Arizona Corrections Officer Retirement Plan

Actuarial Valuation as of June 30, 2006

December 11, 2006

The Fund Manager Arizona Corrections Officer Retirement Plan Phoenix, Arizona

Re: Arizona Corrections Officer Retirement Plan

This report contains the consolidated results of the June 30, 2006 actuarial valuation of the Arizona Corrections Officer Retirement Plan. The valuations determine the 2007/2008 Fiscal Year employer contribution requirements and the June 30, 2006 actuarial present values associated with the Plan.

Participant data was provided by your Administrator. This data has been reviewed for reasonableness, but no attempt has been made to audit such information. Financial information was taken from the June 30, 2006 information submitted by your Administrator.

The valuations were made in accordance with generally accepted actuarial principles and practices. The valuations were based on the provisions of the Arizona Corrections Officer Retirement Plan as amended through June 30, 2006. The actuarial assumptions used in the valuations produce results that we believe are reasonable.

Respectfully submitted,

Sandia Mikodwan

Sandra W. Rodwan

Member, American Academy of Actuaries

Table of Contents

Section One: Valuation Summary	
Valuation Summary	1
Section Two: Actuarial Calculations – Funding	
Contribution Requirements	6
Actuarial Accrued Liability	8
Aggregate Gain/Loss	10
Actuarial Balance Sheet	11
Contribution Requirements by Employer	12
Actuarial Accrued Liability by Employer	13
Section Three: Retirement Plan Benefit Provision	
Benefit Provision Summary	14
Section Four: Actuarial Assumptions and Meth	ods
Actuarial Assumptions	16
Actuarial Methods	20
Section Five: Valuation Data	
Funding Value of Assets	21
Participant Summary	22
Section Six: Accounting Disclosures	
Information for GASR Statement No. 25	30



Section One: Valuation Summary



Purpose of Valuation

The purpose of the annual actuarial valuation of the Arizona Corrections Officer Retirement Plan as of June 30, 2006 is to:

- Compute the liabilities associated with benefits likely to be paid on behalf of current retired and active members. This information is contained on page 9.
- Compare accrued assets with accrued liabilities to assess the funded condition. This information is contained on pages 6 and 11.
- ❖ Compute the employers' recommended contribution rates for the Fiscal Year beginning July 1, 2007. This information is contained on page 4 and 5.

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

Liabilities and Funded Condition of Retirement Plan

Accrued liabilities of the Retirement Plan as of June 30, 2006, were computed to be \$981,207,708. The funding value of accrued assets was \$919,867,995. The ratio of the funding value of accrued assets to accrued liabilities was 93.7%.

Funding Value of Assets

A smoothed market value of assets was used for the June 30, 2006 valuation. This method spreads the difference between actual and expected investment return over seven years. Prior to the June 30, 2003 valuation, the difference was spread over four years.

Aggregate Computed Contribution Rate

Contribution rates are computed individually for each participating unit. In the aggregate, the normal cost contribution rate was computed to be 14.03% of member payroll. Deducting member contributions of 7.96% of payroll resulted in an aggregate employer normal cost of 6.07% of payroll.

The excess of accrued liabilities over accrued assets produced a 30-year amortization payment of 0.65% of payroll.

The aggregate net employer contribution for FY 2007/2008 was therefore computed to be 6.72% of payroll. After the application of the minimum contribution required for each unit by Statute, the aggregate net employer contribution is 6.77% of payroll.

Retirement Plan Experience

Experience of the Retirement Plan during the year ended June 30, 2006 was less favorable than assumed. The primary source of unfavorable experience was the recognized rate of investment return (based on the smoothed market value of assets), which was less than assumed.

Benefit Provision Changes

There were no benefit provision changes in this valuation. The minimum employer contribution rate was increased to 6% beginning with the June 30, 2006 actuarial valuation, except that for any employer whose actual contribution rate is less than 5% for the 2006/2007 Fiscal Year, that employer's contribution rate will not be subject to the 6% minimum. Instead, that employer's contribution rate for the 2006/2007 Fiscal Year, and for each year thereafter, shall be at least 5% and not more than that employer's actual contribution rate, pursuant to 2006 legislation.

Assumption and Method Changes

There were no changes in assumptions and methods. The final June 30, 2005 annual actuarial valuation included changes enacted by the 2006 legislature and the Fund Manager. The changes include the Projected Unit Credit Actuarial cost method, 30 year amortization of unfunded actuarial accrued liabilities (if any), a reduction in the assumed rate of across-the-board salary increases, an increase in the minimum contribution rate, and the establishment of a Stabilization Reserve Account.

Participant Data

	<u>6/30/2006</u>	6/30/2005
Active Members	11,914	11,752
Active Member Payroll	\$437,743,658	\$404,155,903
Retirees and Beneficiaries	1,955	1,733
Annual Pensions	\$37,272,183	\$31,329,225
Financial Data		
	<u>6/30/2006</u>	6/30/2005
Smoothed Valuation Assets	\$953,160,640*	\$914,396,008*
Market Value of Assets	\$861,782,725	\$788,873,785

^{*} The net smoothed value of assets used for the valuation after deducting the Future Benefit Increase Reserve was \$919,867,995 in 2006 and \$872,980,916 in 2005.

Comments, Recommendations and Conclusion

Comment 1: This report contains the consolidated results of the individual actuarial valuations of the 21 units in the Arizona Corrections Officer Retirement Plan as of June 20, 2006. The aggregate results are indicative of the overall condition of the Retirement Plan. The condition of each unit, however, is dependent upon its particular experience and characteristics.

Of the 21 units, 11 had accrued valuation assets in excess of actuarial accrued liabilities. The amount of this excess was amortized over a period of 20 years and applied as a temporary credit to the employer normal cost contribution rate. In the remaining 10 units, unfunded actuarial accrued liabilities were amortized over a 30-year period and added to the normal cost to produce the total employer contribution rate.

There were two new units included in this valuation.

Comment 2: The experience of the Retirement System during the year ended June 30, 2006, was less favorable than expected based upon the long-term assumptions. The recognized rate of investment return based on the smoothed market value reflects the unfavorable market conditions over prior years, and was the primary source of negative experience. The increases in contribution rates reflect the experience.

Comment 3: The smoothed market value used for the valuation spreads differences between the assumed and actual investment return over 7 years. This method is unchanged from last year.

Comment 4: It is important to note that the funding credits are not expected to continue indefinitely and are likely to decrease over the short term. **For long-term budgeting, the employer normal cost should be viewed as the <u>minimum</u> annual cost.** The normal cost is computed separately for each unit. In the aggregate, the employer normal cost has been computed to be 6.07% of payroll.

Comment 5: The 2005 legislature increased the minimum employer contribution rate to 6% from 5% effective for the fiscal year beginning July 1, 2007. The 5% minimum remains in effect for employers whose computed contribution rate was less than 5% for the 2006/2007 fiscal year.

Comment 6: The June 30, 2006 annual actuarial valuation includes the establishment of a Stabilization Reserve Account pursuant to legislation enacted in 2006. One-half of increases (if any) in the excess of accrued assets over accrued liabilities for an employer are allocated to the Stabilization Reserve Account for that employer to be available to offset a portion of any future unfunded actuarial accrued liability. Five units had a Stabilization Reserve Account as of June 30, 2006. The total amount was \$169,875. The Stabilization Reserve Accounts were excluded from the computation of the employer contribution rates.

Conclusion: The annual actuarial valuation as of June 30, 2006 reflects the effect of market conditions over the past years. The recognized rate of return, which includes the carry-forwards of experience gains (losses) from prior years, has been less than the long-term assumption. In the absence of actual investment return well in excess of the assumed rate or significant favorable experience in other risk areas, the employer contribution rates are likely to continue to increase over the short term.

Section Two:

Actuarial Calculations – Funding



Contribution Requirements - 2007/2008 Fiscal Year

Member: 7.96% of covered compensation

Employer: The aggregate computed contribution rate before application of the statutory

minimum was 6.72% of covered compensation, consisting of 6.07% for normal

cost, 0.65% for amortization of unfunded actuarial accrued liability*.

Components of Computed Normal Cost

	Percents of Covered Compensation
Normal cost requirement Service pensions	8.61%
Disability pensions	0.82
Survivors of active members	1.56
Refunds of members' accumulated contributions	2.48
Health insurance	0.56
Total normal cost requirement	14.03%
Less member contribution	<u>7.96</u>
Employer normal cost requirement	6.07%

^{*}In the aggregate, actuarial accrued liability, \$981,207,708, exceeded the funding value of accrued assets, \$919,867,995. Of the 21 units, 11 had assets in excess of accrued liabilities and 10 had unfunded accrued liabilities. The excess was amortized over 20 years and applied as a credit to the employer normal cost. The unfunded actuarial accrued liabilities were amortized over 30 years and added to the employer normal cost.

These contribution rates are prior to the minimum rate established for each unit by the State Legislature beginning with the 2007/2008 fiscal year. The total aggregate computed contribution after application of the minimum is 6.77 % of payroll.

Note: The normal cost should be viewed as the minimum long-term ongoing cost.

Computed Employer Contribution Requirements

Valuation Date:		Unfunded Actuarial	7 5. 4. 1
<u>June 30</u>	Normal Cost	Accrued Liability	<u>Total</u>
1990	5.74%	0.42%	6.16%
1995	7.18	(0.25)	6.93
1996	7.23	(0.60)	6.63
1997	6.94	(0.96)	5.98
1998	6.92	(1.78)	5.14
1999	4.92	(3.04)	1.88
2000*	4.90	(3.75)	1.15
2001*	5.79	(4.08)	1.71
2002*	6.79	(2.84)	3.95
2003*	5.74	(1.67)	4.07
2004*	6.05	(0.58)	5.47
2005*	6.53	0.48	7.01
2005#	4.64	(0.18)	4.46
2006*	6.07	0.65	6.72

^{*} The computed contribution rates are before application of the minimum rates established by the Legislature.

The minimum rate is 2% for fiscal years beginning with 2001/2002, 4% for the 2005/2006 fiscal year 5% for the 2006/2007 fiscal years beginning and 6% for the fiscal years beginning with 2007/2008.

The minimum was increased to 6% beginning with the June 30, 2006 actuarial valuation, except that, for any employer whose actual contribution rate is less than 5% for the 2006/2007 Fiscal Year, that employer's contribution rate will not be subject to the 6% minimum. Instead, such an employer's contribution rate for the 2006/2007 Fiscal Year, and for each year thereafter, shall be at least 5% and not more than that employer's actual contribution rate.

Revised pursuant to changes enacted by the 2006 Legislature and the CORP Fund Manager.

Actuarial Accrued Liability

The total contribution is made up of two parts, the normal cost and the amortization of the unfunded actuarial accrued liability. For 11 of the participating units, the valuation assets exceed the actuarial accrued liability so they have a credit against the normal cost. The remaining 10 units have a contribution greater than the normal cost to pay for a portion of the past service liability. The Legislature has established a policy of amortizing, or funding, the unfunded actuarial accrued liability over an open period of 30 years. The excess was amortized over 20 years and applied as a credit.

The aggregate actuarial accrued liability exceeds the valuation assets by \$61,339,713.

	June 30, 2006
Actuarial Accrued Liability	
Retired members and survivors	\$384,512,841
Former members with vested benefits	12,884,713
Active members	<u>583,810,154</u>
Total	\$981,207,708
Valuation Assets*	919,867,995
Unfunded Actuarial Accrued Liability	\$61,339,713

^{*} This amount excludes the \$33,292,645 in investment income reserve held for future pension increases pursuant to state statute.

History of Assets and Accrued Liabilities

Valuation Date June 30	Valuation <u>Assets</u>	Actuarial Accrued <u>Liabilities</u>	Funded <u>Ratio</u>	Unfunded Actuarial Accrued <u>Liabilities</u>	Financing Period
1987	\$47,550	\$68,932	69%	\$21,382	40 yrs
1990	108,973	122,578	88.9	13,605	40
1995	265,006	254,189	104.3	(10,817)	34
1996	319,255	290,518	109.9	(28,737)	33
1997	393,904	355,590	110.8	(38,314)	20
1998	484,956	410,531	118.1	(74,425)	20
1999	592,152	443,676	133.5	(148,476)	20
2000	704,991	501,323	140.6	(203,668)	20
2001	776,177	554,387	140.0	(221,790)	20
2002	782,446	632,238	123.8	(150,208)	20
2003	811,791	709,298	114.4	(102,493)	20
2004	833,621	795,775	104.8	(37,946)	20
2005	872,981	906,025	96.4	33,044	20
2005#	872,981	863,791	101.1	(9,190)	20
2006	919,868	981,208	93.7	61,340	30

Dollar amounts in \$000.

Results shown throughout this report for years prior to 2001 were prepared by the previous actuarial firm.

[#] Revised pursuant to changes enacted by the 2006 Legislature and the CORP Fund Manager.

Aggregate Gain/Loss

		Year Ended <u>June 30, 2006</u>
(1) U	JAAL ^a at start of year	\$33,044,123
(2) N	Normal cost	56,284,702
(3) F	Funding method contributions	61,162,126
(4) I	nterest accrual	2,601,450
(5) E	Expected UAAL before changes	30,768,149
(6) (Change from amendments	none
. ,	Change from assumption and nethod revisions	(43,504,265)
(8) E	Expected UAAL after changes	(12,736,116)
(9) A	Actual UAAL	61,339,713
(9) G	fain(Loss)	(74,075,829)
(10) F	Percent of AAL ^b	8.2%

^a Unfunded Actuarial Accrued Liability

^b Actuarial Accrued Liability at beginning of year

Aggregate Actuarial Balance Sheet June 30, 2006

Actuarial Assets

Accrued Assets		
Member accumulated contributions	\$193,818,602	
Employer and benefit payment reserves	583,720,915	
Funding value adjustment	175,621,123	
Total accrued assets*		\$953,160,640
Prospective assets (computed value)		
Member contributions	259,633,626	
Employer normal costs	208,925,445	
Employer unfunded actuarial accrued liability	61,339,713	
Total prospective assets		529,898,784
Total Actuarial Assets		\$1,483,059,424

^{*} Includes \$33,292,645 reserve for payment of ad-hoc pension increases. The net funding value of assets is \$919,867,995.

Actuarial Present Values (Liability)

Pensions in payment status		
Service pensions	\$311,299,880	
Disability pensions	15,487,014	
Survivor pensions	41,115,512	
Health insurance	16,610,435	
Total benefit values		\$384,512,841
Prospective pension payments and refunds (future retirements)		1,017,181,574
Prospective health insurance payments (future retirements)		47,902,489
Reserve for future pension increases		33,292,645
Stabilization reserve account		169,875
Total Actuarial Present Values (Liability)		\$1,483,059,424

Employer Contribution Requirements 2007/2008 Fiscal Year Expressed as Percents of Covered Compensation

Amort. of Unf. Act. Normal Accr. **Total Computed Total Required Employer** Cost **UAAL*** Emp. Contrib. **Emp. Contribution Apache County Corrections Officers** 6.84% (0.26)%6.58% 6.58% **Cochise County Corrections Officers** 6.63 (0.23)6.40 6.40 4.99 3.89 5.00 Coconino County Corrections Officers (1.10)Department of Corrections 6.41 0.63 7.04 7.04 Department of Juvenile Corrections 6.33 0.36 6.69 6.69 Gila County Corrections Officers 6.42 (0.25)6.17 6.17 Gila County Dispatchers 5.99 5.56 5.56 (0.43)**Graham County Corrections Officers** 5.37 (0.47)4.90 5.00 **Graham County Dispatchers** 2.65 (0.11)2.54 5.00 Maricopa County Corrections Officers 5.12 1.02 6.14 6.14 **Mohave County Corrections Officers** 5.00 4.64 (4.18)0.46 Navajo County Corrections Officers 5.09 (1.08)4.01 5.00 Pima County Corrections Officers 5.72 1.72 7.44 7.44 **Pinal County Corrections Officers** 5.36 0.28 5.64 5.64 **Pinal County Dispatchers** 3.72 1.40 5.12 5.12 Santa Cruz County Corrections Officers 5.04 (5.04)0.00 5.00 Town of Marana Dispatchers 2.78 0.99 3.77 5.00 6.94 Town of Oro Valley Dispatchers 4.69 2.25 6.94 Wickenburg Dispatchers 6.49 2.33 8.82 8.82 Yavapai County Corrections Officers 5.39 0.75 6.14 6.14 Yuma County Corrections Officers 4.90 (1.76)3.14 5.00 **Total** 6.07% 0.65% 6.72% 6.77%

^{*} Thirty years from July 1, 2006 (20 years credit).

Actuarial Accrued Liability - Valuation Assets - Amortization Payment

	Actuarial				
	Accrued	<u>Valuati</u>	on Assets	Emp. Unf. Act.	Amortization
Employer	Liability	Members	Employers	Acc. Liability	Payment*
Apache County Corrections Officers	\$1,027,478	\$229,233	\$821,672	\$(23,427)	0.00%
Cochise County Corrections Officers	4,472,940	984,608	3,550,234	(61,902)	0.00
Coconino County Corrections Officers	2,767,032	1,022,948	2,231,686	(487,602)	0.00
Department of Corrections	679,229,498	134,317,719	507,024,663	37,887,116	0.63
Department of Juvenile Corrections	64,363,933	13,134,130	48,839,977	2,389,826	0.36
Gila County Corrections Officers	1,262,314	368,743	966,361	(72,790)	0.00
Gila County Dispatchers	910,955	222,948	731,601	(43,594)	0.00
Graham County Corrections Officers	911,808	162,999	800,451	(51,642)	0.00
Graham County Dispatchers	87,695	35,565	58,432	(6,302)	0.00
Maricopa County Corrections Officers	143,415,991	27,215,699	99,298,830	16,901,462	1.02
Mohave County Corrections Officers	2,532,419	636,560	3,372,457	(1,476,598)	0.00
Navajo County Corrections Officers	1,490,845	390,538	1,342,637	(242,330)	0.00
Pima County Corrections Officers	49,891,250	8,502,864	34,814,671	6,573,715	1.72
Pinal County Corrections Officers	7,477,573	1,892,896	5,221,122	363,555	0.28
Pinal County Dispatchers	1,140,642	217,409	731,358	191,875	1.40
Santa Cruz County Corrections Officers	1,105,276	275,641	1,556,526	(726,891)	0.00
Town of Marana Dispatchers	293,341	84,888	102,104	106,349	0.99
Town of Oro Valley Dispatchers	1,140,381	321,548	568,327	250,506	2.25
Wickenburg Dispatchers	331,924	43,901	180,619	107,404	2.33
Yavapai County Corrections Officers	9,305,404	2,072,266	6,074,086	1,159,052	0.75
Yuma County Corrections Officers	8,049,009	1,685,498	7,761,580	(1,398,069)	0.00
Totals	\$981,207,708	\$193,818,601	\$726,049,394	\$61,339,713	0.65%

^{*}Thirty years from July 1, 2006 (20 years credit).

Section Three:

Retirement Plan Benefit Provisions



Summary of Plan Provisions Valued and/or Considered

Normal Retirement (no reduction for age). A corrections officer may retire upon meeting one of the following age and service requirements:

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

The amount of normal pension at 20 years of credited service is 50% of average monthly salary with 2% increments for every year over 20 years of credited service up to 25 years of credited service. With 25 or more years of credited service the accrual rate is 2.5% for each year. Maximum is 80% of average monthly salary.

Early Retirement: (reduction for age). No provision.

Vested Termination (**deferred retirement**): A corrections officer may be eligible for deferred retirement after completion of 10 or more years of credited service if member contributions are left on deposit in the plan. The amount of deferred pension is determined in the same manner as a normal retirement pension based on credited service, compensation and benefit provisions at the time of termination.

Disability Retirement. A corrections officer who is injured in the performance of his duties which totally and permanently prevent him from performing a reasonable range of duties in his department and was the result of either physical contact with an inmate, responding to a confrontational situation with an inmate or a job-related motor vehicle accident may be retired under accidental disability. A corrections officer who becomes incapacitated for any gainful employment, as the direct and proximate result of performance of duty as a corrections officer, may be retired by the fund manager under a total and permanent disability. The amount of pension for both types of disability is 50 percent of average monthly salary.

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

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

Post-Retirement Adjustments. Pensions payable to retirees or beneficiaries who have been on the retirement rolls for at least two years or are age 55 or older and were on the retirement rolls on June 30 of the previous year may receive pension increases up to 4%. Increases are subject to the level of investment income earned.

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

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

Member Contributions. 8.50 % of base salary. For Fiscal Year 2007/2008, the member contribution rate is 7.96% pursuant to legislation adopted in 2005.

Employer Contributions. Level percent of payroll normal cost plus 30 year amortization of unfunded actuarial accrued liability (20 year amortization for accrued assets in excess of accrued liabilities). The minimum employer contribution rate is 6% for fiscal years beginning with FY 2007/2008 (5% for units under 5% as of June 30, 2005 valuation).

Section Four:

Actuarial Assumptions And Methods



Summary of Valuation Assumptions

Economic Assumptions

Interest Rate: 8.50% (net of expenses)

Salary Increases: 5.00% for inflation and 0.5% for other across-the-board increases, plus age-

related merit and longevity.

Sample Annual Rates of Salary Increase

Age	Across-the- Board	Merit and Longevity	Other	Total
20	5.00%	3.0%	0.5%	8.50%
25	5.00	3.0	0.5	8.50
30	5.00	2.6	0.5	8.10
35	5.00	1.1	0.5	6.60
40	5.00	0.2	0.5	5.70
45	5.00	0.2	0.5	5.70
50	5.00	0.2	0.5	5.70
55	5.00	0.1	0.5	5.60
60	5.00	-	0.5	5.50
65	5.00	-	0.5	5.50

Demographic Assumptions

Non-Disability Mortality rates: 1971 Group Annuity Mortality Table Projected to 2000 (Male), female ages set back six years. (first used for June 30, 1999 valuation.)

Disability Mortality Rates: 1971 Group Annuity Mortality Table Projected to 1984 (Male), female ages set back six years.

	Single Life Retirement Values										
	Non-Disability Table Disability Table Non-Disability Table					oility Table Disability Table					
	Present Va	alue of \$100	Present Va	alue of \$100	Futur	e Life	Futui	re Life			
Sample	Monthly	For Life	Monthly	For Life	Expectano	y (Years)	Expectan	cy (Years)			
Ages	Men	Women	Men	Women	Men	Women	Men	Women			
20					56.90	62.76	56.03	61.88			
25					52.02	57.88	51.16	57.00			
30					47.16	53.00	46.32	52.13			
35					42.33	48.13	41.50	47.28			
40	\$13,588	13,977	\$13,510	\$13,923	37.55	43.30	36.73	42.46			
45	13,130	13,664	13,028	13,591	32.84	38.50	32.06	37.68			
50	12,549	13,232	12,420	13,135	28.32	33.77	27.57	32.98			
55	11,829	12,675	11,674	12,552	24.02	29.21	23.33	28.45			
60	10,930	11,986	10,752	11,836	19.94	24.86	19.32	24.16			
65	9,835	11,127	9,643	10,952	16.13	20.74	15.59	20.10			
70	8,601	10,069	8,412	9,878	12.73	16.86	12.30	16.31			
75	7,338	8,853	7,172	8,661	9.86	13.37	9.54	12.92			
80	6,043	7,597	5,909	7,425	7.44	10.40	7.22	10.06			
85	4,917	6,293	4,826	6,152	5.61	7.87	5.48	7.64			
90	3,964	5,126	3,915	5,026	4.24	5.93	4.18	5.79			

Termination of Employment: Service-related rates for first five years of employment and agerelated rates after first five years of employment. The sample rates are as follows:

		Percent of Active Members							
Sample Ages	Years of Service	Separating Within the Year	Disabled Within the Year						
All	0	30.0%							
	1	25.0	(all years of service)						
	2	20.0	(n						
	3	15.0							
	4	12.0							
25	5 and over	7.0	0.08%						
30		7.0	0.10						
35		7.0	0.12						
40		6.0	0.25						
45		6.0	0.33						
50		5.0	0.40						
55		5.0	0.47						
60		5.0	0.50						

Rates first used for June 30, 1999 valuation

Retirement Rates: Age-related rates based on the following schedule:

Percent of Active Members Retiring within Year Following Attainment of Indicated Retirement Age

	Percent of Active Members Retiring
Age	During Next Year
40-44	25%
45	25
46	25
47	25
48	25
49	25
50	25
51	25
52	25
53	25
54	25
55	25
56	25
57	25
58	25
59	25
60	30
61	30
62	40
63	40
64	40
65	100

Active members are eligible to retire at any age with 20 (25 for dispatchers) years of service, at age 62 with 10 years of service or when the sum of age and service equals at least 80.

These rates, adopted by the Fund Manager, as recommended by the Plan's actuary, were first used for the June 30, 1999 valuations.

Actuarial Method Used for the Valuation

Normal Cost. Normal cost and the actuarial present values between service rendered before and after the valuation date were determined using the projected unit credit actuarial cost method.

Actuarial Accrued Liability. The actuarial accrued liability allocated to service rendered prior to the valuation date, including experience gains and losses, was computed using the assumptions summarized in this report. Accrued valuation assets were subtracted from the computed actuarial accrued liability. Any unfunded amount would be amortized as level percent of payroll over an open period of 30 years. If accrued valuation assets exceed the actuarial accrued liability, the excess is 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 5.50% annually for the purpose of computing the amortization payment (credit) as a level percent of payroll.

Section Five: Valuation Data



Derivation of Funding Value of Pension Fund Assets Values as of June 30

	2002	2003	2004	2005	2006
Beginning of Year					
(1) Book Value	\$631,618,088	\$646,861,802	\$587,318,350	\$615,695,876	\$662,258,326
(2) Market Value	683,192,443	586,328,472	622,938,516	719,235,235	788,873,785
(3) Funding Value*	821,997,262	816,897,977	842,500,476	879,533,619	914,396,008
End of Year					
(4) Market Value	586,328,472	622,938,516	719,235,235	788,873,785	861,782,725
(5) Net Addition to Assets,					
Excluding Investment Income	4,322,458	(1,298,955)	5,408,517	3,792,355	8,710,956
(6) Total Net Investment Income = (4) - (2) - (5)	(101,186,429)	37,908,999	90,888,202	65,846,195	64,197,984
(7) Projected Net Rate of Return	9.00%	9.00%	9.00%	8.75%	8.50%
(8) Projected Investment Income = $(7) x[(3) + .5 x (5)]$	74,174,264	73,462,365	76,068,426	77,125,107	78,093,876
(9) Investment Income in Excess of Proj.	(175,360,693)	(35,553,366)	14,819,776	(11,278,912)	(13,895,892)
(9a) Allocation to Future Benefit Increase Reserve (FBIR) (ACTUAL	L)				
(9b) Allocation to Funding Value of Assets ((9) - (9a))	(175,360,693)	(35,553,366)	14,819,776	(11,278,912)	(13,895,892)
(10) Excess Investment Income Recognized*					
(10a) From Current Year =(9b)/7 in 2003 and after	(43,840,173)	(5,079,052)	2,117,111	(1,611,273)	(1,985,127)
(10b) From One Year Prior	(52,004,733)	(21,920,087)	(5,079,052)	2,117,111	(1,611,273)
(10c) From Two Years Prior	4,960,482	(20,801,893)	(21,920,087)	(5,079,052)	2,117,111
(10d) From Three Years Prior	7,288,417	1,240,121	(20,801,893)	(21,920,087)	(5,079,052)
(10e) From Four Years Prior	0	0	1,240,121	(20,801,893)	(21,920,087)
(10 f) From Five Years Prior				1,240,121	(20,801,893)
(10g) From Six Years Prior					1,240,121
(11) Change in Funding Value = $(5) + (8) + (9a) + (10)$ [ag]	(5,099,285)	25,602,499	37,033,143	34,862,389	38,764,632
End of Year Values					
(12) Book Value	\$646,861,802	\$587,318,350	\$615,695,876	\$662,258,326	\$744,246,872
(4) Market Value	586,328,472	622,938,516	719,235,235	788,873,785	861,782,725
(13) Preliminary Funding Value (3) + (11)	816,897,977	842,500,476	879,533,619	914,396,008	953,160,640
(14) Future Benefit Increase Reserve	34,452,064	30,709,183	45,912,625	41,415,092	33,292,645
(15) Funding Value (13) - (14)	782,445,913	811,791,293	833,620,994	872,980,916	919,867,995
(16) Funding Value Adjustment (15) - (12) * Four year recognition through June 30, 2002. Beginning with the June 30, 2003 va	135,584,111 duation, seven year recogniti	224,472,943 on was used for the current	217,925,118 year. The remaining amo	210,722,590 unt from the prior year is r	175,621,123 ecognized over 6 years,

^{*} Four year recognition through June 30, 2002. Beginning with the June 30, 2003 valuation, seven year recognition was used for the current year. The remaining amount from the prior year is recognized over 6 years, from the second prior year over 5 years, from the third prior year over 4 years, from the fourth prior year over 3 years, form the fifth prior year over 2 years, and from the sixth prior year over 1 year.

Section Five: Valuation Data

Participant Summary

Pensions Being Paid	Number	Annual Pensions	Average Pensions
Retired Members			
Service Pensions	1,528	\$31,308,171	\$20,490
Disabilty Pensions	82	1,454,870	17,742
Totals	1,610	32,763,041	20,350
Survivors			
Spouses	312	4,114,575	13,188
Children with Guardians*	33	394,566	11,957
Totals	345	4,509,141	13,070
Total Pensions Being Paid	1,955	\$37,272,182	\$19,065

Averages

_	Average Age	Average Service	Average Retirement Age
_	(Years)	(Years)	(Years)
Service Retired Members	63.4	18.3	57.9
Disability Retired Members	51.9	9.4	44.6
Spouse Beneficiaries	61.3	10.7	51.4

Summaries of Retired Members and Survivors June 30, 2006 Tabulated by Attained Age of Recipient

	Service			Disability	Sı	Survivors		Totals		
Attained		Annual		Annual		Annual		Annual		
Age	No.	Pensions	No.	Pensions	No.	Pensions	No.	Pensions		
Children w/ Guardians		\$ -		\$ -	33	\$394,566	33	\$394,566		
20-24			2	30,276			2	30,276		
25-29					2	21,634	2	21,634		
30-34			1	19,829	7	90,883	8	110,712		
35-39			9	145,597	11	149,448	20	295,045		
40-44	41	946,395	11	171,687	16	215,072	68	1,333,154		
45-49	111	2,908,545	11	204,800	18	242,918	140	3,356,263		
50-54	164	4,538,667	17	317,577	28	397,052	209	5,253,296		
55-59	211	6,064,862	14	257,233	48	739,448	273	7,061,543		
60-64	272	6,073,420	8	145,400	56	809,497	336	7,028,317		
65-69	347	5,649,112	4	80,578	43	499,956	394	6,229,646		
70-74	228	3,252,687	5	81,893	44	523,492	277	3,858,072		
75-79	118	1,447,030			28	323,277	146	1,770,307		
80 and Over	36	427,453			11	101,898	47	529,351		
Totals	1,528	\$31,308,171	82	\$1,454,870	345	\$4,509,141	1,955	\$37,272,182		

Pensions Being Paid

Valuation Date		Annual	% Incr. in Annual	Average	Present Value	of Pensions
<u>June 30</u>	<u>No.</u>	Pensions	Pensions	<u>Pension</u>	<u>Total</u>	Average
1987	15	\$ 103,522	- %	\$6,901	\$982,116	\$65,474
1990	115	765,738	34.0	6,659	7,150,080	62,175
1995	435	3,456,705	27.5	7,946	34,140,660	78,484
1996	504	4,274,602	23.7	8,481	41,777,424	82,892
1997	598	5,305,705	24.1	8,872	52,028,400	87,004
1998	708	6,884,614	29.8	9,724	66,342,827	93,705
1999	825	9,642,797	40.1	11,688	89,514,713	108,503
2000	925	11,042,151	14.5	11,937	107,650,253	116,379
2001	1,040	13,446,069	21.8	12,929	124,247,094	119,468
2002	1,218	17,660,064	31.3	14,499	166,073,532	136,349
2003	1,363	21,653,042	22.6	15,886	201,489,450	147,828
2004	1,536	26,261,143	21.3	17,097	255,272,652	166,193
2005	1,733	31,329,225	19.3	18,078	332,199,210	191,690
2006	1,955	37,272,183	19.0	19,065	384,512,841	196,682

Retired Members and Survivors – By Employer

		Retired Mo	ember	<u>'S</u>	<u>Survivors</u>			Totals	
	<u> </u>	<u>Service</u>	<u>Di</u>	<u>sability</u>		<u>No.</u>			
						Child			
		Annual		Annual		with	Annual		Annual
Employer	No.	Pensions	No.	Pensions	Spouse	<u>Guardian</u>	Pensions	No.	Pensions
Apache County Corrections Officers	1	\$26,495	1	\$13,191			\$ -	2	\$39,686
Cochise County Corrections Officers	13	142,265			4		28,041	17	170,306
Coconino County Corrections Officers			1	16,409				1	16,409
Department of Corrections	1,130	22,731,758	38	661,776	230	30	3,429,675	1,428	26,823,209
Department of Juvenile Corrections	81	2,028,465	2	24,340	22	1	292,959	106	2,345,764
Gila County Corrections Officers									
Gila County Dispatchers									
Graham County Corrections Officers	1	32,894						1	32,894
Maricopa County Corrections Officers	187	4,022,805	19	368,905	34		445,951	240	4,837,661
Mohave County Corrections Officers	4	40,062	2	28,191	1		11,488	7	79,741
Navajo County Dispatchers	2	28,294			1		9,641	3	37,935
Pima County Corrections Officers	71	1,561,873	16	290,997	12		156,624	99	2,009,494
Pinal County Corrections Officers	3	75,462			1		12,302	4	87,764
Pinal County Dispatchers	1	14,477						1	14,477
Santa Cruz County Corrections Officers	2	33,979						2	33,979
Town of Marana Dispatchers									
Town of Oro Valley Dispatchers	1	33,726						1	33,726
Wickenburg Dispatchers					1		14340	1	14,340
Yavapai County Corrections	19	270,159	2	33,783	5	1	87,110	7	391,052
Yuma County Corrections Officers	12	265,458	1	17,278	1	1	21,010	5	303,746
Totals	1,528	\$31,308,172	82	\$1,454,870	312	33	\$4,509,141	1,955	\$37,272,183

Active Members Included in Valuation

Historical Schedule

Valuation Date	Partic. Units	Active Members	Valuation Payroll (+000)	Age (Yrs.)	Service (Yrs.)	Pay	% Increase in Avg. Pay
6-30-87		4,936	\$102,910	38.0	3.5	\$ 20,849	- %
6-30-90	11	6,478	136,693	37.8	4.4	21,101	(2.0)
6-30-95	12	8,365	198,603	38.2	5.3	23,742	4.6
6-30-96	12	8,945	224,686	38.0	5.2	25,119	5.8
6-30-97	12	9,728	249,203	38.1	5.3	25,617	2.0
6-30-98	12	9,571	261,700	38.2	5.5	27,343	6.7
6-30-99	12	10,901	305,478	37.8	5.2	28,023	2.5
6-30-00	12	11,290	339,440	38.1	5.3	30,066	7.3
6-30-01	12	11,047	339,783	38.1	5.6	30,758	2.3
6-30-02	12	10,464	330,428	38.7	6.0	31,578	2.7
6-30-03	15	10,964	358,161	38.8	6.0	32,667	3.4
6-30-04	18	11,583	381,942	38.7	6.0	32,974	0.9
6-30-05	19	11,752	404,156	39.6	6.0	34,390	4.3
6-30-06	21	11,914	437,744	39.3	6.2	36,742	6.8

Active Members – June 30, 2006 Age and Service Distribution

Attained	Service								Valuation
Age	0-4	5-9	10-14	15-19	20-24	25-29	Over 30	No.	Payroll
Under 20	91							91	\$2,811,294
20-24	1,196	9						1,205	37,602,809
25-29	1,410	328	2					1,740	57,532,372
30-34	1,074	624	140	3				1,841	64,903,063
35-39	813	509	296	108	1			1,727	63,997,517
40-44	621	386	270	229	43	1		1,550	59,257,047
45-49	492	365	216	188	84	17		1,362	53,417,916
50-54	366	277	168	158	71	16	3	1,059	42,592,725
55-59	265	203	139	140	82	13		842	34,896,010
60-64	98	127	73	64	25	1	4	392	16,274,170
65-69	19	27	19	9	5			79	3,394,968
70-74	6	4	4	2	5		1	22	921,634
75-79	2							2	65,616
80-84	1						1	2	76,517
Totals	6,454	2,859	1,327	901	316	48	9	11,914	\$437,743,658

Group Averages:

Age: 39.3 years Service: 6.2 years Annual Pay: \$36,742

Inactive Members as of June 30, 2006

Attained				Service				
Age	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	Total
Under 20	14							14
Onder 20	14							14
20-24	158							158
25-29	198	7						205
30-34	157	25	7					189
35-39	114	17	11					142
40-44	71	16	6	4				97
45-49	74	6	10	6				96
50-54	60	12	20	6	1			99
55-59	51	11	24	14	1			101
60-64	21	3	13	3	2			42
65-69	9	1	1		1			12
70-74	3	1						4
Totals	930	99	92	33	5			1,159

Active Members – By Employer

					Average	
		Annual	Average Compensation		Age	Service
Employer	<u>No.</u>	Compensation	Amount	% Change	<u>(Yrs.)</u>	(Yrs.)
Apache County Corrections Officers	19	\$558,967	\$29,419	8.1	39.7	5.3
Cochise County Corrections Officers	62	1,712,113	27,615	1.2	40.5	6.9
Coconino County Corrections Officers	79	2,711,675	34,325	7.1	34.9	4.0
Department of Corrections	7,611	279,463,705	36,718	6.7	40.4	6.7
Department of Juvenile Corrections	853	31,653,821	37,109	9.6	41.9	5.6
Gila County Corrections Officers	59	1,843,708	31,249	4.4	44.3	3.1
Gila County Dispatchers	22	630,779	28,672	7.5	43.1	6.6
Graham County Corrections Officers	22	667,910	30,360		37.4	4.1
Graham County Dispatchers	14	35,812	2,558		30.5	1.7
Maricopa County Corrections Officers	2,003	76,431,091	38,158	8.0	35.6	4.9
Mohave County Corrections Officers	74	2,184,299	29,518	8.8	34.2	3.6
Navajo County Dispatchers	50	1,374,596	27,492	5.9	36.6	3.6
Pima County Corrections Officers	468	17,658,430	37,732	3.2	36.3	6.6
Pinal County Corrections Officers	161	5,962,471	37,034	0.4	37	5.4
Pinal County Dispatchers	18	634,747	35,264	1.0	39.6	6.9
Santa Cruz County Corrections Officers	20	653,409	32,670	7.5	34.8	5.1
Town of Marana Dispatchers	12	498,266	41,522	1.5	39.9	3.8
Town of Oro Valley Dispatchers	12	515,269	42,939	(0.6)	38.9	7.2
Wickenburg Dispatchers	6	214,871	35,812	(1.8)	49.3	4.0
Yavapai County Corrections	203	7,183,800	35,388	4.8	38.5	3.6
Yuma County Corrections Officers	146	4,825,900	33,054	3.1	31.3	4.5
Totals	11,914	\$437,415,639	\$36,714	6.8	39.3	6.6

Section Six: Accounting Disclosures



GASB Statement No. 25 Supplementary Information

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, 2006

Actuarial Cost Method: Individual Entry Age

Amortization method: Level percent open

Remaining amortization period: 30 years for unfunded actuarial accrued

liability, 20 years for excess.

Asset valuation method: Smoothed market value

Actuarial assumptions:

Investment rate of return 8.50%
Projected salary increases 5.50-9.00%
Includes inflation at 5.00%

Membership data as of June 30, 2006, is indicated in Section Five of this report.

Analysis of Funding Progress

Valuation Date June 30	(1) Valuation Value of <u>Assets</u>	(2) Actuarial Accrued <u>Liability</u>	(3) Percent Funded (1)/(2)	(4) Unfunded AAL (2)-(1)	(5) Annual Covered <u>Payroll</u>	(6) UAAL As a % Of Covered Payroll
1998	\$484,955,951	\$410,530,787	118.1%	\$(74,425,164)	\$261,700,318	-
1999	592,151,804	443,675,999	133.5	(148,475,805)	305,477,946	-
2000	704,990,577	501,322,987	140.6	(203,667,590)	339,439,892	-
2001	776,177,208	554,386,854	140.0	(221,790,354)	339,782,697	-
2002	782,445,913	632,237,814	123.8	(150,208,099)	330,427,800	-
2003	811,791,293	709,297,998	114.4	(102,493,295)	358,160,933	-
2004	833,620,994	795,774,862	104.8	(37,846,132)	381,942,220	-
2005	872,980,916	906,025,039	96.4	33,044,123	404,155,903	8.18
2006	919,867,995	981,207,708	93.7	61,339,713	437,743,658	14.01

10

Required Supplementary Information

Schedule of Employer Contributions

Year Ended June 30	Annual Required Contribution	Percent Contributed
1992	\$ 9,492,656	100.0
1993	10,099,143	100.0
1994	10,032,668	100.0
1995	10,565,831	100.0
1996	14,371,254	100.0
1997	16,704,445	100.0
1998	17,063,015	100.0
1999	17,109,704	100.0
2000	16,876,163	100.0
2001	14,927,396	100.0
2002	7,101,111	100.0
2003	7,397,596	100.0
2004	14,555,335	100.0
2005	16,291,914	100.0
2006	24,028,050	
2007	20,677,565	

Actual required contribution dollar amount will be based on the recommended contribution rate and the actual pensionable payroll for the period.

Trend Information

Year Ended <u>June 30</u>	Annual Pension <u>Cost</u>	Percent Contributed	Net Pension Obligation
1995	\$10,565,831	100.0	0
1996	14,371,254	100.0	0
1997	16,704,445	100.0	0
1998	17,063,015	100.0	0
1999	17,109,704	100.0	0
2000	16,897,163	100.0	0
2001	14,927,396	100.0	0
2002	7,101,111	100.0	0
2003	7,397,596	100.0	0
2004	14,555,335	100.0	0
2005	16,291,914	100.0	0
2006	24,028,050	100.0	0

Actuarial Accrued Liability – Valuation Assets – Amortization Payment

		(2)	(3)		(5)	
	(1)	Actuarial	Percent	(4)	Annual	
	Actuarial	Acc. Liability	Funded	Unfunded	Covered	
Employer	Value of Assets	Entry Age	(1)/(2)	<u>AAL (2) - (1)</u>	Payroll	(4)/(5)
Apache County Corrections Officers	\$1,050,905	\$1,027,478	102.3%	\$(23,427)	\$558,967	0.0%
Cochise County Corrections Officers	4,534,842	4,472,940	101.4%	(61,902)	1,712,113	0.0%
Coconino County Corrections Officers	3,254,634	2,767,032	117.6%	(487,602)	2,711,675	0.0%
Department of Corrections	641,342,382	679,229,498	94.4%	37,887,116	279,463,705	13.6%
Department of Juvenile Corrections	61,974,107	64,363,933	96.3%	2,389,826	31,653,821	7.5%
Gila County Corrections Officers	1,335,104	1,262,314	105.8%	(72,790)	1,843,708	0.0%
Gila County Dispatchers	954,549	910,955	104.8%	(43,594)	630,779	0.0%
Graham County Corrections Officers	963,450	911,808	105.7%	(51,642)	667,910	0.0%
Graham County Dispatchers	93,997	87,695	107.2%	(6,302)	35,812	0.0%
Maricopa County Corrections Officers	126,514,529	143,415,991	88.2%	16,901,462	76,431,091	22.1%
Mohave County Corrections Officers	4,009,017	2,532,419	158.3%	(1,476,598)	2,184,299	0.0%
Navajo County Corrections Officers	1,733,175	1,490,845	116.3%	(242,330)	1,374,596	0.0%
Pima County Corrections Officers	43,317,535	49,891,250	86.8%	6,573,715	17,658,430	37.2%
Pinal County Corrections Officers	7,114,018	7,477,573	95.1%	363,555	5,962,471	6.1%
Pinal County Dispatchers	948,767	1,140,642	83.2%	191,875	634,747	30.2%
Santa Cruz County Corrections Officers	1,832,167	1,105,276	165.8%	(726,891)	653,409	0.0%
Town of Marana Dispatchers	186,992	293,341	63.7%	106,349	498,266	21.3%
Town of Oro Valley Dispatchers	889,875	1,140,381	78.0%	250,506	515,269	48.6%
Wickenburg Dispatchers	224,520	331,924	67.6%	107,404	214,871	50.0%
Yavapai County Corrections Officers	8,146,352	9,305,404	87.5%	1,159,052	7,183,800	16.1%
Yuma County Corrections Officers	9,447,078	8,049,009	117.4%	(1,398,069)	4,825,900	0.0%
Totals	\$919,867,995	\$981,207,708	93.7%	\$61,339,713	\$437,415,639	14.0%