

September 10, 2001

The Fund Manager
Arizona Public Safety Personnel Retirement System
Phoenix, Arizona

Re: Arizona Corrections Officer Retirement Plan

This report contains the consolidated results of the June 30, 2001 actuarial valuation of the Arizona Corrections Officer Retirement Plan. The valuations determine the 2002-2003 Fiscal Year employer contribution requirements and the June 30, 2001 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, 2001 information submitted by your Administrator.

The valuations were made in accordance with generally accepted actuarial principles and practices. The valuation assumptions are the same as those used for the June 30, 2000 valuations, with the exception of an extended retirement pattern to reflect the earlier retirement eligibility enacted this year. The actuarial assumptions used in the valuations are reasonably related to the past experience of the Plan and represent reasonable expectations of future experience under the Plan.

Respectfully submitted,

Sandra W. Rodwan

Joseph A. Nichols

Members, American Academy of Actuaries

***Arizona Corrections Officer
Retirement Plan***

Actuarial Valuation as of June 30, 2001

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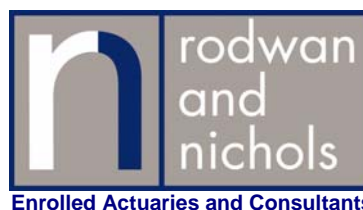
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Section One:
Valuation Summary



Enrolled Actuaries and Consultants

Purpose of Valuation

The purpose of the annual actuarial valuation of the Arizona Corrections Officer Retirement Plan as of June 30, 2001 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, 2002. 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, 2001, were computed to be \$554,386,854. The funding value of accrued assets was \$776,177,208. The ratio of the funding value of accrued assets to accrued liabilities was 140.0%.

Funding Value of Assets

A smoothed market value of assets was used for the June 30, 2001 valuation. This method, which spreads the difference between actual and expected investment return over four years, is unchanged from prior 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 14.29% of member payroll. Deducting member contributions of 8.50% of payroll resulted in an aggregate employer normal cost of 5.79% of payroll.

In the aggregate, the excess of accrued assets over accrued liabilities produced a temporary 20-year amortization credit of (4.08)% of payroll.

The aggregate net employer contribution for FY 2002/2003 was therefore computed to be 1.71% of payroll. After the application of the 2% minimum contribution required for each unit by Statute, the aggregate net employer contribution is 2.14% of payroll.

Retirement Plan Experience

Overall experience during the year ended June 30, 2001 was more favorable than expected. Investment return was the primary source of favorable experience. Even though the market value of assets decreased, the funding value increase was greater than expected. This was due to the method used to smooth investment gains and losses over a four-year period. Less than assumed salary increases also contributed to the overall favorable experience.

Benefit Provision Changes

The following benefit provision changes were effective for this valuation pursuant to legislation enacted in 2001.

- ❖ Normal retirement eligibility was reduced to 20 years of credited service at any age, the formula changed and the maximum pension was increased to 80% of average monthly salary.
- ❖ The post-retirement health insurance subsidies were increased.

Assumption and Method Changes

There were no changes in assumptions or methods used for the valuation other than extending the assumed retirement rates to reflect the earlier retirement eligibility.

Participant Data

	<u>6/30/2001</u>	<u>6/30/2000</u>
Active Members	11,047	11,290
Active Member Payroll	\$ 339,782,697	\$339,439,892
Retirees and Beneficiaries	1,040	925
Annual Pensions	\$13,446,069	\$11,042,151

Financial Data

	<u>6/30/2001</u>	<u>6/30/2000</u>
Smoothed Valuation Assets	\$821,997,262*	\$764,775,466*
Market Value of Assets	\$683,192,443	\$807,765,880

* The net smoothed value of assets used for the valuation after deducting the Future Benefit Increase Reserve was \$776,177,208 in 2001 and \$704,990,577 in 2000.

Comments, Recommendations and Conclusion

Comment 1: This report contains the consolidated results of the individual actuarial valuations of the 12 units in the Arizona Corrections Officer Retirement Plan as of June 20, 2001. The aggregate results are indicative of the overall condition of the Retirement System. The condition of each unit, however, is dependent upon its particular experience and characteristics.

Accrued valuation assets exceeded actuarial accrued liabilities in each of the 12 units. 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.

Comment 2: The funding of the Corrections Officer Retirement Plan is far ahead of schedule, largely as a result of favorable investment returns. It is important to note that the funding credits are not expected to continue indefinitely and may vary from year to year. ***For long-term budgeting, the employer normal cost should be viewed as the minimum annual cost.*** The normal cost is computed separately for each unit. In the aggregate, the employer normal cost has been computed to be 5.79% of payroll.

Comment 3: The net increase in the aggregate employer contribution rate is attributable to the benefit provision changes, offset in part by the overall favorable experience.

Comment 4: The increases in the post-retirement health insurance subsidy enacted this year were large. The impact on the computed liabilities and contribution rates would be significantly greater if these amounts were projected to increase in the future.

Conclusion: The accrued overall actuarial condition of the Retirement Plan continues to be excellent.



Section Two:
***Actuarial Calculations –
Funding***



Contribution Requirements – 2002/2003 Fiscal Year

Member: 8.50% of covered compensation

Employer: The aggregate computed contribution rate before application of the statutory minimum was 1.71% of covered compensation, consisting of 5.79% for normal cost, (4.08)% for amortization of unfunded actuarial accrued liability*.

Components of Computed Normal Cost

	Percents of Covered Compensation
Normal cost requirement	
Service pensions	
Members	
Survivors of retired members	9.65%
Disability pensions	0.69
Survivors of active members	0.52
Refunds of members' accumulated contributions	2.77
Health insurance	<u>0.67</u>
Total normal cost requirement	14.29%
Less member contribution	<u>8.50</u>
Employer normal cost requirement	5.79%

**In the aggregate, actuarial accrued liability, \$554,386,854, was exceeded by the funding value of accrued assets, \$776,177,208. All 12 units had assets in excess of accrued liabilities. The excess or the unfunded was amortized over 20 years and applied as a credit to the computed employer normal cost.*

These contribution rates are prior to the minimum 2% rate established for each unit by the State Legislature beginning with the 2001/2002 fiscal year. The total aggregate computed contribution after application of the minimum is 2.14% of payroll.

The experience of the Retirement Plan has been significantly more favorable than expected over the long term. This favorable experience has resulted in the credit which offsets the normal cost which otherwise would be payable. The normal cost should be viewed as the long-term ongoing cost, and should be seen as the minimum contribution requirement over the long term.

Computed Employer Contribution Requirements

Valuation Date: <u>June 30</u>	<u>Normal Cost</u>	<u>Unfunded Actuarial Accrued Liability</u>	<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

* *Computed contribution rates are before application of the 2% minimum employer contribution for each participating unit. Minimum rate established by State Legislature in 2000 for fiscal years beginning 2001/2002.*

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 all 12 of the participating units, the valuation assets exceed the actuarial accrued liability so they have a credit against the normal cost. The Legislature has established a policy of amortizing, or funding, the unfunded actuarial accrued liability over an open period of 20 years.

The aggregate valuation assets exceed the actuarial accrued liability by \$221,790,354.

	June 30, 2001
Actuarial Accrued Liability	
Retired members and survivors	\$ 133,492,081
Former members with vested benefits	4,366,829
Active members	<u>416,527,944</u>
Total	\$554,386,854
Valuation Assets*	\$776,177,208
Unfunded Actuarial Accrued Liability	\$(221,790,354)

** This amount excludes the \$ 45,820,054 in investment income reserve held for future pension increases pursuant to state statute.*

History of Assets and Accrued Liabilities

Valuation Date <u>June 30</u>	Valuation <u>Assets</u>	Actuarial Accrued <u>Liabilities</u>	Funded <u>Ratio</u>	Unfunded Actuarial Accrued <u>Liabilities</u>	Financing <u>Period</u>
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

Dollar amounts in \$000.

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

Aggregate Gain/Loss

	<u>Year Ended June 30, 2001</u>
(1) UAAL ^a at start of year	\$(203,667,590)
(2) Normal cost	36,659,508
(3) Funding method contributions	43,893,558
(4) Interest accrual	(18,655,615)
(5) Expected UAAL before changes	(229,557,255)
(6) Change from amendments	41,000,000 ^c
(7) Change from assumption revision	None
(8) Expected UAAL after changes	(188,557,255)
(9) Actual UAAL	(221,790,354)
(10) Gain(Loss)	33,233,099
(11) Percent of AAL ^b	6.6%

^a Unfunded Actuarial Accrued Liability

^b Actuarial Accrued Liability at beginning of year.

^c Estimated

Aggregate Actuarial Balance Sheet June 30, 2001**Actuarial Assets**

Accrued Assets		
Member Accumulated contributions	\$132,404,040	
Employer and benefit payment reserves	545,034,103	
Funding value adjustment	<u>144,559,120</u>	
Total accrued assets*		\$821,997,263
Prospective assets (computed value)		
Member contributions	226,721,728	
Employer normal costs	92,192,621	
Employer unfunded actuarial accrued liability	<u>(221,790,354)</u>	
Total prospective assets		<u>97,123,995</u>
Total Actuarial Assets		<u><u>\$919,121,258</u></u>

* Includes \$45,820,054 reserve for payment of ad-hoc pension increases. The net funding value of assets is \$776,177,208.

Actuarial Present Values (Liability)

Pensions in payment status		
Service pensions	\$93,964,213	
Disability pensions	9,539,301	
Survivor pensions	20,743,580	
Health insurance	<u>9,244,987</u>	
Total Benefit values		\$133,492,081
Prospective pension payments (future retirements)		654,962,150
Prospective health insurance payments (future retirements)		37,211,147
Prospective refunds of members contributions		47,635,825
Reserve for future pension increases		<u>45,820,055</u>
Total Actuarial Present Values (Liability)		<u><u>\$919,121,258</u></u>

**Employer Contribution Requirements
2002/2003 Fiscal Year
Expressed as Percents of Covered Compensation**

<u>Employer</u>	<u>Normal Cost</u>	<u>Amort. Of Unf. Act. Accr. Liability*</u>	<u>Total Computed Emp. Contrib. Requirements</u>	<u>Total Required Emp. Contrib. Requirements</u>
Apache County Corrections Officers	6.02%	-4.07%	1.99%	2.00%
Cochise County Corrections Officers	7.81	-6.64	1.17	2.00
Coconino County Corrections Officers	5.28	-1.65	3.63	3.63
Department of Corrections	5.75	-4.03	1.72	2.00
Department of Juvenile Corrections	6.14	-2.88	3.26	3.26
Maricopa County Corrections Officers	5.81	-5.27	0.54	2.00
Mohave County Corrections Officers	6.10	-6.10	0.00	2.00
Navajo County Corrections Officers	5.86	-4.83	1.03	2.00
Pima County Corrections Officers	5.80	-4.39	1.41	2.00
Santa Cruz County Corrections Officers	5.00	-5.00	0.00	2.00
Yavapai County Corrections Officers	5.65	-2.58	3.07	3.07
Yuma County Corrections Officers	5.25	-5.07	0.18	2.00
Totals	5.79%	-4.08%	1.71%	2.14%

*** Twenty years from July 1, 2001**

Actuarial Accrued Liability – Valuation Assets – Amortization Payment

<u>Employer</u>	<u>Actuarial Accrued Liability</u>	<u>Valuation Assets</u>		<u>Emp. Unf Act. Acc. Liability</u>	<u>Amortization Payment*</u>
		<u>Members</u>	<u>Employers</u>		
Apache County Corrections Officers	\$452,179	\$155,792	\$644,703	-\$348,316	0.00%
Cochise County Corrections Officers	2,376,167	587,608	3,342,447	-1,553,888	0.00
Coconino County Corrections Officers	1,174,731	470,026	1,415,947	-711,242	0.00
Department of Corrections	395,545,774	95,205,046	459,615,694	-159,274,966	0.00
Department of Juvenile Corrections	39,399,292	10,034,590	43,309,755	-13,945,053	0.00
Maricopa County Corrections Officers	75,812,237	16,638,854	87,601,197	-28,427,814	0.00
Mohave County Corrections Officers	1,735,357	511,286	3,314,400	-2,090,329	0.00
Navajo County Corrections Officers	737,172	232,348	1,236,064	-731,240	0.00
Pima County Corrections Officers	27,728,341	6,005,151	30,598,937	-8,875,747	0.00
Santa Cruz County Corrections Officers	577,145	213,228	1,093,978	-730,061	0.00
Yavapai County Corrections Officers	4,286,737	1,003,126	4,853,718	-1,570,107	0.00
Yuma County Corrections Officers	4,561,721	1,346,985	6,746,328	-3,531,592	0.00
Totals	\$554,386,854	\$132,404,040	\$643,773,168	-\$221,790,354	0.00%

*Twenty years from July 1, 2001.



Section Three:

***Retirement Plan
Benefit Provisions***



Enrolled Actuaries and Consultants

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 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 three-fourths of the pension being paid the deceased retired corrections officer or one-third of the average monthly salary of the deceased active corrections officer. Eligible surviving children are paid equal shares of the pension which would have been payable to a surviving spouse if a surviving spouse pension is not being paid. If no pension is payable because of the death of an active member, a refund of twice the member's accumulated contributions is paid to the beneficiary.

Other Terminations. The member is paid a refund of accumulated member contributions, plus an additional amount if the member has at least five years of service 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		
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.

Employer Contributions. Level percent of payroll normal cost plus 20 year amortization of unfunded actuarial accrued liability.



Section Four:

***Actuarial Assumptions
And Methods***



Enrolled Actuaries and Consultants

Summary of Valuation Assumptions

Economic Assumptions

Interest Rate: 9.0% (net of expenses)

Salary Increases: 5.5% for inflation and 1% for other across-the-board increased, plus age-related merit and longevity.

Sample Annual Rates of Salary Increase

Age	Across-the-Board	Merit and Longevity	Other	Total
20	5.5%	3.0%	1.0%	9.5%
25	5.5	3.0	1.0	9.5
30	5.5	2.6	1.0	9.1
35	5.5	1.1	1.0	7.6
40	5.5	0.2	1.0	6.7
45	5.5	0.2	1.0	6.7
50	5.5	0.2	1.0	6.7
55	5.5	0.1	1.0	6.6
60	5.5	-	1.0	6.5
65	5.5	-	1.0	6.5

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.

Sample Ages	Single Life Retirement Values							
	Non-Disability Table		Disability Table		Non-Disability Table		Disability Table	
	Present Value of \$100 Monthly For Life		Present Value of \$100 Monthly For Life		Future Life Expectancy (Years)		Future Life Expectancy (Years)	
	Men	Women	Men	Women	Men	Women	Men	Women
20					56.86	62.72	55.98	61.84
25					51.98	57.83	51.12	56.96
30					47.12	52.95	46.27	52.09
35					42.29	48.09	41.46	47.24
40	\$12,930	\$13,272	\$12,861	\$13,225	37.51	43.25	36.69	42.42
45	12,522	12,997	12,430	12,933	32.80	38.46	32.01	37.64
50	11,997	12,613	11,879	12,526	28.28	33.73	27.53	32.93
55	11,342	12,112	11,199	11,999	23.98	29.17	23.28	28.40
60	10,513	11,485	10,346	11,347	19.90	24.82	19.27	24.11
65	9,490	10,694	9,308	10,532	16.09	20.70	15.55	20.05
70	8,326	9,710	8,145	9,530	12.69	16.82	12.25	16.27
75	7,124	8,564	6,963	8,382	9.82	13.32	9.49	12.87
80	5,879	7,371	5,748	7,206	7.39	10.36	7.17	10.02
85	4,791	6,120	4,696	5,983	5.57	7.83	5.43	7.59
90	3,864	4,994	3,796	4,893	4.19	5.89	4.10	5.74

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

Sample Ages	Years of Service	Percent of Active Members	
		Separating Within the Year	Disabled Within the Year
All	0	30.0%	(all years of service)
	1	25.0	
	2	20.0	
	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**

Age	Percent of Active Members Retiring 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 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 allocation of actuarial present values between service rendered before and after the valuation date were determined using an individual entry age actuarial cost method having the following characteristics:

- ❖ The annual normal costs for each individual active member, payable from date of hire to date of retirement, are sufficient to accumulate the value of the member's benefit at the time of retirement;
- ❖ Each annual normal cost is a constant percentage of the member's year-by-year projected covered pay.

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 was amortized as level percent of payroll over an open period of 20 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 would otherwise would be payable.

Active member payroll was assumed to increase 6.5% annually for the purpose of computing the amortization payment (credit) as a level percent of payroll.



Section Five:
Valuation Data



Enrolled Actuaries and Consultants

Derivation of Funding Value of Pension Fund Assets

	Values as of June 30				
	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>
Beginning of Year					
(1) Book Value	\$519,862,469	\$588,205,472	\$631,938,840	\$	\$
(2) Market Value	696,231,350	807,765,880	683,192,443		
(3) Funding Value	634,606,216	764,775,466	821,997,262		
End of Year					
(4) Market Value	807,765,880	683,192,443			
(5) Net Addition to Assets, Exc. Inv. Income	18,762,353	13,986,319			
(6) Total Net Investment Income = (4) - (2) - (5)	92,772,177	(138,559,756)		-	-
(7) Projected Net Rate of Return	9.00%	9.00%			
(8) Projected Investment Income = (7) x [(3) + .5 x (5)]	57,958,865	69,459,176			
(9) Investment Income in Excess of Proj.	34,813,312	(208,018,932)			
(9a) Allocation to Future Benefit Increase Reserve (Actual)	14,971,383	-			
(9b) Allocation to Funding Value of Assets ((9) - (9a))	19,841,929	(208,018,932)	-	-	-
(10) Excess Investment Income Recognized (4 Yr. Recog.)					
(10a) From Current Year = .25 x (9b)	4,960,482	(52,004,733)	-	-	-
(10b) From One Year Prior	7,288,417	4,960,482	(52,004,733)	-	-
(10c) From Two Years Prior	13,532,135	7,288,417	4,960,482	(52,004,733)	-
(10d) From Three Years Prior	12,695,615	13,532,135	7,288,417	4,960,482	(52,004,733)
(11) Change in Funding Value =(5) + (8) + (9a) + (10) [a..d]	130,169,250	57,221,796			
End of Year Values					
(12) Book Value	588,205,472	631,618,088			
(4) Market Value	807,765,880	683,192,443			
(13) Preliminary Funding Value (3) + (11)	764,775,466	821,997,262			
(14) Future Benefit Increase Reserve	59,784,889	45,820,054			
(15) Funding Value (13) - (14)	704,990,577	776,177,208			
(16) Funding Value Adjustment (15) - (12)	116,785,105	144,559,120			

Participant Summary**Summary of Retired Members and Survivors
June 30, 2001**

<u>Pensions Being Paid</u>	<u>Number</u>	<u>Annual Pensions</u>	<u>Average Pensions</u>
Retired Members			
Service Pensions	748	\$10,239,384	\$ 13,689
Disability Pensions	<u>64</u>	<u>924,606</u>	14,447
Totals	812	11,163,990	13,749
Survivors			
Spouses	211	2,131,135	10,100
Children with Guardians*	<u>17</u>	<u>150,944</u>	8,879
Totals	228	2,282,079	10,009
Total Pensions Being Paid	1,040	\$13,446,069	\$ 12,929

* Does not include pensions payable to children whose parent is being paid a survivor pension.

Averages

	<u>Average Age</u>	<u>Average Service (Years)</u>	<u>Average Retirement Age</u>
Service Retired Members	66.0	16.0	61.0
Disability Retired Members	50.7	9.3	46.2
Spouse Beneficiaries	57.8	10.0	50.6

**Summaries of Retired Members and Survivors
June 30, 2001
Tabulated by Attained Age of Recipient**

Attained Age	Service		Disability		Survivors		Totals	
	No.	Annual Pensions	No.	Annual Pensions	No.	Annual Pensions	No.	Annual Pensions
Children w/Guardians	0	\$ 0	0	\$0	17	\$ 150,944	17	\$ 150,944
20-24	0	0	0	0	0	0	0	0
25-29	0	0	1	15,393	3	27,662	4	43,055
30-34	0	0	4	54,408	6	58,605	10	113,013
35-39	0	0	8	104,888	11	99,620	19	204,508
40-44	2	46,389	5	78,142	11	98,807	18	223,338
45-49	14	510,450	15	221,696	15	146,832	44	878,978
50-54	42	1,125,406	13	198,847	32	345,222	87	1,669,475
55-59	56	1,351,870	6	86,754	35	388,707	97	1,827,331
60-64	177	2,389,861	3	51,178	28	281,136	208	2,722,175
65-69	254	2,894,833	7	89,097	35	354,056	296	3,337,986
70-74	145	1,394,475	0	0	28	273,901	173	1,668,376
75-79	50	460,885	1	18,017	6	52,955	57	531,857
80 and Over	8	65,215	1	6,186	1	3,632	10	75,033
Total	748	\$ 10,239,384	64	\$ 924,606	228	\$ 2,282,079	1,040	\$13,446,069

Pensions Being Paid

Valuation Date June 30	No.	Annual Pensions	% Incr. in Annual Pensions	Average Pension	Present Value of Pensions	
					Total	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

Ninety-five terminated participants with a deferred vested benefit are included in the valuation.

Retired Members and Survivors – By Employer

<u>Employer</u>	<u>Retired Members</u>				<u>Survivors</u>			<u>Totals</u>	
	<u>No.</u>	<u>Annual Pensions</u>	<u>No.</u>	<u>Annual Pensions</u>	<u>No. Spouse</u>	<u>Child with Guardian</u>	<u>Annual Pensions</u>	<u>No.</u>	<u>Annual Pensions</u>
Apache County	0	\$ 0	0	\$ 0	0	0	\$ 0	0	\$ 0
Cochise County	12	89,615	0	0	1	0	4,287	13	93,902
Coconino County	0	0	1	13,487	0	0	0	1	13,487
Department of Corrections	547	7,511,717	31	440,943	162	16	1,769,050	756	9,721,710
Juvenile Corrections	44	741,657	1	8,351	13	1	132,317	59	882,325
Maricopa County	97	1,294,143	16	266,720	22	0	240,046	135	1,800,909
Mohave County	3	19,357	3	34,974	0	0	0	6	54,331
Navajo County	2	23,256	0	0	0	0	0	2	23,256
Pima County	29	420,240	10	131,971	10	0	101,450	49	653,661
Santa Cruz County	0	0	0	0	0	0	0	0	0
Yavapai County	13	131,953	1	13,959	2	0	27,069	16	172,981
Yuma County	1	7,446	1	14,201	1	0	7,860	3	29,507
Totals	748	\$ 10,239,384	64	\$ 924,606	211	17	\$ 2,282,079	1,040	\$ 13,446,069

**Active Members Included in Valuation
Historical Schedule**

Valuation Date	Partic. Units	Active Members	Valuation Payroll (+000)	Average			
				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

Active Members - June 30, 2001
Age and Service Distribution

Attained Age	Service							No.	Valuation Payroll
	0-4	5-9	10-14	15-19	20-24	25-29	Over 30		
Under 20	32							32	\$ 826,608
20-24	990	1						991	25,509,515
25-29	1,582	328	7					1,917	52,490,450
30-34	1,198	537	145	3				1,883	54,625,137
35-39	795	410	278	95	1			1,579	48,573,586
40-44	658	316	233	180	49	4		1,440	46,533,332
45-49	440	282	178	172	80	12		1,164	39,181,132
50-54	326	231	159	185	85	18	2	1,006	35,833,545
55-59	229	160	119	122	49	9	1	689	23,984,832
60-64	67	71	65	65	16	3		287	10,164,484
65-69	19	12	9	9	2			51	1,787,450
70-74	5	1						6	207,133
75-79						1	1	2	65,493
Totals	6,341	2,349	1,193	831	282	47	4	11,047	\$ 339,782,697

Group Averages:

Age: 38.1 years
Service: 6.6 years
Annual Pay: \$30,758.

Inactive Members - June 30, 2001
Age and Service Distribution

Attained Age	Service						No.
	0-4	5-9	10-14	15-19	20-24	25-29	
Under 20	3						3
20-24	88						88
25-29	189	3	1				193
30-34	167	7	6				180
35-39	81	6	6	1			94
40-44	79	19	7	5			110
45-49	59	14	16	3	2		94
50-54	65	14	11	6	3		99
55-59	40	8	19	5	2		74
60-64	21	5	18	8	2		54
65-69	8	1	1				10
70-74	3						3
Totals	803	77	85	28	9		1,002

Active Members – By Employer

Employer	No.	Annual Compensation	Average Compensation		Average	
			Amount	% Change	Age (Yrs.)	Service (Yrs.)
Apache County	23	\$ 534,228	\$ 23,227	3.1	35.0	3.7
Cochise County	61	1,463,174	23,986	8.0	38.6	5.2
Coconino County	89	2,694,143	30,271	10.7	29.5	2.2
Department of Corrections	8,106	247,297,726	30,508	0.8	38.2	5.6
Juvenile Corrections	986	30,293,131	30,723	4.8	39.6	4.5
Maricopa County	1,008	33,715,028	33,447	7.5	38.0	7.4
Mohave County	63	1,522,321	24,164	0.4	40.5	4.0
Navajo County	41	946,115	23,076	(10.4)	37.8	2.5
Pima County	368	12,640,035	34,348	7.7	35.0	7.2
Santa Cruz County	22	525,811	23,901	5.6	31.5	4.3
Yavapai County	127	3,797,366	29,901	12.8	38.1	3.5
Yuma County	153	4,353,619	28,455	10.9	31.7	4.4
Totals	11,047	\$ 339,782,697	\$ 30,758	2.3	38.1	5.6

Section Six:
Accounting Disclosures



Enrolled Actuaries and Consultants

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, 2001
Actuarial Cost Method:	Individual Entry Age
Amortization method:	Level percent open
Remaining amortization period:	20 years
Asset valuation method:	Smoothed market value
Actuarial assumptions:	
Investment rate of return	9.00%
Projected salary increases*	5.5% - 9.5%
* Includes inflation at	5.5%

Membership data as of June 30, 2001, is indicated in Section Five of this report.

Analysis of Funding Progress

Valuation Date June 30	(1) Valuation Value of Assets	(2) Actuarial Accrued Liability	(3) Percent Funded (1)/(2)	(4) Unfunded AAL (2)-(1)	(5) Annual Covered Payroll	(6) UAAL As a % Of Covered Payroll
1997	\$393,904,298	\$355,590,127	110.8%	\$(38,314,171)	\$249,203,373	- %
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	-

**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	7,094,294	

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 June 30	Annual Pension Cost	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

Actuarial Accrued Liability -- Valuation Assets – Amortization Payment

<u>Employer</u>	(1) Actuarial Value of Assets	(2) Actuarial Acc Liability Entry Age	(3) Percent Funded (1)/(2)	(4) Unfunded AAL (2)-(1)	(5) Annual Covered Payroll	(4)/(5)
Apache County	\$ 800,495	\$ 452,179	177.0	\$ (28,427,814)	\$ 33,715,028	0.0%
Cochise County	3,930,055	2,376,167	165.4	(2,090,329)	1,522,321	0.0%
Coconino County	1,885,973	1,174,731	160.5	(731,240)	946,115	0.0 %
Dept. of Corrections	554,820,740	395,545,774	140.2	(159,274,966)	247,297,726	0.0%
Juvenile Corrections	53,344,345	39,399,292	135.4	(1,553,888)	1,463,174	0.0%
Maricopa County	104,240,051	75,812,237	137.5	(711,242)	2,694,143	0.0%
Mohave County	3,825,686	1,735,357	220.5	(8,875,747)	12,640,035	0.0%
Navajo County	1,468,412	737,172	199.2	(1,570,107)	3,797,366	0.0%
Pima County	36,604,088	27,728,341	132.0	(13,945,053)	30,293,131	0.0%
Santa Cruz County	1,307,206	577,145	226.5	(730,061)	525,811	0.0%
Yavapai County	5,856,844	4,286,737	136.6	(3,531,592)	4,353,619	0.0%
Yuma County	8,093,313	4,561,721	177.4	(3,531,592)	4,353,619	0.0%
Totals	\$776,177,208	\$554,386,854	140.0%	\$(12,330,880)	\$ 339,782,697	0.0%