>	85% 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.
<b>Pay Increase Timing:</b>	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.
<b>Decrement Timing:</b>	Decrements of all types are assumed to occur mid-year.
<b>Eligibility Testing:</b>	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.
<b>Decrement Relativity:</b>	Decrement rates are used directly from the experience study, without adjustment for multiple decrement table effects.
<b>Decrement Operation:</b>	Disability and turnover decrements do not operate during retirement eligibility.
<b>Service Credit Accruals:</b>	It is assumed that members accrue one year of service credit per year.
<b>Incidence of Contributions:</b>	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.
<b>Normal Form of Benefit:</b>	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. 85% of members are assumed to be married at time of retirement.
<b>Benefit Service:</b>	Exact fractional service is used to determine the amount of benefit payable.
<b>Health Care Utilization:</b>	75% of future retirees are expected to utilize retiree health care. 85% of those are assumed to be married.
<b>Future Cost of Living Increases:</b>	Future cost of living increases are not reflected in the liabilities. The 2012 Experience Study recommended reducing the expected rate of return by approximately 0.5% to account for this contingency.

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**SECTION F**  
PLAN PROVISIONS

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

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**Membership:** Persons who are employed in an eligible group, prior to attaining age 50 years, for at least 40 hours a week for more than six months per year.

**Average Monthly Compensation:** One-thirty-sixth of total compensation paid to member during the three years, out of the last 20 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:** First day of month following completion of 20 years of service or following 62<sup>nd</sup> birthday and completion of 15 years of service.

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

- **For retirement with 25 or more years of credited service,** 50% of average monthly compensation for the first 20 years of credited service, plus 2-1/2% of average monthly compensation for each year of credited service above 20 years.
- **For retirement with 20 years of credited service but less than 25 years of credited service,** 50% of average monthly compensation for the first 20 years of credited service, plus 2% of average monthly compensation for each year of credited service between 20 and 25 years.
- **For retirement with less than 20 years of credited service,** the percent of average monthly compensation is reduced at a rate of 4% for each year less than 20 years.

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

**Vested Termination (deferred retirement):** Termination of covered position employment with 10 or more years of credited service. Pension is equal to twice the amount of pension based on 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

**Ordinary Disability Retirement (not duty-related):** Physical condition which totally and permanently prevents performance of a reasonable range of duties or a mental condition which totally and permanently prevents any substantial gainful employment. The amount of pension is a percentage of normal pension, as follows:

<u>Credited Service</u>	<u>Additional Monies (% of Contributions)</u>
Less than 7 years	25%
7-13 years	50%
14-19 years	75%

**Accidental Disability Retirement (duty-related):** Total and presumably permanent disability, incurred in performance of duty, preventing performance of a reasonable range of duties within the employee’s job classification. No credited service requirement. Pension is computed in the same manner as normal pension based on credited service and average monthly compensation at time of termination of employment. Pension is 50% of average monthly compensation, or normal pension amount, whichever is greater.

**Offset of Ordinary Disability Retirement before the member’s normal retirement date:** The pension is reduced if the retiree engages in any employment and the income from this employment is greater than the retiree’s pension. The reduction is equal to the difference between the retiree’s income from employment and the retiree’s pension.

**Temporary Disability:** Termination of employment prior to normal retirement eligibility by reason of temporary disability. Pension is 1/12 of 50% of compensation during the year preceding the date disability was incurred. Payments terminate after 12 months of prior recovery.

**Catastrophic Disability:** Pension is 90% of average monthly compensation. After 60 months, the pension is the greater of 62.5% of average monthly compensation or the member’s accrued normal pension.

**Survivor Pension:** Death while a member is employed by an employer, or death after retirement. No credited service requirement.

**Spouse Pension:** 80% of pension deceased active member would have been paid for accidental disability retirement or, in the case of retired member, 80% of the retired member’s pension. Requires two years of marriage. Terminates upon death. For member killed in line of duty, 100% of average compensation, reduced by child’s pension.

**Child’s Pension:** 20% of the pension each month based on the calculation for an accidental disability retirement. Payable to a dependent child under age 18 (age 23 if a full-time student).

**Guardian’s Pension:** Same amount as spouse’s pension. Payable only during periods no spouse is being paid and there is at least one child under age 18 (age 23 if a full time student). 80% of the member’s pension and the Child’s Pension will be paid to the guardian.

**Other Termination of Employment:** Member is paid his/her accumulated contributions.

**Post-Retirement Adjustments:** Effective July 1 of each year, each retired member or survivor of a retired member may be entitled to a permanent benefit increase in his base benefit. The maximum amount of the increase is four percent (4%) of the average normal PSPRS benefit being received on the preceding June 30 and is contingent upon sufficient excess investment earnings for the fund. To be eligible for the increase the member or survivor must be age 55 or older on July 1 of the current year and began receiving benefits on or before July 31 of the previous year. A member or survivor is also eligible if he began receiving benefits on or before July 31 of the two previous years regardless of age.

Prior to July 1, 2013 a COLA reserve is maintained and used to pay for the post-retirement adjustment. The investment return on the COLA 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 COLA 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 COLA reserve. A post-retirement adjustment is paid as long as there is a positive balance in the COLA reserve.

**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

**Deferred Retirement Option Plan (DROP):** A member with 20 or more years of credited service under the System may enter into the DROP program with his employer. Under the DROP program, the member must voluntarily and irrevocably elect to enter into the program with his employer for a period of up to 60 months. During the DROP period, the member remains in the employ of the employer as a full-time paid firefighter or full-time paid certified Peace officer but no member or employer contributions are made to the System, therefore no additional years of credited service are accrued on the member’s behalf. The member’s monthly pension is calculated based upon the years of credited service and average monthly compensation at the beginning of the DROP period. This monthly pension amount is credited to a DROP participation account with interest at the rate of 8.5% annually, but credited monthly to the account. The interest rate credited to the DROP account is 8.25% for the fiscal year beginning July 1, 2010, 8.0% for the fiscal year beginning July 1, 2011 and 7.85% for the fiscal year beginning July 1, 2012.



At the end of the DROP period or prior to that time if the member terminates employment, the monies in the DROP participation account will be either paid to the member in a lump-sum amount or paid in a lump-sum distribution to an eligible retirement plan or individual retirement account. The member will then begin receiving the monthly pension amount directly from the System in the same amount as was being credited to the DROP participation account.

**Reverse DROP:** Expired effective July 1, 2010.

**Member Contributions:** Members contribute 7.65% of compensation.

**Employer Contributions:** Percent of payroll normal cost plus 30 year (25 years remaining as of June 30, 2011) amortization of unfunded actuarial accrued liability (20 year amortization for credit). The statutory minimum is 8% of payroll (5% of payroll if the actual employer contribution rate is less than 5% for the 2006/2007 fiscal year).

### **Changes in Plan Provisions for Existing Members and New Hires effective January 1, 2012**

#### ***Existing Members***

- Member contribution rates are shown in the schedule below. Additional member contributions DO NOT reduce the employer contribution, this means there is a “maintenance of effort” provision
  1. FY 2010-2011 – 7.65%
  2. FY 2011-2012 – 8.65%
  3. FY 2012-2013 – 9.55%
  4. FY 2013-2014 – 10.35%
  5. FY 2014-2015 – 11.05%
  6. FY 2015-2016 and after: 11.65% or a 33.3%/66.7% split between the employee and the employer, whichever is lower; minimum employee contribution rate is 7.65%.
- Employer will contribute to System when members retire and return to work.
- DROP
  1. Members who have at least 20 years of service on or after January 1, 2012 – no change in the DROP
  2. Members with less than 20 years of service on or after January 1, 2012
    1. Can still elect DROP
    2. Interest credited on DROP account is the average return on the actuarial value of assets, with a minimum of 2% and a maximum equal to the actuarial assumed earnings rate
    3. Members in the DROP contributed to the Retirement System; contributions are not refundable

#### ***New Hires on or after January 1, 2012***

**Average Monthly Compensation:** One- sixtieth of total compensation paid to member during the five years, out of the last 20 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:** First day of month following the attainment of age 52.5 and completion of 25 years of service.

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

- **For retirement with 25 years of credited service**, 62.5% of average monthly compensation.
- **For retirement with less than 25 years of credited service**, the monthly benefit is reduced at a rate of 4% for each year less than 25 years of service.
- **For retirement with more than 25 years of credited service**, the monthly benefit is increased by 2.5% of the average monthly compensation multiplied by the numbers of years greater than 25 years.

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

- If ceases 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
- Member contribution rates are shown in the schedule below. Additional member contributions DO NOT reduce the employer contribution, this means there is a “maintenance of effort” provision
  1. FY 2011-2012 – 8.65%
  2. FY 2012-2013 – 9.55%
  3. FY 2013-2014 – 10.35%
  4. FY 2014-2015 – 11.05%
  5. FY 2015-2016 and after: 11.65% or a 33.3%/66.7% split between the employee and the employer, whichever is lower; minimum employee contribution rate is 7.65%
- Employer will contribute to System when members retire and return to work
- No DROP

***Existing Members and New Hires***

- COLA provision – effective July 1, 2013
  - Effective May 31, 2011 no more excess investment earnings will be transferred to the current COLA reserve. Any remaining COLA reserve will be used to pay future COLA increases until the COLA reserve is depleted
  - A COLA is only paid in a year when the return on the market value of assets exceeds 10.5% and the plan is at least 60% funded. 100% of the excess earnings is used to determine whether a COLA can be paid and the size of the COLA for that year.

- No COLA reserve accumulates. The present value of that year's COLA 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 COLA, 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
- The amount of the COLA to be paid is determined as follows:
  - Funded ratio is 60-64%, COLA is 2%
  - Funded ratio is 65-69%, COLA is 2.5%
  - Funded ratio is 70-74%, COLA is 3%
  - Funded ratio is 75-79%, COLA is 3.5%
  - Funded ratio is 80% or more, COLA is 4%

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**SECTION G**

**GLOSSARY**

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<b><i>Actuarial Accrued Liability</i></b>	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.”
<b><i>Accrued Service</i></b>	The service credited under the plan which was rendered before the date of the actuarial valuation.
<b><i>Actuarial Assumptions</i></b>	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.
<b><i>Actuarial Cost Method</i></b>	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.”
<b><i>Actuarial Equivalent</i></b>	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.
<b><i>Actuarial Present Value</i></b>	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.
<b><i>Amortization</i></b>	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.
<b><i>Experience Gain/(Loss)</i></b>	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.
<b><i>Normal Cost</i></b>	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.

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

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## **APPENDIX I**

### **ACCOUNTING DISCLOSURES**

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**This information is presented in draft form for review by the System's auditor. Please let us know if there are any items that the auditor changes so that we may maintain consistency with the System's financial statements.**

**GASB STATEMENT NO. 25 SUPPLEMENTARY INFORMATION**

**SCHEDULE OF FUNDING PROGRESS  
(EXCLUDING HEALTH INSURANCE SUBSIDY BEGINNING JUNE 30, 2008)**

**SCHEDULE OF FUNDING PROGRESS**

<b>Year Ended June 30</b>	<b>Actuarial Value of Assets (a)</b>	<b>Actuarial Accrued Liability (AAL) (b)</b>	<b>Unfunded AAL (UAAL) (b)-(a)</b>	<b>Funded Ratio (a)/(b)</b>	<b>Covered Payroll (c)</b>	<b>UAAL as a Percent of Covered Payroll [(b)-(a)]/(c)</b>
2003	\$ 4,781,376,659	\$ 4,739,612,765	\$ (41,763,894)	100.9 %	\$ 881,284,717	0.0 %
2004	4,774,312,978	5,167,332,630	393,019,652	92.4 %	911,718,122	43.1 %
2005	4,886,962,635	5,951,937,046	1,064,974,411	82.1 %	974,862,717	109.2 %
2006	4,999,911,405	6,495,012,333	1,495,100,928	77.0 %	1,073,685,222	139.2 %
2007	4,829,521,186	7,268,291,485	2,438,770,299	66.4 %	1,228,037,467	198.6 %
2008	5,095,645,042	7,405,397,175	2,309,752,133	68.8 %	1,383,332,020	167.0 %
2009	5,445,497,208	7,778,394,070	2,332,896,862	70.0 %	1,415,642,509	164.8 %
2010	5,591,303,990	8,255,185,021	2,663,881,031	67.7 %	1,400,543,761	190.2 %
2011	5,795,944,673	9,094,447,076	3,298,502,403	63.7 %	1,325,349,817	248.9 %
<b>2012</b>	<b>6,051,595,012</b>	<b>10,054,752,250</b>	<b>4,003,157,238</b>	<b>60.2 %</b>	<b>1,349,251,544</b>	<b>296.7 %</b>

Results prior to 2009 were calculated by the prior actuary.



**GASB STATEMENT NO. 25 SUPPLEMENTARY INFORMATION**

**SCHEDULE OF EMPLOYER CONTRIBUTIONS**

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<b>Fiscal Year Ended June 30</b>	<b>Annual Required Contribution</b>
2001	\$ 51,391,526
2002	51,983,407
2003	50,800,669
2004	79,000,130
2005	104,497,150
2006	127,218,686
2007	177,587,507
2008	233,556,049
2009	328,436,309
2010	300,707,126
2011	308,826,519 (est.)
2012	331,409,431 (est.)
2013	375,527,931 (est.)
2014	432,133,225 (est.)

Fiscal Years prior to 2011 provided by the prior actuary.

Beginning with the 2011 fiscal year, this schedule shows the estimated annual required contribution (calculated based on recommended contribution rate and the projected payroll for the fiscal year). Actual amounts reported in the employer's financial statements may be different, due to differences between the projected payroll and the actual payroll during the fiscal year.

**GASB STATEMENT NO. 25 SUPPLEMENTARY INFORMATION**

**SUMMARY OF ACTUARIAL METHODS AND ASSUMPTIONS**

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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, 2012
Actuarial cost method	Entry Age Normal
Amortization method	Level percent-of-pay closed
Remaining amortization period	24 years
Asset valuation method	7-year smoothed market 80%/120% market
Actuarial assumptions:	
Investment rate of return	8.00%
Projected salary increases	5.0% - 9.0%
Payroll growth	5.0%
Cost-of-living adjustments	None

**GASB STATEMENT NO. 45 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.

As of the June 30, 2012 valuation, an 8.00% interest rate assumption was used. It is our understanding that currently assets are not segregated to fund these liabilities. As a result, according to GASB Statement No. 45, these benefits may not be considered to be pre-funded. In that case the 8.00% interest rate assumption may not be appropriate. This issue should be discussed with the auditors and with legal counsel.

**SCHEDULE OF FUNDING PROGRESS**

Valuation Date	Actuarial Value of Assets	Actuarial Accrued Liability (AAL)	Unfunded AAL (UAAL)	Funded Ratio	Annual Covered Payroll	UAAL as a % of Covered Payroll
June 30	(a)	(b)	(b-a)	(a/b)	(c)	((b-a)/c)
2006	\$0	\$232,878,379	\$232,878,379	0.00%	\$1,073,685,222	21.69%
2007	0	256,905,578	256,905,578	0.00	1,228,037,467	20.92%
2008	0	257,381,466	257,381,466	0.00	1,383,332,020	18.61%
2009	0	211,056,746	211,056,746	0.00	1,415,642,509	14.91%
2010	0	236,637,370	236,637,370	0.00	1,400,543,761	16.90%
2011	0	270,813,801	270,813,801	0.00	1,325,349,817	20.43%
<b>2012</b>	<b>0</b>	<b>270,777,736</b>	<b>270,777,736</b>	<b>0.00</b>	<b>1,349,251,544</b>	<b>20.07%</b>

**ANNUAL REQUIRED CONTRIBUTION**

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<b>Valuation Date June 30</b>	<b>Fiscal Year Ended June 30</b>	<b>Normal Cost (a)</b>	<b>Actuarial Accrued Liability (b)</b>	<b>Total (a+b)</b>	<b>Dollar Amount</b>
2005	2007	0.53%	1.17%	1.70%	\$21,797,745
2006	2008	0.51%	1.00%	1.51%	20,888,314
2007	2009	0.58%	0.98%	1.56%	22,084,023
2008	2010	0.51%	0.89%	1.40%	19,607,613
2009	2011	0.57%	0.72%	1.29%	20,325,827
2010	2012	0.57%	0.85%	1.42%	22,135,531
2011	2013	0.38%	1.10%	1.48%	21,625,733
<b>2012</b>	<b>2014</b>	<b>0.33%</b>	<b>1.06%</b>	<b>1.39%</b>	<b>20,676,943</b>

Fiscal Years prior to 2011 provided by the prior actuary.

**Health Insurance Subsidy Payment Reported for FY 2012: \$13,513,216**

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

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## **APPENDIX II**

### SUMMARY OF POPULATION DATA BY INDIVIDUAL EMPLOYERS

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# Arizona Public Safety Personnel Retirement System Annual Actuarial Valuation

Division Number	Employer Name	Number of Actives	Active Payroll	Number of Retirees	Annual Retiree Benefits	Number of DROP	Annual DROP Benefits	Number of Vested Inactive	Annual Vested Benefits
1	BISBEE FIRE DEPT.	18	\$ 826,905	21	\$ 755,506	1	\$ 33,743	6	\$ 152,397
2	CASA GRANDE FIRE DEPT.	57	4,559,461	17	843,318	-	-	1	7,687
3	CASA GRANDE POLICE DEPT.	71	5,196,630	39	1,681,784	5	310,560	2	5,023
4	CHANDLER FIRE DEPT.	192	15,497,570	45	2,426,216	12	958,760	1	608
5	CHANDLER POLICE DEPT.	285	24,439,914	81	4,082,398	31	1,956,870	9	243,924
6	CLIFTON FIRE DEPT.	-	-	1	27,665	-	-	-	-
7	DEPT. OF PUBLIC SAFETY	934	63,792,633	1,158	55,708,095	136	7,961,628	34	537,869
8	DOUGLAS FIRE DEPT.	23	1,292,729	22	847,449	1	36,540	3	9,674
9	DOUGLAS POLICE DEPT.	29	1,939,472	26	979,058	3	97,882	3	57,325
10	FLAGSTAFF FIRE DEPT.	70	4,546,952	76	3,429,594	10	571,298	1	1,243
11	FLAGSTAFF POLICE DEPT.	113	7,083,003	61	2,942,375	3	107,975	12	316,052
12	GLENDALE FIRE DEPT.	215	18,406,246	77	4,063,204	17	1,395,391	6	345,627
13	GLENDALE POLICE DEPT.	378	29,355,876	158	7,820,260	18	1,180,071	14	265,201
14	GLOBE FIRE DEPT.	17	834,811	10	368,829	2	67,866	-	-
15	KINGMAN FIRE DEPT.	45	2,819,425	16	711,182	4	232,192	1	61,248
16	MARICOPA COUNTY SHERIFF'S OFFICE	622	37,558,838	409	18,766,281	49	2,608,336	16	336,659
17	MESA FIRE DEPT.	340	28,075,010	187	10,672,447	49	3,264,868	6	94,603
18	MESA POLICE DEPT.	701	53,991,203	391	20,437,080	65	3,616,999	21	316,162
19	MIAMI FIRE DEPT.	-	-	-	-	-	-	-	-
20	NOGALES FIRE DEPT.	45	2,269,167	17	638,116	-	-	-	-
21	PHOENIX FIRE DEPT.	1,382	120,263,523	915	53,894,943	200	15,764,641	15	729,634
22	PHOENIX POLICE DEPT.	2,766	241,079,774	1,866	103,879,388	274	19,547,189	221	1,680,690
23	PRESCOTT FIRE DEPT.	55	3,636,198	48	2,287,839	7	341,514	5	62,412
24	PRESCOTT POLICE DEPT.	67	4,265,174	56	2,449,210	2	97,249	3	148,714
25	SCOTTSDALE POLICE DEPT.	392	32,275,668	180	9,061,313	28	1,824,296	35	516,281
26	SIERRA VISTA FIRE DEPT.	47	2,738,862	19	918,333	3	203,018	2	41,533
27	TEMPE FIRE DEPT.	127	11,373,929	106	5,604,459	23	1,778,211	6	27,014
28	TEMPE POLICE DEPT.	305	26,046,499	199	10,262,555	23	1,408,185	26	615,941
29	TUCSON FIRE	494	34,528,312	498	24,955,600	98	5,026,220	10	105,905
30	TUCSON POLICE	811	55,484,551	798	37,704,239	112	6,612,958	34	532,699
31	WINSLOW FIRE DEPT.	5	278,572	3	167,154	-	-	-	-
32	YUMA FIRE DEPT.	105	6,560,746	68	3,189,874	10	470,873	-	-
33	YUMA POLICE DEPT.	154	9,175,414	97	4,204,484	7	342,528	19	174,139
34	YUMA COUNTY SHERIFF'S DEPT.	83	4,865,178	35	1,380,955	3	124,712	9	174,372
35	GAME AND FISH DEPT.	124	6,710,792	140	6,063,898	15	678,405	6	37,847
36	SIERRA VISTA POLICE DEPT.	63	4,071,033	31	1,550,887	2	184,181	6	57,258
37	BENSON POLICE DEPT.	13	739,731	4	162,205	-	-	1	43,506
38	BISBEE POLICE DEPT.	12	637,562	14	525,834	1	47,643	1	785
39	PIMA COUNTY SHERIFF'S DEPT.	497	31,919,756	341	15,030,773	36	2,058,927	51	313,405
40	KINGMAN POLICE DEPT.	51	2,973,701	21	949,260	2	69,815	3	2,724
41	ASU CAMPUS POLICE	58	3,383,274	33	1,458,716	1	56,017	12	38,830
42	LAKE HAVASU CITY FIRE DEPT.	69	4,358,509	40	1,834,917	5	302,442	3	41,885
43	MOHAVE COUNTY SHERIFF'S DEPT.	80	4,574,572	37	1,450,312	7	327,889	9	92,082
44	BULLHEAD CITY FIRE DEPT.	76	5,765,450	15	622,895	5	259,003	1	4,213
45	U OF A CAMPUS POLICE	54	3,272,923	23	842,075	3	165,539	9	134,122
46	COCHISE COUNTY SHERIFF'S DEPT.	79	4,621,170	56	2,068,375	2	103,441	16	20,316
47	SAFFORD POLICE DEPT.	16	1,102,416	11	443,399	4	194,131	-	-
49	DREXEL HEIGHTS FIRE DISTRICT	80	4,746,991	13	414,710	4	217,683	11	353,176
50	WINSLOW POLICE DEPT.	22	1,135,156	7	271,189	2	107,839	2	8,985
51	PAYSON FIRE DEPT.	24	1,482,525	6	275,208	2	111,341	1	13,891

# Arizona Public Safety Personnel Retirement System Annual Actuarial Valuation

Division Number	Employer Name	Number of Actives	Active Payroll	Number of Retirees	Annual Retiree Benefits	Number of DROP	Annual DROP Benefits	Number of Vested Inactive	Annual Vested Benefits
52	PAYSON POLICE DEPT.	23	\$ 1,461,875	18	\$ 730,977	2	\$ 93,653	7	\$ 192,261
53	NORTHERN AZ. CONSOLIDATED FIRE DISTRICT	36	1,542,928	3	128,354	2	99,025	10	41,309
54	FRY FIRE DISTRICT	42	2,824,535	18	853,168	-	-	2	22,944
55	FREDONIA MARSHALS	4	171,383	-	-	-	-	2	21,548
56	NAU CAMPUS POLICE	14	847,674	11	502,403	1	29,212	1	11,886
58	SOUTH TUCSON FIRE DEPT.	7	399,654	4	144,094	-	-	1	810
59	AVONDALE FIRE DEPT.	53	3,875,467	7	343,422	-	-	1	47
60	PARKER POLICE DEPT.	12	634,948	3	111,325	-	-	4	71,455
61	COCONINO COUNTY SHERIFF'S DEPT.	49	2,598,786	50	2,207,762	6	248,501	10	132,858
62	CENTRAL YAVAPAI FIRE DISTRICT	72	5,147,698	25	1,354,993	8	483,917	1	57,102
64	BUCKSKIN FIRE DISTRICT	10	661,249	8	317,645	-	-	3	5,152
65	SNOWFLAKE POLICE DEPT.	14	683,238	5	184,156	-	-	-	-
66	COTTONWOOD POLICE DEPT.	30	1,713,476	15	550,160	1	53,805	4	11,211
67	LAKE HAVASU CITY POLICE DEPT.	68	4,343,430	33	1,539,885	10	536,077	13	345,470
69	SOUTH TUCSON POLICE DEPT.	14	613,205	16	574,119	-	-	2	23,371
70	APACHE JUNCTION POLICE DEPT.	44	2,975,918	30	1,278,877	8	374,724	6	50,067
71	NAVAJO COUNTY SHERIFF'S DEPT.	47	2,213,998	30	1,085,399	-	-	11	147,568
72	MOHAVE VALLEY FIRE DISTRICT	35	1,927,927	1	37,587	-	-	5	51,774
73	PEORIA FIRE DEPT.	136	10,470,454	22	1,060,900	5	310,299	2	7,102
74	PEORIA POLICE DEPT.	164	12,995,169	56	2,586,040	16	881,007	16	101,489
76	PARADISE VALLEY POLICE DEPT.	24	2,035,841	32	1,462,981	3	204,875	1	8,656
77	WILLCOX POLICE DEPT.	10	502,238	6	206,625	-	-	-	-
78	SHOW LOW POLICE DEPT.	27	1,614,782	9	332,141	2	104,841	3	130,557
79	ELOY POLICE DEPT.	27	1,750,752	7	271,856	2	87,129	4	88,710
80	NOGALES POLICE DEPT.	55	3,066,028	19	670,006	-	-	5	2,185
81	GILBERT POLICE DEPT.	226	16,652,610	32	1,543,406	2	101,480	24	235,899
83	CLIFTON POLICE DEPT.	6	304,069	1	27,053	-	-	3	28,746
85	COOLIDGE POLICE DEPT.	26	1,445,925	10	351,191	3	141,436	2	4,063
86	HOLBROOK POLICE DEPT.	14	674,834	11	389,659	1	27,044	1	7,547
87	SANTA CRUZ COUNTY SHERIFF'S DEPT.	36	2,004,335	15	580,644	1	36,835	10	138,735
88	PRESCOTT VALLEY POLICE DEPT.	54	3,486,908	10	401,170	2	96,598	7	289,925
89	EAGAR POLICE DEPT.	7	377,277	4	142,196	1	48,972	2	10,304
90	TOLLESON POLICE DEPT.	29	1,828,051	8	337,516	-	-	3	283,041
91	FLORENCE POLICE DEPT.	27	1,610,463	5	159,122	-	-	1	2,102
92	SPRINGVILLE POLICE DEPT.	8	414,401	3	89,614	-	-	-	-
93	EL MIRA GE POLICE DEPT.	34	2,603,058	8	308,605	-	-	8	137,172
94	SUPERIOR POLICE DEPT.	6	276,969	2	62,439	-	-	2	51,286
95	SAN LUIS POLICE DEPT.	29	1,501,144	5	217,640	-	-	3	100,960
96	PAGE POLICE DEPT.	20	1,256,185	7	296,172	-	-	5	163,755
97	PAGE FIRE DEPT.	14	789,214	2	72,398	-	-	6	174,853
98	YAVAPAI COUNTY SHERIFF'S DEPT.	121	6,694,709	54	2,064,933	5	227,237	22	345,583
100	PIMA POLICE DEPT.	3	161,926	-	-	-	-	2	10,501
101	APACHE COUNTY SHERIFF'S DEPT.	28	1,508,907	20	731,824	-	-	4	27,484
102	COTTONWOOD FIRE DEPT.	26	1,532,169	3	122,757	-	-	-	-
103	LA PAZ COUNTY SHERIFF'S DEPT.	21	1,167,036	15	616,266	4	151,105	5	221,807
104	PINAL COUNTY SHERIFF'S DEPT.	203	12,760,338	81	3,049,722	5	192,219	23	1,020,143
105	CLARKDALE POLICE DEPT.	5	216,113	5	133,441	-	-	2	58,852
106	BUCKEYE POLICE DEPT.	70	4,620,117	11	482,028	1	48,259	4	89,317
107	MARANA POLICE DEPT.	74	4,512,699	15	586,760	1	31,010	13	133,350
108	TOLLESON FIRE DEPT.	27	2,020,030	4	177,902	2	93,741	2	1,501

# Arizona Public Safety Personnel Retirement System Annual Actuarial Valuation

Division Number	Employer Name	Number of Actives	Active Payroll	Number of Retirees	Annual Retiree Benefits	Number of DROP	Annual DROP Benefits	Number of Vested Inactive	Annual Vested Benefits
109	CHINO VALLEY POLICE DEPT.	21	\$ 1,034,332	5	\$ 199,385	2	\$ 71,314	-	\$ -
110	SURPRISE POLICE DEPT.	120	8,147,849	13	559,779	6	327,661	15	259,374
111	WELLTON POLICE DEPT.	6	338,656	2	68,372	-	-	1	12,443
112	GILA COUNTY SHERIFF'S DEPT.	35	1,687,594	25	761,220	5	160,835	10	261,001
113	PINETOP-LA KESIDE POLICE DEPT.	10	542,880	10	346,658	-	-	3	72,599
114	BULLHEAD CITY POLICE DEPT.	68	4,547,415	29	1,186,681	6	348,179	3	66,738
115	WILLIAMS POLICE DEPT.	10	529,832	5	112,849	-	-	1	3,534
116	MIAMI POLICE DEPT.	4	168,104	2	64,364	-	-	1	19,677
117	THATCHER POLICE DEPT.	9	577,651	7	255,313	-	-	1	54,952
118	YOUNGTOWN POLICE DEPT.	1	57,465	3	101,803	-	-	7	322,832
119	DEPT. OF EMER & MILITARY AFF	44	2,178,181	16	595,635	2	64,456	3	132,945
120	SURPRISE FIRE DEPT.	105	8,487,018	4	197,329	4	275,324	2	168,564
121	CAMP VERDE MARSHALS	15	779,063	3	110,834	-	-	1	5,997
122	ORO VALLEY POLICE DEPT.	89	5,994,297	21	803,016	3	168,049	8	262,836
123	GREENLEE COUNTY SHERIFF'S DEPT.	13	702,098	4	138,610	-	-	3	7,804
124	TUCSON AIRPORT AUTHORITY FIRE DEPT.	16	1,003,678	16	789,662	1	43,994	2	15,715
125	TUCSON AIRPORT AUTHORITY POLICE DEPT.	20	1,430,042	17	760,067	2	75,503	2	6,247
126	WICKENBURG POLICE DEPT.	16	936,356	5	201,003	-	-	1	49,132
127	EL MIRAGE FIRE DEPT.	22	1,574,920	2	93,663	-	-	1	121,916
128	PATAGONIA MARSHALS	3	114,419	2	65,987	-	-	1	70,130
129	SEDONA POLICE DEPT.	22	1,339,699	6	262,574	1	47,773	3	5,817
130	MAMMOTH POLICE DEPT.	4	136,033	1	14,958	-	-	7	64,306
131	GLOBE POLICE DEPT.	27	1,245,174	12	439,206	-	-	1	482
132	TOMBSTONE MARSHALS	5	209,851	-	-	-	-	4	157,479
133	GOLDER RANCH FIRE DISTRICT	127	8,090,745	6	201,099	5	238,346	1	3,214
134	FORT MOJAVE MESA FIRE DISTRICT	27	2,110,827	9	408,365	2	80,506	4	32,886
136	GOODYEAR FIRE DEPT.	87	6,662,566	1	50,154	2	163,127	-	-
137	GOODYEAR POLICE DEPT.	90	6,321,537	14	664,048	2	92,594	5	93,996
138	CHINO VALLEY FIRE DISTRICT	34	2,150,642	2	91,475	3	187,535	-	-
139	A VONDALE POLICE DEPT.	104	6,657,158	16	691,365	2	79,476	14	184,064
140	GRAHAM COUNTY SHERIFF'S DEPT.	22	1,206,971	5	149,119	-	-	1	6,519
142	GOLDEN VALLEY FIRE DISTRICT	25	1,395,830	4	146,882	-	-	3	12,831
143	DAISY MOUNTAIN FIRE DISTRICT	85	6,526,447	1	33,788	1	63,460	2	16,880
144	QUARTZSITE POLICE DEPT.	9	568,865	-	-	1	28,562	3	273,325
145	PICTURE ROCKS FIRE DISTRICT	22	1,080,059	6	161,811	-	-	3	73,687
146	PIMA COUNTY COMM. COLLEGE POLICE	27	1,532,215	11	411,826	-	-	6	5,870
147	NORTHWEST FIRE DISTRICT	178	12,584,613	17	734,316	10	538,017	7	45,467
148	APACHE JUNCTION FIRE DISTRICT	76	5,718,335	11	508,677	3	144,290	3	104,032
149	GILBERT FIRE DEPT.	178	13,072,322	3	135,614	1	49,202	2	26,429
150	PINE-STRAWBERRY FIRE DISTRICT	18	1,196,490	3	120,144	2	89,654	1	22,357
151	ATTORNEY GENERAL INVEST.	9	528,445	27	1,105,346	5	191,885	-	-
153	ST. JOHNS POLICE DEPT.	7	301,428	2	45,821	-	-	2	9,769
154	PIMA COUNTY ATTORNEY INVEST.	5	250,888	4	182,803	1	46,587	-	-
155	SUN LAKES FIRE DISTRICT	33	3,100,519	9	382,811	1	84,850	3	7,320
156	KEARNY POLICE DEPT.	5	217,033	2	71,957	-	-	4	275,663
157	GREENLEE COUNTY ATTORNEY INVEST.	-	-	-	-	-	-	-	-
158	NAVAJO COUNTY ATTORNEY INVEST.	-	-	1	33,141	-	-	-	-
162	AVRA VALLEY FIRE DISTRICT	29	1,330,934	1	28,690	-	-	8	62,554
163	SAN LUIS FIRE DEPT.	29	1,396,801	-	-	1	33,439	5	41,014
164	AZ DEPT. LIQ. LIC. & CONTROL INVEST.	12	673,548	12	422,240	1	57,263	2	92,665



# Arizona Public Safety Personnel Retirement System Annual Actuarial Valuation

Division Number	Employer Name	Number of Actives	Active Payroll	Number of Retirees	Annual Retiree Benefits	Number of DROP	Annual DROP Benefits	Number of Vested Inactive	Annual Vested Benefits
165	MARICOPA COUNTY ATTORNEY INVEST.	13	\$ 840,022	17	\$ 727,005	-	-	1	\$ 28,236
166	SEDONA FIRE DISTRICT	68	4,888,151	14	708,972	2	144,175	2	68,283
167	GUADALUPE FIRE DEPT.	4	252,982	1	46,050	-	-	-	-
168	MAYER FIRE DISTRICT	16	885,820	3	89,529	-	-	-	-
169	SOMERTON POLICE DEPT.	19	921,077	2	90,904	1	28,450	4	141,640
170	SUN CITY WEST FIRE DISTRICT	47	3,830,920	13	595,475	3	143,425	-	-
171	SOMERTON FIRE DEPT.	18	899,976	3	67,343	-	-	1	2,673
172	TUBAC FIRE DISTRICT	29	1,527,111	2	50,898	-	-	1	6,497
173	LA PAZ COUNTY ATTORNEY INVEST.	-	-	-	-	1	31,210	-	-
174	SAHUARITA POLICE DEPT.	34	2,350,231	-	-	-	-	3	27,103
176	FLORENCE FIRE DEPT.	22	1,240,750	-	-	-	-	1	12,078
177	SUN CITY FIRE DISTRICT	58	4,517,966	14	984,848	7	423,269	-	-
178	HA YDEN POLICE DEPT.	7	393,097	-	-	-	-	5	18,287
179	GILA RIVER FIRE DEPT.	64	4,315,948	6	156,704	-	-	7	393,328
180	GILA RIVER POLICE DEPT.	121	7,787,003	4	136,333	-	-	18	1,052,030
181	SALT RIVER PIMA-MARICOPA FIRE	75	6,219,761	6	270,077	-	-	3	249,219
182	SALT RIVER PIMA-MARICOPA POLICE	101	8,237,605	12	550,204	-	-	6	403,526
183	LA KESIDE FIRE DISTRICT	24	1,618,006	1	26,920	-	-	1	88,662
185	PINETOP FIRE DISTRICT	26	1,821,523	7	198,885	-	-	4	155,223
186	SHOW LOW FIRE DISTRICT	33	2,176,596	1	43,401	-	-	1	87,580
187	YA VAPAI COUNTY ATTORNEY INVEST.	-	-	2	72,148	-	-	-	-
188	THREE POINTS FIRE DISTRICT	16	821,082	2	106,590	-	-	1	1,692
190	BUCKEYE FIRE DEPT.	74	4,623,728	-	-	-	-	1	36,064
191	MONTEZUMA RIMROCK FIRE DISTRICT	9	493,000	1	27,203	2	59,803	2	6,272
192	HEBER-OVERGAARD FIRE DISTRICT	13	823,664	-	-	-	-	3	21,144
193	HELLSGATE FIRE DISTRICT	7	410,927	-	-	1	46,892	-	-
194	GREEN VALLEY FIRE DISTRICT	57	3,797,022	6	218,922	6	287,647	4	68,140
195	SUMMIT FIRE DISTRICT	41	2,413,174	2	76,692	2	120,178	5	52,956
196	CAMP VERDE FIRE DISTRICT	26	1,605,397	2	103,941	-	-	1	11,814
197	FORT MCDOWELL TRIBAL FIRE DEPT.	14	855,349	-	-	-	-	1	4,127
198	FORT MCDOWELL TRIBAL POLICE DEPT.	20	1,627,934	-	-	-	-	2	42,039
199	HIGHLANDS FIRE DISTRICT	23	1,662,865	3	125,405	-	-	2	7,806
200	RIO RICO FIRE DISTRICT	30	1,551,903	-	-	-	-	5	94,540
201	TRI-CITY FIRE DISTRICT	20	1,019,447	-	-	-	-	2	30,527
202	MARICOPA COUNTY PARK RANGERS	-	-	4	177,580	-	-	1	48,265
203	VERDE VALLEY FIRE DISTRICT	25	1,705,977	2	88,842	1	68,964	3	262,755
204	AZ. STATE PARK RANGERS	22	964,400	11	411,375	10	356,906	6	213,742
205	LINDEN FIRE DISTRICT	10	476,910	-	-	-	-	-	-
206	HUALAPAI INDIAN TRIBE POLICE DEPT.	13	749,496	-	-	-	-	1	6,580
207	PINEWOOD FIRE DISTRICT	17	1,122,227	3	154,492	-	-	-	-
208	RINCON VALLEY FIRE DISTRICT	38	1,880,134	-	-	-	-	4	104,878
209	TONOPAH VALLEY FIRE DISTRICT	8	313,468	-	-	-	-	3	12,159
210	JEROME POLICE DEPT.	3	118,752	-	-	-	-	1	20,579
211	FORT MOJAVE TRIBAL POLICE DEPT.	21	1,530,517	-	-	-	-	4	18,516
212	BUCKEYE VALLEY FIRE DISTRICT	72	4,209,725	-	-	-	-	3	2,001
213	ELOY FIRE DISTRICT	28	1,855,417	-	-	-	-	-	-
214	PASCUA YAQUI TRIBE FIRE DEPT.	23	1,450,963	1	47,161	-	-	1	4,391
215	PASCUA YAQUI TRIBE POLICE DEPT.	27	2,295,969	4	139,208	-	-	7	150,843
216	TOWN OF SUPERIOR FIRE DEPT.	6	258,284	-	-	-	-	-	-
217	WICKENBURG FIRE DEPT.	10	444,373	-	-	-	-	-	-

# Arizona Public Safety Personnel Retirement System Annual Actuarial Valuation

Division Number	Employer Name	Number of Actives	Active Payroll	Number of Retirees	Annual Retiree Benefits	Number of DROP	Annual DROP Benefits	Number of Vested Inactive	Annual Vested Benefits
219	BLACK CANYON FIRE DISTRICT	9	\$ 391,704	-	\$ -	-	\$ -	2	13,081
220	GRAHAM COUNTY ATTORNEY INVEST.	-	-	-	-	-	-	-	-
221	QUARTZSITE FIRE DISTRICT	8	450,050	-	-	-	-	2	8,373
222	RIO VERDE FIRE DISTRICT	14	1,049,340	1	21,173	1	42,214	1	5,471
223	SCOTTSDALE FIRE DEPT.	235	18,202,663	5	226,815	2	124,492	-	-
224	AK CHIN INDIAN COMM. FIRE DEPT.	32	1,860,611	4	126,807	-	-	3	171,674
225	AK CHIN INDIAN COMM. POLICE DEPT.	17	1,063,163	1	59,379	-	-	3	10,645
226	CORONA DE TUCSON FIRE DISTRICT	19	1,004,933	1	32,972	-	-	2	30,877
227	GOLDEN SHORES FIRE DISTRICT	6	397,801	-	-	-	-	-	-
228	CITY OF MARICOPA FIRE DEPT.	59	4,648,101	-	-	-	-	3	79,388
229	CAVE CREEK MARSHALS	1	82,139	-	-	-	-	-	-
231	SAN CARLOS TRIBAL POLICE DEPT.	24	1,550,155	-	-	-	-	1	23,854
232	GROOM CREEK FIRE DISTRICT	8	405,153	-	-	-	-	1	14,667
233	MOUNT LEMMON FIRE DISTRICT	6	296,045	-	-	-	-	-	-
234	YA VAPAI PRESCOTT TRIBAL POLICE	4	236,840	-	-	-	-	6	168,961
235	TOHONO O'ODHAM NATION FIRE DEPT.	43	2,723,371	-	-	-	-	5	45,906
236	TOHONO O'ODHAM NATION POLICE DEPT.	72	4,839,067	6	236,408	1	53,957	3	27,814
237	WILLIAMSON VALLEY FIRE DISTRICT	5	251,048	-	-	-	-	2	1,232
238	HARQUAHALA FIRE DISTRICT	13	730,486	-	-	-	-	8	117,257
239	COOLIDGE FIRE DEPT.	3	158,600	-	-	-	-	1	3,597
240	CLARKDALE FIRE DISTRICT	10	537,404	-	-	-	-	1	3,016
241	WITTMANN FIRE DISTRICT	11	565,562	-	-	-	-	-	-
242	CENTRAL AZ. COLLEGE POLICE DEPT.	5	263,282	1	42,616	-	-	-	-
243	CITY OF MARICOPA POLICE DEPT.	48	3,431,134	1	35,951	-	-	3	124,272
244	ORACLE FIRE DISTRICT	6	255,786	-	-	-	-	3	18,258
245	BENSON FIRE DEPT.	1	69,095	-	-	-	-	-	-
246	DESERT HILLS FIRE DEPT.	21	1,034,385	1	24,772	-	-	-	-
247	QUEEN CREEK FIRE DEPT.	27	1,839,081	1	86,392	-	-	2	18,376
248	SONOITA ELGIN FIRE DEPT.	9	385,645	-	-	-	-	5	15,773
249	CHRISTOPHER-KOHL'S FIRE DISTRICT	5	224,962	1	13,350	-	-	2	14,172
250	WHETSTONE FIRE DISTRICT	5	202,814	-	-	-	-	-	-
251	QUEEN VALLEY FIRE DISTRICT	3	129,840	-	-	-	-	-	-
252	LA KE MOHA VE RANCHOS FIRE DISTRICT	19	762,549	2	87,715	-	-	3	8,447
253	HUACHUCA CITY POLICE DEPT.	5	249,717	-	-	-	-	-	-
254	PALOMINAS FIRE DISTRICT	11	437,224	-	-	-	-	-	-
255	SUN SITES PEARCE FIRE DISTRICT	6	231,374	-	-	-	-	-	-
TOTAL		18,542	1,349,251,544	9,802	485,003,106	1,496	93,213,333	1,264	22,200,481

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**APPENDIX III**

SUMMARY OF LIABILITY AND ASSET  
INFORMATION BY INDIVIDUAL EMPLOYERS

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# Arizona Public Safety Personnel Retirement System Annual Actuarial Valuation

Division Number	Employer Name	Total AAL	Total Assets	Reserve for future Pension Increases	Net Assets	Funded Percent	Unfunded Liability
1	BISBEE FIRE DEPT.	\$ 8,933,649	\$ 1,720,702	\$ -	\$ 1,720,702	19.30%	\$ 7,212,947
2	CASA GRANDE FIRE DEPT.	11,963,098	11,686,671	-	11,686,671	58.50%	8,276,427
3	CASA GRANDE POLICE DEPT.	34,908,899	16,848,670	-	16,848,670	48.30%	18,060,229
4	CHANDLER FIRE DEPT.	89,369,352	65,390,559	-	65,390,559	73.20%	23,978,793
5	CHANDLER POLICE DEPT.	148,961,881	97,906,676	-	97,906,676	65.70%	51,055,205
6	CLIFTON FIRE DEPT.	259,468	175,920	-	175,920	67.80%	83,548
7	DEPT. OF PUBLIC SAFETY	880,031,434	431,524,269	-	431,524,269	49.00%	448,507,165
8	DOUGLAS FIRE DEPT.	12,079,568	4,510,557	-	4,510,557	37.30%	7,569,011
9	DOUGLAS POLICE DEPT.	17,148,791	7,381,173	-	7,381,173	43.00%	9,767,618
10	FLAGSTAFF FIRE DEPT.	57,561,012	31,459,483	-	31,459,483	54.70%	26,101,529
11	FLAGSTAFF POLICE DEPT.	51,247,952	24,405,305	-	24,405,305	47.60%	26,842,647
12	GLENDALE FIRE DEPT.	122,424,374	84,891,498	-	84,891,498	69.30%	37,532,876
13	GLENDALE POLICE DEPT.	187,700,231	102,978,564	-	102,978,564	54.90%	84,721,667
14	GLOBE FIRE DEPT.	7,312,932	3,702,594	-	3,702,594	50.60%	3,610,338
15	KINGMAN FIRE DEPT.	20,621,370	13,881,709	-	13,881,709	67.30%	6,739,661
16	MARICOPA COUNTY SHERIFF'S OFFICE	348,647,463	197,115,792	-	197,115,792	56.50%	151,531,671
17	MESA FIRE DEPT.	259,326,618	166,996,344	-	166,996,344	64.40%	92,330,274
18	MESA POLICE DEPT.	451,296,104	277,907,210	-	277,907,210	61.60%	173,388,894
19	MIAMI FIRE DEPT.	-	394,967	-	394,967	0.00%	(394,967)
20	NOGALES FIRE DEPT.	14,669,234	8,669,869	-	8,669,869	59.10%	5,999,365
21	PHOENIX FIRE DEPT.	1,179,717,941	704,733,417	-	704,733,417	59.70%	474,984,524
22	PHOENIX POLICE DEPT.	2,166,419,171	1,252,168,467	-	1,252,168,467	57.80%	914,250,704
23	PRESCOTT FIRE DEPT.	40,147,728	19,247,445	-	19,247,445	47.90%	20,900,283
24	PRESCOTT POLICE DEPT.	38,696,641	13,603,099	-	13,603,099	35.20%	25,093,542
25	SCOTTSDALE POLICE DEPT.	214,873,628	139,914,951	-	139,914,951	65.10%	74,958,677
26	SIERRA VISTA FIRE DEPT.	19,991,969	13,123,158	-	13,123,158	65.60%	6,868,811
27	TEMPE FIRE DEPT.	126,228,460	76,211,736	-	76,211,736	60.40%	50,016,724
28	TEMPE POLICE DEPT.	206,188,699	103,346,360	-	103,346,360	50.10%	102,842,339
29	TUCSON FIRE	416,663,176	203,093,294	-	203,093,294	48.70%	213,569,882
30	TUCSON POLICE	659,505,431	329,852,302	-	329,852,302	50.00%	329,653,129
31	WINSLOW FIRE DEPT.	2,697,956	6,035,202	-	6,035,202	223.70%	(3,337,246)
32	YUMA FIRE DEPT.	59,059,809	30,455,972	-	30,455,972	51.60%	28,603,837
33	YUMA POLICE DEPT.	72,905,659	43,985,939	-	43,985,939	60.30%	28,919,720
34	YUMA COUNTY SHERIFF'S DEPT.	26,109,756	15,500,639	-	15,500,639	59.40%	10,609,117
35	GAME AND FISH DEPT.	93,143,376	35,113,785	-	35,113,785	37.70%	58,029,591
36	SIERRA VISTA POLICE DEPT.	28,602,995	14,566,814	-	14,566,814	50.90%	14,036,181
37	BENSON POLICE DEPT.	3,429,926	1,978,329	-	1,978,329	57.70%	1,451,597
38	BISBEE POLICE DEPT.	7,710,369	2,100,380	-	2,100,380	27.20%	5,609,989
39	PIMA COUNTY SHERIFF'S DEPT.	276,228,519	149,085,235	-	149,085,235	54.00%	127,143,284
40	KINGMAN POLICE DEPT.	19,345,080	11,847,807	-	11,847,807	61.20%	7,497,273
41	ASU CAMPUS POLICE	23,676,797	15,203,840	-	15,203,840	64.20%	8,472,957
42	LAKE HAVASU CITY FIRE DEPT.	36,335,652	21,400,897	-	21,400,897	58.90%	14,934,755
43	MOHAVE COUNTY SHERIFF'S DEPT.	31,891,722	19,464,007	-	19,464,007	61.00%	12,427,715
44	BULLHEAD CITY FIRE DEPT.	32,089,567	24,869,128	-	24,869,128	77.50%	7,220,439
45	U OF A CAMPUS POLICE	20,225,217	11,680,865	-	11,680,865	57.80%	8,544,352
46	COCHISE COUNTY SHERIFF'S DEPT.	34,017,463	14,427,189	-	14,427,189	42.40%	19,590,274
47	SAFFORD POLICE DEPT.	10,498,186	4,656,655	-	4,656,655	44.40%	5,841,531
49	DREXEL HEIGHTS FIRE DISTRICT	20,391,555	16,251,960	-	16,251,960	79.70%	4,139,595
50	WINSLOW POLICE DEPT.	7,346,017	5,360,986	-	5,360,986	73.00%	1,985,031
51	PA YSON FIRE DEPT.	8,145,416	5,382,932	-	5,382,932	66.10%	2,762,484

# Arizona Public Safety Personnel Retirement System Annual Actuarial Valuation

Division Number	Employer Name	Total AAL	Total Assets	Reserve for future Pension Increases	Net Assets	Funded Percent	Unfunded Liability
52	PA YSON POLICE DEPT.	\$ 13,251,213	\$ 5,597,463	\$ -	\$ 5,597,463	42.20%	\$ 7,653,750
53	NORTHERN AZ. CONSOLIDATED FIRE DISTRICT	5,521,900	3,791,722	-	3,791,722	68.70%	1,730,178
54	FRY FIRE DISTRICT	16,503,126	8,390,244	-	8,390,244	50.80%	8,112,882
55	FREDONIA MARSHALS	474,608	609,451	-	609,451	128.40%	(134,843)
56	NAU CAMPUS POLICE	8,180,972	3,671,052	-	3,671,052	44.90%	4,509,920
58	SOUTH TUCSON FIRE DEPT.	2,973,683	1,738,168	-	1,738,168	58.50%	1,235,515
59	A VONDALE FIRE DEPT.	14,699,136	13,212,178	-	13,212,178	89.90%	1,486,958
60	PARKER POLICE DEPT.	2,838,832	2,050,926	-	2,050,926	72.20%	787,906
61	COCONINO COUNTY SHERIFF'S DEPT.	33,799,738	11,595,499	-	11,595,499	34.30%	22,204,239
62	CENTRAL YA VAPAI FIRE DISTRICT	37,800,413	23,105,591	-	23,105,591	61.10%	14,694,822
64	BUCKSKIN FIRE DISTRICT	4,659,846	1,777,616	-	1,777,616	38.10%	2,882,230
65	SNOWFLAKE POLICE DEPT.	3,567,151	1,958,756	-	1,958,756	54.90%	1,608,395
66	COTTONWOOD POLICE DEPT.	9,809,423	4,255,843	-	4,255,843	43.40%	5,553,580
67	LAKE HAVASU CITY POLICE DEPT.	36,403,240	21,369,064	-	21,369,064	58.70%	15,034,176
69	SOUTH TUCSON POLICE DEPT.	6,847,942	543,003	-	543,003	7.90%	6,304,939
70	APACHE JUNCTION POLICE DEPT.	25,500,835	12,166,524	-	12,166,524	47.70%	13,334,311
71	NAVAJO COUNTY SHERIFF'S DEPT.	14,089,740	6,078,479	-	6,078,479	43.10%	8,011,261
72	MOHAVE VALLEY FIRE DISTRICT	5,594,725	5,648,449	-	5,648,449	101.00%	(53,724)
73	PEORIA FIRE DEPT.	51,241,188	41,223,476	-	41,223,476	80.40%	10,017,712
74	PEORIA POLICE DEPT.	73,772,626	47,252,572	-	47,252,572	64.10%	26,520,054
76	PARADISE VALLEY POLICE DEPT.	23,259,067	8,293,055	-	8,293,055	35.70%	14,966,012
77	WILCOX POLICE DEPT.	3,746,695	1,951,379	-	1,951,379	52.10%	1,795,316
78	SHOW LOW POLICE DEPT.	9,675,454	6,264,238	-	6,264,238	64.70%	3,411,216
79	ELOY POLICE DEPT.	7,368,194	5,626,814	-	5,626,814	76.40%	1,741,380
80	NOGALES POLICE DEPT.	17,513,625	11,692,386	-	11,692,386	66.80%	5,821,239
81	GILBERT POLICE DEPT.	62,839,097	46,823,028	-	46,823,028	74.50%	16,016,069
83	CLIFTON POLICE DEPT.	448,488	585,778	-	585,778	130.60%	(137,290)
85	COOLIDGE POLICE DEPT.	8,771,453	5,143,910	-	5,143,910	58.60%	3,627,543
86	HOLBROOK POLICE DEPT.	6,089,127	2,119,507	-	2,119,507	34.80%	3,969,620
87	SANTA CRUZ COUNTY SHERIFF'S DEPT.	11,912,313	5,980,797	-	5,980,797	50.20%	5,931,516
88	PRESCOTT VALLEY POLICE DEPT.	15,997,465	11,972,313	-	11,972,313	74.80%	4,025,152
89	EAGAR POLICE DEPT.	3,475,246	1,941,640	-	1,941,640	55.90%	1,533,606
90	TOLLESON POLICE DEPT.	7,587,233	4,696,400	-	4,696,400	61.90%	2,890,833
91	FLORENCE POLICE DEPT.	4,272,472	4,156,244	-	4,156,244	97.30%	116,228
92	SPRINGVILLE POLICE DEPT.	2,269,105	1,654,942	-	1,654,942	72.90%	614,163
93	EL MIRAGE POLICE DEPT.	10,085,055	6,207,742	-	6,207,742	61.60%	3,877,313
94	SUPERIOR POLICE DEPT.	1,214,054	965,505	-	965,505	79.50%	248,549
95	SAN LUIS POLICE DEPT.	6,022,631	4,632,753	-	4,632,753	76.90%	1,389,878
96	PAGE POLICE DEPT.	5,921,302	4,080,689	-	4,080,689	68.90%	1,840,613
97	PAGE FIRE DEPT.	1,851,312	1,501,966	-	1,501,966	81.10%	349,346
98	YAVAPAI COUNTY SHERIFF'S DEPT.	41,718,775	21,112,140	-	21,112,140	50.60%	20,606,635
100	PIMA POLICE DEPT.	131,136	354,628	-	354,628	270.40%	(223,492)
101	APACHE COUNTY SHERIFF'S DEPT.	10,981,152	3,874,146	-	3,874,146	35.30%	7,107,006
102	COTTONWOOD FIRE DEPT.	4,821,801	3,691,051	-	3,691,051	76.50%	1,130,750
103	LA PAZ COUNTY SHERIFF'S DEPT.	11,914,451	6,564,204	-	6,564,204	55.10%	5,350,247
104	PINAL COUNTY SHERIFF'S DEPT.	64,653,222	42,235,203	-	42,235,203	65.30%	22,418,019
105	CLARKDALE POLICE DEPT.	2,337,850	1,889,335	-	1,889,335	80.80%	448,515
106	BUCKEYE POLICE DEPT.	15,158,757	11,598,871	-	11,598,871	76.50%	3,559,886
107	MARANA POLICE DEPT.	18,583,886	13,200,211	-	13,200,211	71.00%	5,383,675
108	TOLLESON FIRE DEPT.	8,516,131	6,944,421	-	6,944,421	81.50%	1,571,710

# Arizona Public Safety Personnel Retirement System Annual Actuarial Valuation

Division Number	Employer Name	Total AAL	Total Assets	Reserve for future Pension Increases	Net Assets	Funded Percent	Unfunded Liability
109	CHINO VALLEY POLICE DEPT.	\$ 5,505,562	\$ 4,212,219	-	\$ 4,212,219	76.50%	\$ 1,293,343
110	SURPRISE POLICE DEPT.	27,619,769	21,724,184	-	21,724,184	78.70%	5,895,585
111	WELLTON POLICE DEPT.	953,522	601,046	-	601,046	63.00%	352,476
112	GILA COUNTY SHERIFF'S DEPT.	13,415,175	7,000,746	-	7,000,746	52.20%	6,414,429
113	PINETOP-LAKESIDE POLICE DEPT.	4,713,416	1,809,163	-	1,809,163	38.40%	2,904,253
114	BULLHEAD CITY POLICE DEPT.	32,551,120	21,251,858	-	21,251,858	65.30%	11,299,262
115	WILLIAMS POLICE DEPT.	1,827,503	1,449,936	-	1,449,936	79.30%	377,567
116	MIAMI POLICE DEPT.	1,256,474	760,833	-	760,833	60.60%	495,641
117	THATCHER POLICE DEPT.	4,611,150	2,507,668	-	2,507,668	54.40%	2,103,482
118	YOUNGTOWN POLICE DEPT.	1,482,899	1,113,755	-	1,113,755	75.10%	369,144
119	DEPT. OF EMER & MILITARY AFF	11,989,861	7,869,642	-	7,869,642	65.60%	4,120,219
120	SURPRISE FIRE DEPT.	25,644,534	21,783,832	-	21,783,832	84.90%	3,860,702
121	CAMP VERDE MARSHALS	3,756,977	2,976,077	-	2,976,077	79.20%	780,900
122	ORO VALLEY POLICE DEPT.	30,016,500	21,539,446	-	21,539,446	71.80%	8,477,054
123	GREENLEE COUNTY SHERIFF'S DEPT.	3,893,924	3,112,726	-	3,112,726	79.90%	781,198
124	TUCSON AIRPORT AUTHORITY FIRE DEPT.	11,662,972	5,026,584	-	5,026,584	43.10%	6,636,388
125	TUCSON AIRPORT AUTHORITY POLICE DEPT.	12,273,275	4,233,091	-	4,233,091	34.50%	8,040,184
126	WICKENBURG POLICE DEPT.	4,194,402	2,416,139	-	2,416,139	57.60%	1,778,263
127	EL MIRAGE FIRE DEPT.	3,748,609	3,355,007	-	3,355,007	89.50%	393,602
128	PATAGONIA MARSHALS	856,668	652,781	-	652,781	76.20%	203,887
129	SEDONA POLICE DEPT.	6,873,804	5,411,507	-	5,411,507	78.70%	1,462,297
130	MAMMOTH POLICE DEPT.	462,141	367,699	-	367,699	79.60%	94,442
131	GLOBE POLICE DEPT.	8,236,427	3,833,491	-	3,833,491	46.50%	4,402,936
132	TOMBSTONE MARSHALS	431,465	785,840	-	785,840	182.10%	(354,375)
133	GOLDER RANCH FIRE DISTRICT	26,312,822	20,849,995	-	20,849,995	79.20%	5,462,827
134	FORT MOJA VE MESA FIRE DISTRICT	12,356,520	8,124,220	-	8,124,220	65.70%	4,232,300
136	GOODYEAR FIRE DEPT.	18,227,499	16,917,670	-	16,917,670	92.80%	1,309,829
137	GOODYEAR POLICE DEPT.	23,354,591	17,528,841	-	17,528,841	75.10%	5,825,750
138	CHINO VALLEY FIRE DISTRICT	9,308,861	7,384,263	-	7,384,263	79.30%	1,924,598
139	AVONDALE POLICE DEPT.	22,041,998	16,248,840	-	16,248,840	73.70%	5,793,158
140	GRAHAM COUNTY SHERIFF'S DEPT.	5,106,642	3,171,870	-	3,171,870	62.10%	1,934,772
142	GOLDEN VALLEY FIRE DISTRICT	4,107,254	3,078,658	-	3,078,658	75.00%	1,028,596
143	DAISY MOUNTAIN FIRE DISTRICT	17,293,379	15,925,566	-	15,925,566	92.10%	1,367,813
144	QUARTZSITE POLICE DEPT.	2,366,057	2,821,166	-	2,821,166	119.20%	(455,109)
145	PICTURE ROCKS FIRE DISTRICT	4,118,886	3,569,152	-	3,569,152	86.70%	549,734
146	PIMA COUNTY COMM. COLLEGE POLICE	7,778,602	4,817,526	-	4,817,526	61.90%	2,961,076
147	NORTHWEST FIRE DISTRICT	50,888,571	39,357,927	-	39,357,927	77.30%	11,530,644
148	APACHE JUNCTION FIRE DISTRICT	25,620,606	19,848,608	-	19,848,608	77.50%	5,771,998
149	GILBERT FIRE DEPT.	38,115,693	35,417,839	-	35,417,839	92.90%	2,697,854
150	PINE-STRAWBERRY FIRE DISTRICT	5,650,050	3,779,007	-	3,779,007	66.90%	1,871,043
151	ATTORNEY GENERAL INVEST.	14,568,229	4,717,037	-	4,717,037	32.40%	9,851,192
153	ST. JOHNS POLICE DEPT.	1,020,641	1,001,728	-	1,001,728	98.10%	18,913
154	PIMA COUNTY ATTORNEY INVEST.	3,129,223	1,666,736	-	1,666,736	53.30%	1,462,487
155	SUN LAKES FIRE DISTRICT	13,917,513	11,089,307	-	11,089,307	79.70%	2,828,206
156	KEARNY POLICE DEPT.	1,824,149	1,467,089	-	1,467,089	80.40%	357,060
157	GREENLEE COUNTY ATTORNEY INVEST.	-	47,299	-	47,299	0.00%	(47,299)
158	NA VAJO COUNTY ATTORNEY INVEST.	405,483	114,686	-	114,686	28.30%	290,797
162	AVRA VALLEY FIRE DISTRICT	1,877,049	2,542,667	-	2,542,667	135.50%	(665,618)
163	SAN LUIS FIRE DEPT.	2,952,082	2,916,906	-	2,916,906	98.80%	35,176
164	AZ DEPT. LIQ. LIC. & CONTROL INVEST.	7,741,142	3,690,355	-	3,690,355	47.70%	4,050,787

# Arizona Public Safety Personnel Retirement System Annual Actuarial Valuation

Division Number	Employer Name	Total AAL	Total Assets	Reserve for future Pension Increases	Net Assets	Funded Percent	Unfunded Liability
165	MARICOPA COUNTY ATTORNEY INVEST.	\$ 9,124,386	\$ 3,926,787	\$ -	\$ 3,926,787	43.00%	\$ 5,197,599
166	SEDONA FIRE DISTRICT	22,109,948	15,257,756	-	15,257,756	69.00%	6,852,192
167	GUADALUPE FIRE DEPT.	1,180,945	701,209	-	701,209	59.40%	479,736
168	MA YER FIRE DISTRICT	2,647,192	2,396,363	-	2,396,363	90.50%	250,829
169	SOMERTON POLICE DEPT.	4,067,589	2,995,614	-	2,995,614	73.60%	1,071,975
170	SUN CITY WEST FIRE DISTRICT	21,900,199	14,411,729	-	14,411,729	65.80%	7,488,470
171	SOMERTON FIRE DEPT.	2,908,758	2,195,992	-	2,195,992	75.50%	712,766
172	TUBAC FIRE DISTRICT	4,241,944	3,715,123	-	3,715,123	87.60%	526,821
173	LA PAZ COUNTY ATTORNEY INVEST.	383,450	311,813	-	311,813	81.30%	71,637
174	SAHUARITA POLICE DEPT.	6,125,837	5,892,772	-	5,892,772	96.20%	233,065
176	FLORENCE FIRE DEPT.	1,829,483	2,076,445	-	2,076,445	113.50%	(246,962)
177	SUN CITY FIRE DISTRICT	33,260,126	18,862,428	-	18,862,428	56.70%	14,397,698
178	HA YDEN POLICE DEPT.	159,414	1,017,288	-	1,017,288	638.10%	(857,874)
179	GILA RIVER FIRE DEPT.	9,473,215	8,409,512	-	8,409,512	88.80%	1,063,703
180	GILA RIVER POLICE DEPT.	12,656,645	13,111,252	-	13,111,252	103.60%	(454,607)
181	SALT RIVER PIMA-MARICOPA FIRE	21,579,951	17,381,695	-	17,381,695	80.50%	4,198,256
182	SALT RIVER PIMA-MARICOPA POLICE	22,605,787	16,708,670	-	16,708,670	73.90%	5,897,117
183	LAKESIDE FIRE DISTRICT	3,496,547	3,040,885	-	3,040,885	87.00%	455,662
185	PINETOP FIRE DISTRICT	6,635,092	4,011,819	-	4,011,819	60.50%	2,623,273
186	SHOW LOW FIRE DISTRICT	4,600,735	4,349,496	-	4,349,496	94.50%	251,239
187	YA YAPAI COUNTY ATTORNEY INVEST.	839,661	56,783	-	56,783	6.80%	782,878
188	THREE POINTS FIRE DISTRICT	2,414,672	1,816,882	-	1,816,882	75.20%	597,790
190	BUCKEYE FIRE DEPT.	9,584,201	10,529,478	-	10,529,478	109.90%	(945,277)
191	MONTEZUMA RIMROCK FIRE DISTRICT	1,888,349	1,301,265	-	1,301,265	68.90%	587,084
192	HEBER-OVERGAARD FIRE DISTRICT	1,172,754	1,451,501	-	1,451,501	123.80%	(278,747)
193	HELLSGATE FIRE DISTRICT	1,670,848	1,301,730	-	1,301,730	77.90%	369,118
194	GREEN VALLEY FIRE DISTRICT	17,029,682	13,125,535	-	13,125,535	77.10%	3,904,147
195	SUMMIT FIRE DISTRICT	8,300,192	6,852,166	-	6,852,166	82.60%	1,448,026
196	CAMP VERDE FIRE DISTRICT	4,956,470	3,927,760	-	3,927,760	79.20%	1,028,710
197	FORT MCDOWELL TRIBAL FIRE DEPT.	1,707,871	1,656,542	-	1,656,542	97.00%	51,329
198	FORT MCDOWELL TRIBAL POLICE DEPT.	3,912,137	3,402,709	-	3,402,709	87.00%	509,428
199	HIGHLANDS FIRE DISTRICT	5,457,061	3,711,945	-	3,711,945	68.00%	1,745,116
200	RIO RICO FIRE DISTRICT	2,692,924	2,753,285	-	2,753,285	102.20%	(60,361)
201	TRI-CITY FIRE DISTRICT	1,719,023	1,840,930	-	1,840,930	107.10%	(121,907)
202	MARICOPA COUNTY PARK RANGERS	2,003,927	73,887	-	73,887	3.70%	1,930,040
203	VERDE VALLEY FIRE DISTRICT	6,493,575	5,725,789	-	5,725,789	88.20%	767,786
204	AZ. STATE PARK RANGERS	12,690,684	9,509,427	-	9,509,427	74.90%	3,181,257
205	LINDEN FIRE DISTRICT	623,869	645,363	-	645,363	103.40%	(21,494)
206	HUALAPAI INDIAN TRIBE POLICE DEPT.	783,124	960,336	-	960,336	122.60%	(177,212)
207	PINEWOOD FIRE DISTRICT	3,318,943	1,823,116	-	1,823,116	54.90%	1,495,827
208	RINCON VALLEY FIRE DISTRICT	3,393,500	3,139,153	-	3,139,153	92.50%	254,347
209	TONOPAH VALLEY FIRE DISTRICT	393,840	545,138	-	545,138	138.40%	(151,298)
210	JEROME POLICE DEPT.	152,283	261,838	-	261,838	171.90%	(109,555)
211	FORT MOJAVE TRIBAL POLICE DEPT.	1,416,530	1,880,414	-	1,880,414	132.70%	(463,884)
212	BUCKEYE VALLEY FIRE DISTRICT	6,349,267	5,885,249	-	5,885,249	92.70%	464,018
213	ELOY FIRE DISTRICT	3,667,128	2,784,885	-	2,784,885	75.90%	882,243
214	PASCUA YAQUI TRIBE FIRE DEPT.	5,071,101	2,949,480	-	2,949,480	58.20%	2,121,621
215	PASCUA YAQUI TRIBE POLICE DEPT.	6,882,016	3,829,735	-	3,829,735	55.60%	3,052,281
216	TOWN OF SUPERIOR FIRE DEPT.	384,022	418,882	-	418,882	109.10%	(34,860)
217	WICKENBURG FIRE DEPT.	764,826	725,485	-	725,485	94.90%	39,341

# Arizona Public Safety Personnel Retirement System Annual Actuarial Valuation

Division Number	Employer Name	Total AAL	Total Assets	Reserve for future Pension Increases	Net Assets	Funded Percent	Unfunded Liability
219	BLACK CANYON FIRE DISTRICT	\$ 574,070	\$ 611,594	-	\$ 611,594	106.50%	\$ (37,524)
220	GRAHAM COUNTY ATTORNEY INVEST.	-	59,704	-	59,704	0.00%	(59,704)
221	QUARTZSITE FIRE DISTRICT	975,289	794,326	-	794,326	81.40%	180,963
222	RIO VERDE FIRE DISTRICT	4,214,927	3,270,606	-	3,270,606	77.60%	944,321
223	SCOTTSDALE FIRE DEPT.	38,729,262	44,721,595	-	44,721,595	115.50%	(5,992,333)
224	AK CHIN INDIAN COMM. FIRE DEPT.	4,515,277	3,970,618	-	3,970,618	87.90%	544,659
225	AK CHIN INDIAN COMM. POLICE DEPT.	2,158,324	2,097,298	-	2,097,298	97.20%	61,026
226	CORONA DE TUCSON FIRE DISTRICT	2,190,730	1,551,987	-	1,551,987	70.80%	638,743
227	GOLDEN SHORES FIRE DISTRICT	823,515	875,952	-	875,952	106.40%	(52,437)
228	CITY OF MARICOPA FIRE DEPT.	8,369,695	7,762,013	-	7,762,013	92.70%	607,682
229	CAVE CREEK MARSHALS	181,256	155,028	-	155,028	85.50%	26,228
231	SAN CARLOS TRIBAL POLICE DEPT.	2,830,913	1,897,066	-	1,897,066	67.00%	933,847
232	GROOM CREEK FIRE DISTRICT	527,750	551,132	-	551,132	104.40%	(23,382)
233	MOUNT LEMMON FIRE DISTRICT	521,679	537,912	-	537,912	103.10%	(16,233)
234	YAVAPAI PRESCOTT TRIBAL POLICE	419,015	643,827	-	643,827	153.70%	(224,812)
235	TOHONO O'ODHAM NATION FIRE DEPT.	5,414,191	4,972,906	-	4,972,906	91.80%	441,285
236	TOHONO O'ODHAM NATION POLICE DEPT.	16,675,216	14,409,903	-	14,409,903	86.40%	2,265,313
237	WILLIAMSON VALLEY FIRE DISTRICT	217,620	291,306	-	291,306	133.90%	(73,686)
238	HARQUAHALA FIRE DISTRICT	764,230	892,330	-	892,330	116.80%	(128,100)
239	COOLIDGE FIRE DEPT.	167,041	246,467	-	246,467	147.50%	(79,426)
240	CLARKDALE FIRE DISTRICT	685,202	592,666	-	592,666	86.50%	92,536
241	WITTMANN FIRE DISTRICT	591,252	524,086	-	524,086	88.60%	67,166
242	CENTRAL AZ. COLLEGE POLICE DEPT.	743,271	513,588	-	513,588	69.10%	229,683
243	CITY OF MARICOPA POLICE DEPT.	5,493,643	5,536,006	-	5,536,006	100.80%	(42,363)
244	ORACLE FIRE DISTRICT	296,219	345,926	-	345,926	116.80%	(49,707)
245	BENSON FIRE DEPT.	453,418	369,108	-	369,108	81.40%	84,310
246	DESERT HILLS FIRE DEPT.	2,100,498	1,168,256	-	1,168,256	55.60%	932,242
247	QUEEN CREEK FIRE DEPT.	2,478,132	1,589,684	-	1,589,684	64.10%	888,448
248	SONOITA ELGIN FIRE DEPT.	541,299	486,979	-	486,979	90.00%	54,320
249	CHRISTOPHER-KOHL'S FIRE DISTRICT	342,714	332,120	-	332,120	96.90%	10,594
250	WHETSTONE FIRE DISTRICT	240,982	255,290	-	255,290	105.90%	(14,308)
251	QUEEN VALLEY FIRE DISTRICT	210,201	156,660	-	156,660	74.50%	53,541
252	LAKE MOHAVE RANCHOS FIRE DISTRICT	1,826,149	1,061,675	-	1,061,675	58.10%	764,474
253	HUACHUCA CITY POLICE DEPT.	390,728	128,739	-	128,739	32.90%	261,989
254	PALOMINAS FIRE DISTRICT	279,245	328,091	-	328,091	117.50%	(48,846)
255	SUN SITES PEARCE FIRE DISTRICT	389,422	338,310	-	338,310	86.90%	51,112
TOTAL		10,325,529,986	6,051,595,012	-	6,051,595,012		4,273,934,974



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## **APPENDIX IV**

### **SUMMARY OF CONTRIBUTION INFORMATION BY INDIVIDUAL EMPLOYERS**

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**Arizona Public Safety Personnel Retirement System Annual Actuarial Valuation**

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<b>Division Number</b>	<b>Employer Name</b>	<b>ER NC%</b>	<b>UAL Pmt %</b>	<b>Calculated ER Cont</b>	<b>Required ER Cont</b>
1	BISBEE FIRE DEPT.	12.41%	46.83%	59.24%	59.24%
2	CASA GRANDE FIRE DEPT.	12.43%	9.72%	22.15%	22.15%
3	CASA GRANDE POLICE DEPT.	12.41%	18.69%	31.10%	31.10%
4	CHANDLER FIRE DEPT.	12.21%	8.33%	20.54%	20.54%
5	CHANDLER POLICE DEPT.	12.32%	11.23%	23.55%	23.55%
6	CLIFTON FIRE DEPT.	0.00%	0.00%	0.00%	5.00%
7	DEPT. OF PUBLIC SAFETY	14.15%	37.84%	51.99%	51.99%
8	DOUGLAS FIRE DEPT.	13.75%	31.30%	45.05%	45.05%
9	DOUGLAS POLICE DEPT.	12.49%	26.97%	39.46%	39.46%
10	FLAGSTAFF FIRE DEPT.	14.11%	30.88%	44.99%	44.99%
11	FLAGSTAFF POLICE DEPT.	12.52%	20.35%	32.87%	32.87%
12	GLENDALE FIRE DEPT.	13.58%	10.96%	24.54%	24.54%
13	GLENDALE POLICE DEPT.	12.45%	15.53%	27.98%	27.98%
14	GLOBE FIRE DEPT.	12.49%	23.33%	35.82%	35.82%
15	KINGMAN FIRE DEPT.	12.57%	12.91%	25.48%	25.48%
16	MARICOPA COUNTY SHERIFF'S OFFICE	14.13%	21.74%	35.87%	35.87%
17	MESA FIRE DEPT.	13.60%	17.66%	31.26%	31.26%
18	MESA POLICE DEPT.	13.94%	17.27%	31.21%	31.21%
19	MIAMI FIRE DEPT.	0.00%	0.00%	0.00%	5.00%
20	NOGALES FIRE DEPT.	13.15%	14.18%	27.33%	27.33%
21	PHOENIX FIRE DEPT.	13.79%	21.16%	34.95%	34.95%
22	PHOENIX POLICE DEPT.	14.11%	20.39%	34.50%	34.50%
23	PRESCOTT FIRE DEPT.	12.41%	31.06%	43.47%	43.47%
24	PRESCOTT POLICE DEPT.	12.52%	31.46%	43.98%	43.98%
25	SCOTTSDALE POLICE DEPT.	13.95%	12.49%	26.44%	26.44%
26	SIERRA VISTA FIRE DEPT.	12.60%	13.50%	26.10%	26.10%
27	TEMPE FIRE DEPT.	13.82%	23.59%	37.41%	37.41%
28	TEMPE POLICE DEPT.	12.38%	21.20%	33.58%	33.58%
29	TUCSON FIRE	13.69%	33.08%	46.77%	46.77%
30	TUCSON POLICE	13.93%	31.82%	45.75%	45.75%
31	WINSLOW FIRE DEPT.	11.60%	-1.46%	10.14%	10.14%
32	YUMA FIRE DEPT.	13.89%	23.32%	37.21%	37.21%
33	YUMA POLICE DEPT.	13.90%	17.02%	30.92%	30.92%
34	YUMA COUNTY SHERIFF'S DEPT.	13.86%	11.77%	25.63%	25.63%
35	GAME AND FISH DEPT.	14.03%	46.50%	60.53%	60.53%
36	SIERRA VISTA POLICE DEPT.	12.78%	18.47%	31.25%	31.25%
37	BENSON POLICE DEPT.	12.21%	10.59%	22.80%	22.80%
38	BISBEE POLICE DEPT.	12.60%	47.28%	59.88%	59.88%
39	PIMA COUNTY SHERIFF'S DEPT.	13.87%	21.42%	35.29%	35.29%
40	KINGMAN POLICE DEPT.	12.66%	13.56%	26.22%	26.22%
41	ASU CAMPUS POLICE	13.95%	13.48%	27.43%	27.43%
42	LAKE HAVASU CITY FIRE DEPT.	12.52%	18.38%	30.90%	30.90%
43	MOHAVE COUNTY SHERIFF'S DEPT.	12.99%	14.62%	27.61%	27.61%
44	BULLHEAD CITY FIRE DEPT.	12.56%	6.69%	19.25%	19.25%
45	U OF A CAMPUS POLICE	12.66%	13.98%	26.64%	26.64%
46	COCHISE COUNTY SHERIFF'S DEPT.	12.70%	22.77%	35.47%	35.47%
47	SAFFORD POLICE DEPT.	12.72%	28.27%	40.99%	40.99%
49	DREXEL HEIGHTS FIRE DISTRICT	12.32%	4.69%	17.01%	17.01%
50	WINSLOW POLICE DEPT.	12.83%	9.57%	22.40%	22.40%
51	PAYSON FIRE DEPT.	12.80%	9.93%	22.73%	22.73%

**Arizona Public Safety Personnel Retirement System Annual Actuarial Valuation**

<b>Division Number</b>	<b>Employer Name</b>	<b>ER NC%</b>	<b>UAL Pmt %</b>	<b>Calculated ER Cont</b>	<b>Required ER Cont</b>
52	PA YSON POLICE DEPT.	12.58%	28.33%	40.91%	40.91%
53	NORTHERN AZ. CONSOLIDATED FIRE DISTRICT ;	13.17%	6.04%	19.21%	19.21%
54	FRY FIRE DISTRICT	12.98%	15.45%	28.43%	28.43%
55	FREDONIA MARSHALS	12.98%	-1.92%	11.06%	11.06%
56	NAU CAMPUS POLICE	12.30%	28.53%	40.83%	40.83%
58	SOUTH TUCSON FIRE DEPT.	12.53%	16.65%	29.18%	29.18%
59	A VONDALE FIRE DEPT.	12.90%	2.06%	14.96%	14.96%
60	PARKER POLICE DEPT.	12.89%	6.73%	19.62%	19.62%
61	COCONINO COUNTY SHERIFF'S DEPT.	12.44%	45.73%	58.17%	58.17%
62	CENTRAL YA VAPAI FIRE DISTRICT	12.48%	15.40%	27.88%	27.88%
64	BUCKSKIN FIRE DISTRICT	12.30%	23.55%	35.85%	35.85%
65	SNOWFLAKE POLICE DEPT.	12.48%	12.70%	25.18%	25.18%
66	COTTONWOOD POLICE DEPT.	12.34%	17.54%	29.88%	29.88%
67	LAKE HA VASU CITY POLICE DEPT.	12.65%	18.64%	31.29%	31.29%
69	SOUTH TUCSON POLICE DEPT.	12.87%	54.86%	67.73%	67.73%
70	APACHE JUNCTION POLICE DEPT.	13.06%	24.02%	37.08%	37.08%
71	NA VAJO COUNTY SHERIFF'S DEPT.	12.48%	19.49%	31.97%	31.97%
72	MOHA VE VALLEY FIRE DISTRICT	13.05%	-0.04%	13.01%	13.01%
73	PEORIA FIRE DEPT.	12.55%	5.16%	17.71%	17.71%
74	PEORIA POLICE DEPT.	12.29%	11.00%	23.29%	23.29%
76	PARADISE VALLEY POLICE DEPT.	12.71%	39.21%	51.92%	51.92%
77	WILLCOX POLICE DEPT.	13.29%	19.14%	32.43%	32.43%
78	SHOW LOW POLICE DEPT.	12.16%	11.45%	23.61%	23.61%
79	ELOY POLICE DEPT.	12.45%	5.39%	17.84%	17.84%
80	NOGALES POLICE DEPT.	12.75%	10.22%	22.97%	22.97%
81	GILBERT POLICE DEPT.	12.41%	5.17%	17.58%	17.58%
83	CLIFTON POLICE DEPT.	12.18%	0.06%	12.24%	12.24%
85	COOLIDGE POLICE DEPT.	12.93%	13.55%	26.48%	26.48%
86	HOLBROOK POLICE DEPT.	12.32%	31.69%	44.01%	44.01%
87	SANTA CRUZ COUNTY SHERIFF'S DEPT.	12.64%	15.90%	28.54%	28.54%
88	PRESCOTT VALLEY POLICE DEPT.	12.67%	6.21%	18.88%	18.88%
89	EAGAR POLICE DEPT.	12.39%	22.40%	34.79%	34.79%
90	TOLLESON POLICE DEPT.	12.72%	8.46%	21.18%	21.18%
91	FLORENCE POLICE DEPT.	13.37%	0.46%	13.83%	13.83%
92	SPRINGERVILLE POLICE DEPT.	12.34%	8.15%	20.49%	20.49%
93	EL MIRAGE POLICE DEPT.	12.21%	8.01%	20.22%	20.22%
94	SUPERIOR POLICE DEPT.	14.69%	4.88%	19.57%	19.57%
95	SAN LUIS POLICE DEPT.	12.51%	4.99%	17.50%	17.50%
96	PAGE POLICE DEPT.	12.76%	7.95%	20.71%	20.71%
97	PAGE FIRE DEPT.	12.30%	2.35%	14.65%	14.65%
98	YA VAPAI COUNTY SHERIFF'S DEPT.	12.58%	16.56%	29.14%	29.14%
100	PIMA POLICE DEPT.	13.71%	-1.07%	12.64%	12.64%
101	APACHE COUNTY SHERIFF'S DEPT.	13.57%	25.33%	38.90%	38.90%
102	COTTONWOOD FIRE DEPT.	12.77%	4.04%	16.81%	16.81%
103	LA PAZ COUNTY SHERIFF'S DEPT.	12.48%	24.75%	37.23%	37.23%
104	PINAL COUNTY SHERIFF'S DEPT.	14.05%	9.47%	23.52%	23.52%
105	CLARKDALE POLICE DEPT.	13.30%	11.33%	24.63%	24.63%
106	BUCKEYE POLICE DEPT.	12.65%	4.20%	16.85%	16.85%
107	MARANA POLICE DEPT.	12.75%	6.41%	19.16%	19.16%
108	TOLLESON FIRE DEPT.	12.53%	4.24%	16.77%	16.77%

**Arizona Public Safety Personnel Retirement System Annual Actuarial Valuation**

<b>Division Number</b>	<b>Employer Name</b>	<b>ER NC%</b>	<b>UAL Pmt %</b>	<b>Calculated ER Cont</b>	<b>Required ER Cont</b>
109	CHINO VALLEY POLICE DEPT.	12.51%	6.80%	19.31%	19.31%
110	SURPRISE POLICE DEPT.	12.49%	3.91%	16.40%	16.40%
111	WELLTON POLICE DEPT.	12.84%	5.52%	18.36%	18.36%
112	GILA COUNTY SHERIFF'S DEPT.	12.84%	20.58%	33.42%	33.42%
113	PINETOP-LAKESIDE POLICE DEPT.	13.30%	28.90%	42.20%	42.20%
114	BULLHEAD CITY POLICE DEPT.	12.68%	13.36%	26.04%	26.04%
115	WILLIAMS POLICE DEPT.	13.59%	4.03%	17.62%	17.62%
116	MIAMI POLICE DEPT.	13.23%	15.95%	29.19%	29.19%
117	THATCHER POLICE DEPT.	12.24%	19.58%	31.82%	31.82%
118	YOUNGTOWN POLICE DEPT.	19.41%	35.81%	55.22%	55.22%
119	DEPT. OF EMER & MILITARY AFF	12.85%	10.22%	23.07%	23.07%
120	SURPRISE FIRE DEPT.	12.25%	2.46%	14.71%	14.71%
121	CAMP VERDE MARSHALS	12.47%	5.42%	17.89%	17.89%
122	ORO VALLEY POLICE DEPT.	12.70%	7.63%	20.33%	20.33%
123	GREENLEE COUNTY SHERIFF'S DEPT.	12.64%	6.11%	18.75%	18.75%
124	TUCSON AIRPORT AUTHORITY FIRE DEPT.	12.47%	35.37%	47.84%	47.84%
125	TUCSON AIRPORT AUTHORITY POLICE DEPT.	12.11%	29.77%	41.88%	41.88%
126	WICKENBURG POLICE DEPT.	12.95%	10.14%	23.09%	23.09%
127	EL MIRAGE FIRE DEPT.	12.56%	1.40%	13.96%	13.96%
128	PATAGONIA MARSHALS	13.80%	9.57%	23.37%	23.37%
129	SEDONA POLICE DEPT.	12.63%	5.89%	18.52%	18.52%
130	MAMMOTH POLICE DEPT.	14.27%	3.76%	18.03%	18.03%
131	GLOBE POLICE DEPT.	12.05%	18.84%	30.89%	30.89%
132	TOMBSTONE MARSHALS	12.65%	-2.13%	10.52%	10.52%
133	GOLDER RANCH FIRE DISTRICT	12.40%	3.62%	16.02%	16.02%
134	FORT MOJAVE MESA FIRE DISTRICT	12.80%	10.81%	23.61%	23.61%
136	GOODYEAR FIRE DEPT.	12.31%	1.09%	13.40%	13.40%
137	GOODYEAR POLICE DEPT.	12.48%	4.99%	17.47%	17.47%
138	CHINO VALLEY FIRE DISTRICT	12.21%	4.83%	17.04%	17.04%
139	A VONDALE POLICE DEPT.	12.46%	4.69%	17.15%	17.15%
140	GRAHAM COUNTY SHERIFF'S DEPT.	12.36%	8.60%	20.96%	20.96%
142	GOLDEN VALLEY FIRE DISTRICT	13.41%	3.98%	17.39%	17.39%
143	DAISY MOUNTAIN FIRE DISTRICT	12.49%	1.12%	13.61%	13.61%
144	QUARTZSITE POLICE DEPT.	14.57%	-1.02%	13.55%	13.55%
145	PICTURE ROCKS FIRE DISTRICT	13.13%	2.86%	15.99%	15.99%
146	PIMA COUNTY COMM. COLLEGE POLICE	12.63%	10.44%	23.07%	23.07%
147	NORTHWEST FIRE DISTRICT	12.76%	4.94%	17.70%	17.70%
148	APACHE JUNCTION FIRE DISTRICT	12.32%	5.44%	17.76%	17.76%
149	GILBERT FIRE DEPT.	12.17%	1.13%	13.30%	13.30%
150	PINE-STRAWBERRY FIRE DISTRICT	12.39%	8.37%	20.76%	20.76%
151	ATTORNEY GENERAL INVEST.	13.87%	97.80%	111.67%	111.67%
153	ST. JOHNS POLICE DEPT.	13.63%	0.41%	14.04%	14.04%
154	PIMA COUNTY ATTORNEY INVEST.	13.40%	31.53%	44.93%	44.93%
155	SUN LAKES FIRE DISTRICT	12.20%	4.94%	17.14%	17.14%
156	KEARNY POLICE DEPT.	12.78%	8.82%	21.60%	21.60%
157	GREENLEE COUNTY ATTORNEY INVEST.	0.00%	0.00%	0.00%	5.00%
158	NAVAJO COUNTY ATTORNEY INVEST.	0.00%	0.00%	0.00%	5.00%
162	AVRA VALLEY FIRE DISTRICT	13.13%	-0.15%	12.98%	12.98%
163	SAN LUIS FIRE DEPT.	13.00%	0.19%	13.19%	13.19%
164	AZ DEPT. LIQ. LIC. & CONTROL INVEST.	12.50%	31.84%	44.34%	44.34%

**Arizona Public Safety Personnel Retirement System Annual Actuarial Valuation**

<b>Division Number</b>	<b>Employer Name</b>	<b>ER NC%</b>	<b>UAL Pmt %</b>	<b>Calculated ER Cont</b>	<b>Required ER Cont</b>
165	MARICOPA COUNTY ATTORNEY INVEST.	16.19%	32.98%	49.17%	49.17%
166	SEDONA FIRE DISTRICT	12.44%	7.53%	19.97%	19.97%
167	GUADALUPE FIRE DEPT.	12.06%	10.13%	22.19%	22.19%
168	MAYER FIRE DISTRICT	13.08%	1.56%	14.64%	14.64%
169	SOMERTON POLICE DEPT.	12.69%	6.27%	18.96%	18.96%
170	SUN CITY WEST FIRE DISTRICT	12.25%	10.44%	22.69%	22.69%
171	SOMERTON FIRE DEPT.	13.67%	4.26%	17.93%	17.93%
172	TUBAC FIRE DISTRICT	12.82%	1.84%	14.66%	14.66%
173	LA PAZ COUNTY ATTORNEY INVEST.	0.00%	0.00%	0.00%	8.00%
174	SAHUARITA POLICE DEPT.	12.44%	0.56%	13.00%	13.00%
176	FLORENCE FIRE DEPT.	11.94%	-0.21%	11.73%	11.73%
177	SUN CITY FIRE DISTRICT	12.48%	16.96%	29.44%	29.44%
178	HA YDEN POLICE DEPT.	15.13%	-1.27%	13.86%	13.86%
179	GILA RIVER FIRE DEPT.	12.47%	1.36%	13.83%	13.83%
180	GILA RIVER POLICE DEPT.	12.32%	-0.11%	12.21%	12.21%
181	SALT RIVER PIMA-MARICOPA FIRE	12.84%	3.65%	16.49%	16.49%
182	SALT RIVER PIMA-MARICOPA POLICE	12.47%	3.87%	16.34%	16.34%
183	LAKESIDE FIRE DISTRICT	12.85%	1.54%	14.39%	14.39%
185	PINETOP FIRE DISTRICT	12.64%	7.76%	20.40%	20.40%
186	SHOW LOW FIRE DISTRICT	12.70%	0.64%	13.34%	13.34%
187	YA VAPAI COUNTY ATTORNEY INVEST.	0.00%	0.00%	0.00%	5.00%
188	THREE POINTS FIRE DISTRICT	13.25%	3.99%	17.24%	17.24%
190	BUCKEYE FIRE DEPT.	12.47%	-0.40%	12.07%	12.07%
191	MONTEZUMA RIMROCK FIRE DISTRICT	12.03%	6.39%	18.42%	18.42%
192	HEBER-OVERGAARD FIRE DISTRICT	14.27%	-0.48%	13.79%	13.79%
193	HELLSGATE FIRE DISTRICT	12.62%	4.79%	17.41%	17.41%
194	GREEN VALLEY FIRE DISTRICT	12.35%	5.56%	17.91%	17.91%
195	SUMMIT FIRE DISTRICT	12.21%	3.22%	15.43%	15.43%
196	CAMP VERDE FIRE DISTRICT	12.62%	3.46%	16.08%	16.08%
197	FORT MCDOWELL TRIBAL FIRE DEPT.	12.61%	0.39%	13.00%	13.00%
198	FORT MCDOWELL TRIBAL POLICE DEPT.	12.73%	1.74%	14.47%	14.47%
199	HIGHLANDS FIRE DISTRICT	12.64%	5.63%	18.27%	18.27%
200	RIO RICO FIRE DISTRICT	12.66%	-0.12%	12.54%	12.54%
201	TRI-CITY FIRE DISTRICT	11.95%	-0.36%	11.59%	11.59%
202	MARICOPA COUNTY PARK RANGERS	0.00%	0.00%	0.00%	8.00%
203	VERDE VALLEY FIRE DISTRICT	12.73%	2.42%	15.15%	15.15%
204	AZ. STATE PARK RANGERS	12.87%	17.88%	30.75%	30.75%
205	LINDEN FIRE DISTRICT	12.58%	0.00%	12.65%	12.65%
206	HUALAPAI INDIAN TRIBE POLICE DEPT.	13.25%	-0.26%	12.99%	12.99%
207	PINEWOOD FIRE DISTRICT	13.15%	7.08%	20.23%	20.23%
208	RINCON VALLEY FIRE DISTRICT	12.59%	0.69%	13.28%	13.28%
209	TONOPAH VALLEY FIRE DISTRICT	14.64%	-0.63%	14.01%	14.01%
210	JEROME POLICE DEPT.	11.60%	-1.32%	10.28%	10.28%
211	FORT MOJA VE TRIBAL POLICE DEPT.	12.90%	-0.37%	12.53%	12.53%
212	BUCKEYE VALLEY FIRE DISTRICT	12.39%	0.62%	13.01%	13.01%
213	ELOY FIRE DISTRICT	12.57%	2.54%	15.11%	15.11%
214	PASCUA YA QUI TRIBE FIRE DEPT.	12.97%	7.82%	20.79%	20.79%
215	PASCUA YA QUI TRIBE POLICE DEPT.	12.19%	7.15%	19.34%	19.34%
216	TOWN OF SUPERIOR FIRE DEPT.	13.35%	-0.39%	12.96%	12.96%
217	WICKENBURG FIRE DEPT.	12.40%	0.50%	12.90%	12.90%

**Arizona Public Safety Personnel Retirement System Annual Actuarial Valuation**

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<b>Division Number</b>	<b>Employer Name</b>	<b>ER NC%</b>	<b>UAL Pmt %</b>	<b>Calculated ER Cont</b>	<b>Required ER Cont</b>
219	BLACK CANYON FIRE DISTRICT	11.76%	-0.27%	11.49%	11.49%
220	GRAHAM COUNTY ATTORNEY INVEST.	0.00%	0.00%	0.00%	5.00%
221	QUARTZSITE FIRE DISTRICT	12.47%	2.16%	14.63%	14.63%
222	RIO VERDE FIRE DISTRICT	12.20%	4.84%	17.04%	17.04%
223	SCOTTSDALE FIRE DEPT.	12.50%	-0.36%	12.14%	12.14%
224	AK CHIN INDIAN COMM. FIRE DEPT.	12.52%	1.65%	14.17%	14.17%
225	AK CHIN INDIAN COMM. POLICE DEPT.	13.33%	0.36%	13.69%	13.69%
226	CORONA DE TUCSON FIRE DISTRICT	13.11%	3.39%	16.50%	16.50%
227	GOLDEN SHORES FIRE DISTRICT	12.65%	-0.29%	12.37%	12.37%
228	CITY OF MARICOPA FIRE DEPT.	12.48%	0.72%	13.20%	13.20%
229	CAVE CREEK MARSHALS	12.30%	1.73%	14.03%	14.03%
231	SAN CARLOS TRIBAL POLICE DEPT.	12.55%	3.18%	15.73%	15.73%
232	GROOM CREEK FIRE DISTRICT	11.78%	-0.18%	11.60%	11.60%
233	MOUNT LEMMON FIRE DISTRICT	12.74%	0.00%	12.80%	12.80%
234	YAVAPAI PRESCOTT TRIBAL POLICE	15.94%	-1.53%	14.41%	14.41%
235	TOHONO O'ODHAM NATION FIRE DEPT.	12.54%	0.89%	13.43%	13.43%
236	TOHONO O'ODHAM NATION POLICE DEPT.	12.75%	2.55%	15.30%	15.30%
237	WILLIAMSON VALLEY FIRE DISTRICT	12.06%	-0.30%	11.76%	11.76%
238	HARQUAHALA FIRE DISTRICT	12.32%	-0.50%	11.82%	11.82%
239	COOLIDGE FIRE DEPT.	12.09%	-0.61%	11.48%	11.48%
240	CLARKDALE FIRE DISTRICT	12.35%	0.96%	13.31%	13.31%
241	WITTMANN FIRE DISTRICT	12.33%	0.68%	13.01%	13.01%
242	CENTRAL AZ. COLLEGE POLICE DEPT.	13.76%	4.76%	18.52%	18.52%
243	CITY OF MARICOPA POLICE DEPT.	12.55%	-0.04%	12.51%	12.51%
244	ORACLE FIRE DISTRICT	14.17%	-0.49%	13.68%	13.68%
245	BENSON FIRE DEPT.	15.07%	6.56%	21.63%	21.63%
246	DESERT HILLS FIRE DEPT.	13.26%	4.83%	18.09%	18.09%
247	QUEEN CREEK FIRE DEPT.	11.50%	2.59%	14.09%	14.09%
248	SONOITA ELGIN FIRE DEPT.	12.93%	0.81%	13.74%	13.74%
249	CHRISTOPHER-KOHL'S FIRE DISTRICT	13.03%	0.32%	13.35%	13.35%
250	WHETSTONE FIRE DISTRICT	12.77%	-0.18%	12.59%	12.59%
251	QUEEN VALLEY FIRE DISTRICT	14.04%	2.26%	16.30%	16.30%
252	LAKE MOHAVE RANCHOS FIRE DISTRICT	13.45%	5.48%	18.93%	18.93%
253	HUACHUCA CITY POLICE DEPT.	14.82%	5.95%	20.77%	20.77%
254	PALOMINAS FIRE DISTRICT	13.96%	0.00%	14.44%	14.44%
255	SUN SITES PEARCE FIRE DISTRICT	13.48%	1.29%	14.77%	14.77%
TOTAL		13.37%	17.07%	30.44%	30.44%

October 12, 2012

Mr. James Hacking  
Administrator  
Arizona Public Safety Personnel Retirement System  
3010 E. Camelback Road, Suite 200  
Phoenix, Arizona 85016

**Re: Report of the June 30, 2012 Actuarial Valuation of PSPRS**

Dear Mr. Hacking:

Enclosed please find 5 copies of this report.

Any questions or comments you may develop will be welcome.

Sincerely,

Mark Buis, FSA, EA, MAAA

MB:rmn  
Enclosures