STATE OF WYOMING
RETIREMENT SYSTEM

REPORT ON ACTUARIAL VALUATION
AS OF JANUARY 1, 2003

Submitted By:
Buck Consultants
1200 Seventeenth Street, Suite 1200
Denver, CO 80202

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I. INTRODUCTION

This report summarizes the results of our actuarial valuation of the State of Wyoming Retirement System (the Retirement System) as of January 1, 2003. The contribution requirements presented in Section VI of the report are based on the following:

1. The benefit provisions of the Retirement System as of January 1, 2003.

2. The characteristics of covered active employees, inactive nonretired participants, and pensioners and beneficiaries as of December 31, 2002.

3. The assets of the Retirement System as of December 31, 2002.

4. Economic actuarial assumptions regarding future salary increases and investment earnings.

5. Other actuarial assumptions regarding employee termination, retirement disability, death, etc.

One purpose of the actuarial valuation is to determine the contribution sufficient to meet the long-term obligations to the participants covered by the Retirement System in accordance with the benefit provisions of the Wyoming Retirement Act.

If each of the actuarial assumptions were to be exactly fulfilled, the true actuarial cost of the Retirement System would equal the cost projected by the actuarial calculations. However, because of the length of time for which projections are made, and because of the great number of variables which can affect the emerging costs, the actual experience of the Retirement System will not match the assumptions. The costs, expressed as a percentage of payroll, will increase if the Retirement System experiences net actuarial losses and will decrease if the Retirement System experiences net actuarial gains.

Effective July 1, 2002, approximately 1,500 members of the State of Wyoming Retirement System employed in a law enforcement profession were removed from this system and placed in a new system, the Wyoming Law Enforcement Fund. A separate calculation determined that as of July 1, 2002, the liabilities of members transferring into the Law Enforcement System comprised 2.2798% of the total liabilities of the system. Accordingly, 2.2798% of the system's assets were deemed transferred into the Law Enforcement Fund. Many exhibits in this report are impacted by this change and adjustments are noted as appropriate.

II. SUMMARY OF VALUATION RESULTS

This section summarizes financial results for the Retirement System Plan based upon actuarial valuations as of January 1, 2003 and January 1, 2002.

	January 1, 2003	January 1, 2002
Contribution Requirements (as % of pay)		
Total Normal Cost	11.19%	11.87%
Employee Contributions	5.57%	5.72%
Employer Share	5.62%	6.15%
Amortization of Unfunded Liability	2.61%	(0.95%)
Administrative Expenses	0.14%	0.14%
Total Employer Cost	8.37%	5.34%
Total Cost (Employee + Employer)	13.94%	11.06%
Funded Status		
Actuarial Value of Assets (AV)	$ 4,352,424,000	$ 4,582,462,000
Actuarial Accrued Liability (AAL)	4,718,618,000	4,442,033,000
AAL Funded Percentage (AV ÷ AAL)	92.2%	103.2%

III. MEMBERSHIP CHARACTERISTICS

As of December 31, 2002, there were 31,135 employees in active service covered under the provisions of the Retirement System. The significant age, service, salary and accumulated contribution information for the active employees are summarized below along with comparative figures from the previous year.

	2002	2001
Number of active employees	31,135	32,811
Average age	45.6	44.9
Average years of service	10.4	9.9
Total current annual salary	$ 988,134,564	$ 964,121,422
Average annual salary	$ 31,737	$ 29,384
Total accumulated contributions	$ 755,758,927	$ 738,227,921
Average accumulated contributions	$ 24,274	$ 22,499

During 2002, the average age and average service increased, and the number of active employees decreased by about 5%. These changes are principally due to the law enforcement members, who are younger and have less service than other members, moving into a separate system.

* * * * *

In addition to the data received on active employees, data were provided on 4,624 vested inactive nonretired members who did not elect to receive their accumulated contributions when they left covered employment. The significant age, service (on date of termination) and accumulated contribution information for these inactive members are summarized below with comparative figures from the previous year.

	2002	2001
Number of inactive employees	4,624	4,797
Average age	51.2	51.1
Average years of service	9.2	9.4
Total accumulated contributions	$ 106,773,656	$ 107,527,598
Average accumulated contributions	$ 23,091	$ 22,416

The average age increased slightly and average service decreased slightly from last year. The number of inactive vested members decreased by 3.6% since last year.

* * * * *

Detailed summaries of the census data for active and inactive participants are shown in the tables contained in the Appendix to this report. The first page of the Appendix contains the index of the tables contained therein.

For these tables, the salaries shown for active employees are the actual 2002 salaries reported annualized for those members who were hired in 2002. For calculating active employee liabilities, the actual 2002 salaries reported were increased by 2.50% (one-half of the 5.0% salary scale) to approximate a pay rate as of January 1, 2003.

IV. BENEFIT EXPERIENCE

During the year ended December 31, 2002, the Board approved 740 pension awards. Of that total, approximately 39% commenced before becoming eligible for unreduced benefits. 30% of new retirees have unreduced benefits due solely to reaching age 60 while 13% of new retirees have attained the rule of 85 without reaching age 60. The remaining 18% of new retirees have both age 60 and rule of 85.

On December 31, 2002, a total of 13,465 pensioners were receiving retirement benefits from the Plan. The average monthly benefit for the pensioners was $958 compared to $915 as of the end of 2001. In addition, 1,385 beneficiaries were receiving monthly payments at December 31, 2002.

Detailed summaries of the census data for pensioners and beneficiaries are shown in the tables contained in the Appendix to this report. The information presented may be summarized as follows:

- Total annual benefits in force as of December 31, 2002 for the 14,850 pensioners and beneficiaries were $167.6 million.
- Of the 14,850 pensioners and beneficiaries, approximately 31% are under age 65, 39% are 65 through 74 and 30% are 75 or older.
- Approximately 42% of the 13,465 pensioners are receiving benefits in either a 50% or 100% joint and survivor annuity, including those with a pop-up feature (options 2, 3, 6 or 7).
- Approximately 11% of the 14,850 pensioners and beneficiaries were receiving monthly benefits of less than $200 and 71% were receiving at least $400 per month.
- For members retiring from active service during 2002, the average age of early and normal retirements was 60.3.
- Benefit payments from Plan assets in 2002 totaled $171,160,286, including refund payments of $8,701,574. In 2001, benefit payments were $156,186,100, including refund payments of $10,377,884.

The actuarial accrued liability for pension benefits to the 14,850 pensioners and beneficiaries amounted to over $1,954 million as of January 1, 2003. This liability is the actuarially estimated amount necessary to pay benefits to the pensioners and beneficiaries assuming that the amounts set aside would earn 8.0% interest per year until they are expended in benefit payments. This amount includes the 3.0% annual cost-of-living increases.

V. ASSETS

As of December 31, 2002, net assets totaled $3,627,019,835 at market value. This amount is equal to the assets shown in the December 31, 2002, auditor's report of $3,712,399,754, less assets transferred to the Wyoming Law Enforcement Fund (as of December 31, 2002) of $85,379,919. In comparison, the market value was $4,160,838,910 as of December 31, 2001. However, a somewhat different asset value is used for the actuarial valuation. Effective January 1, 2001, we are using a method that adjusts to market value gradually as follows:

> Appreciation and depreciation in excess of the expected appreciation, whether realized or unrealized, is spread over five years beginning with the year of occurrence. Interest and dividends are recognized immediately. The procedure results in recognition of all changes in market value after five years.

The procedure is applied to all investments. Since a portion of the excess appreciation not yet recognized was due to assets now transferred to the Law Enforcement Fund, we transferred 2.2798% of all unrecognized appreciation and depreciation in the four and one-half years preceding July 1, 2002, to the Law Enforcement Fund. The determination of the actuarial value of investments is shown in Table A that follows. There was approximately $973 million of deferred depreciation that will be recognized in future years. A statement of the actuarial assets for the years ended December 31, 2002 and 2001 is provided in Table B. The asset value on this basis is $4,352,423,802 and $4,582,462,306, respectively.

The amount of write-up or write-down (which reflects changing market values) is considered part of the investment income for the year. This procedure treats realized and unrealized capital gains or losses equally. In other words, the sale of a security -- either at a gain or loss -- has no effect on the value of assets for actuarial purposes. If the market value has gone up, the increase is gradually reflected in the value of the fund's assets; it does not have to be sold for the appreciation to be *realized.* This *automatic* reflection of market value appreciation or depreciation should eliminate any need for making investment decisions for the explicit purpose of meeting the investment return assumption.

Chart 1 is a graph showing the historical asset values on both actuarial and market value bases. This graph illustrates that the growth or decline of the market value of assets has also been reflected in the actuarial value of assets but with less volatility.

The investment portfolio is summarized in Table C. On December 31, 2002, 52% of the assets at market value consisted of equities.

Income and disbursements for 2002 and 2001 on the actuarial value basis are given in Table D. The progress of the fund for the last seventeen years is provided in Table E. It shows that assets have increased consistently from year to year until 2002, although the amount of the increase has varied with fluctuations in investment income. Benefit payments have consistently increased, confirming the growth in assets needed to finance lifetime benefits for current pensioners and those participants who will retire in the future.

Table F shows the components of investment earnings over the last seventeen years. Over the full period, the earnings of $3,840 million on an actuarial value basis represents an average annual return of 10.6%.

Market Value Results

These investment results are used to determine whether investment experience is meeting the Retirement System's actuarially assumed return. They do not, however, necessarily indicate the relative success of the Retirement System's investment program. Rather than on the smoothed actuarial value of assets, comparisons of performance (with other funds, investment institutions and market indices) are generally based on rates of return that reflect market changes in full.

The estimated investment returns for the last fourteen years on a *market value basis* as reported by your investment advisors are as follows:

Year	Rate of Return	Year	Rate of Return
1989	18.00%	1996	11.73%
1990	5.30%	1997	20.92%
1991	20.30%	1998	19.02%
1992	8.57%	1999	13.88%
1993	10.24%	2000	(0.99%)
1994	(2.78%)	2001	(4.47%)
1995	25.90%	2002	(9.29%)

These values can be used to illustrate the smoothing effect that results from using an actuarial value of assets. Chart 2 illustrates that the volatility of market returns is reduced by using an actuarial value of assets. By using an actuarial value that reduces the year-to-year fluctuations in return, the year-to-year fluctuations in cost are reduced.

The difference between the investment return rates at market value, when compared to similar return rates on the actuarial valuation basis, stems from the inclusion in the market value figures of all capital appreciation or depreciation whereas the results based on the actuarial valuation basis reflect only the write-up/down in accordance with the adopted valuation procedure.

The rates of return, based on full market value changes as presented herein, should not be taken as a truly adequate measure of the Retirement System's investment performance. There are many reasons for differences among portfolios in return rates based on market value and among managers during a given time period. While a manager's investment choices are an important factor, consideration must also be given to the effects of established policy guidelines and any special characteristics of the Plan that influence investment decisions. Those other factors, commonly dealt with in an investment performance study, are beyond the scope of this report.

TABLE A

DETERMINATION OF WRITE-UP (DOWN) AMOUNT AND ACTUARIAL VALUE OF INVESTMENTS AS OF DECEMBER 31, 2002 AND 2001

				PORTION OF TOTAL APPRECIATION/ (DEPRECIATION) DEFERRED			
				December 31, 2002		December 31, 2001	
Year Ending	Total Appreciation* (Depreciation)	Expected* Appreciation	Difference From Expected*	% Deferred	$ Deferred	% Deferred	$ Deferred
12/31/98	524,278,639	-	524,278,639	0%	0	20%	107,301,999**
12/31/99	401,008,675	-	401,008,675	20%	80,201,735	40%	164,145,663**
12/31/00	(174,445,845)	230,318,773	(404,764,618)	40%	(161,905,847)	60%	(248,524,636)**
12/31/01	(319,713,854)	223,300,711	(543,014,565)	60%	(325,808,739)	80%	(444,546,422)**
12/31/02	(494,704,675)	212,650,620	(707,355,295)	80%	(565,884,236)	0%	0

	December 31, 2002	December 31, 2001
(a) Total Deferred as of Valuation Date	$ (973,397,087)	$ (421,623,396)
(b) Total Appreciation (Depreciation) for Last Five Plan Years	(729,847,164)	437,675,490**
(c) Write-Up/(Down) Amount for the Year--Equals 20% of (b) Plus Rounding Adjustment	(145,969,434)	87,535,099

	January 1, 2003	January 1, 2002
Market Value of Investments	$ 3,832,877,993	$ 4,311,141,485
Less: Amount Transferred to Law Enforcement Fund	85,379,919	N/A
Less: Deferred Appreciation (Depreciation)	(973,397,087)	(421,623,396)
Preliminary Actuarial Value of Investments	$ 4,720,895,161	$ 4,732,764,881
Adjustment for 20% Corridor	(247,993,120)	0
Actuarial Value of Investments***	$ 4,472,902,041	$ 4,732,764,881

*Values in these columns for the Years Ending 1998 through 2001 have all been decreased by 2.2798% to reflect appreciation/(depreciation) transferred to the Law Enforcement Fund.

**The deferred dollar amounts are not consistent with the "Difference From Expected" values in the table because the table values have been adjusted for the unrecognized amounts transferred to the Law Enforcement Fund. The dollars deferred as of December 31, 2001 agree with last year's report – before the Law Enforcement members were transferred out.

***See Table B for actuarial value of assets.

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ASSETS OF THE FUND AS OF DECEMBER 31, 2002 AND 2001
(ACTUARIAL VALUE BASIS)

	2002	2001
Net Accounts Receivable/(Payable)	$ (120,478,239)	$ (150,302,575)
Preliminary Actuarial Value of Investments	4,720,895,161	4,732,764,881
Net Assets	$ 4,600,416,922	$ 4,582,462,306
Market Value of Assets	$ 3,627,019,835	$ 4,160,838,910
80% Minimum Actuarial Value	$ 2,901,615,868	$ 3,328,671,128
120% Maximum Actuarial Value	$ 4,352,423,802	$ 4,993,006,692
Adjustment for 20% Corridor	$ (247,993,120)	$ 0
Actuarial Value of Assets	$ 4,352,423,802	$ 4,582,462,306

Value of Assets

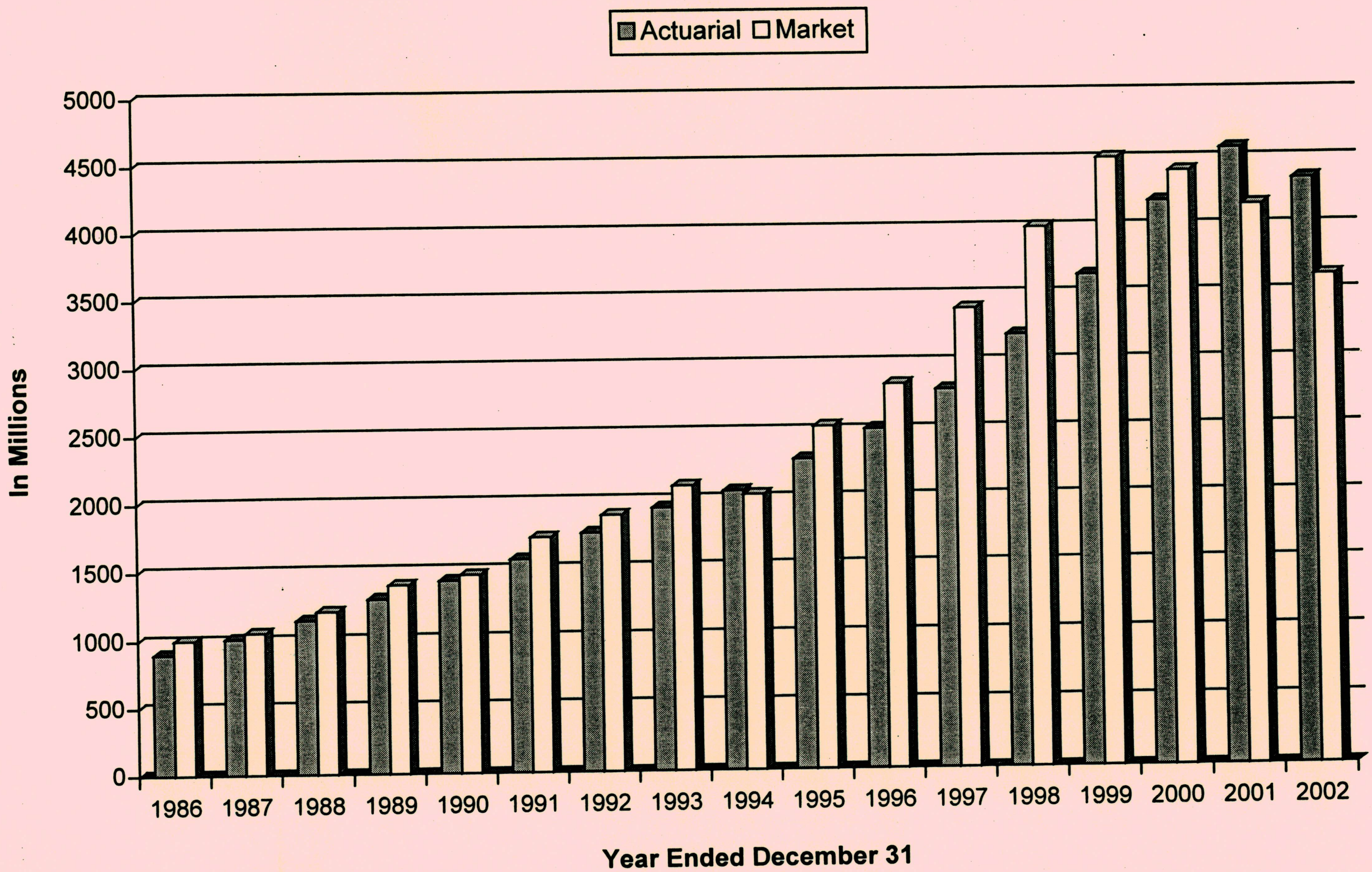

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TABLE C

INVESTMENT PORTFOLIO

Type of Investment	December 31, 2002 Market Value		December 31, 2001 Market Value	
	Amount	Percentage Distribution	Amount	Percentage Distribution
Cash Investments	$ 211,422,014	5.7%	$ 230,007,644	5.3%
Fixed Income Investments	$ 1,582,378,848	42.2%	$ 1,770,830,723	41.1%
Equity Investments	$ 1,953,697,212	52.1%	$ 2,310,303,118	53.6%
Total Investments*	$ 3,747,498,074	100.0%	$ 4,311,141,485	100.0%

* Total market value of assets (after adjusting for accruals) is $3,627,019,835 and $4,160,838,910 as of December 31, 2002 and 2001.

Note that this investment portfolio reflects the transfer of $85,379,919 as of December 31, 2002, to the Law Enforcement Fund.

TABLE D

SUMMARY STATEMENT OF INCOME AND DISBURSEMENTS FOR THE YEARS ENDED DECEMBER 31, 2002 AND 2001 (ACTUARIAL VALUE BASIS)

	2002		2001	
Contribution Income:				
Employer Contributions	$ 57,139,516		$ 56,465,278	
Employee Contributions	58,234,324		53,792,429	
Other	237,912		52,099	
Total Contribution Income	$ 115,611,752		$ 110,309,806	
Less: Administrative Expenses	(1,281,554)		(1,387,930)	
Net Contribution Income		$ 114,330,198		$ 108,921,876
Investment Income:				
Interest and Dividends	$ 120,095,700		$ 130,085,149	
Less: Investment Expenses	(8,173,582)		(7,523,216)	
Net Interest and Dividends	$ 111,922,118		$ 122,561,933	
Gross Write-Up of Assets	(145,969,434)		87,535,099	
Expected Appreciation	215,102,574		228,510,289	
Net Adjustment for 20% Corridor Around Market Value	0		0	
Net Investment Income		(66,937,862)		438,607,321
Net Income from Securities Lending		728,165		679,058
Total Income Available for Benefit Payments and Reserves		$ 48,120,501		$ 548,208,255
Benefit Payments:				
Pension Benefits	$ (162,458,712)		$ (145,808,216)	
Refunds	(8,701,574)		(10,377,884)	
Total Benefit Payments		(171,160,286)		(156,186,100)
Funds transferred to Law Enforcement Fund (as of June 30, 2002)	$ (89,230,435)		--	
Unrealized Appreciation/(Depreciation) transferred to Law Enforcement Fund	(16,032,115)		--	
Change in Gross Write-up for assets due to Law Enforcement Fund transfer	(1,736,169)		--	
Total transfer to Law Enforcement Fund (actuarial value basis)		$ (106,998,719)		--
Addition to Reserve for Future Benefit Payments		$ (230,038,504)		$ 392,022,155
Actuarial Value of Assets, Beginning of Year		4,582,462,306		4,190,440,151
Actuarial Value of Assets, End of Year		$ 4,352,423,802		$ 4,582,462,306

TABLE E

PROGRESS OF THE FUND THROUGH DECEMBER 31, 2002
(ACTUARIAL VALUE BASIS)

Plan Year	Employer Contributions*	Employee Contributions	Administrative Expenses	Net Investment Income	Benefit Payments	Transfers Out	Fund at Year End
17 Years Through December 31, 2002	$ 751,602,006	$ 745,390,798	$ (15,908,301)	$3,840,388,204	$(1,628,284,183)	$ (106,998,719)	$ 4,352,423,802
As of 12/31/85	--	--	--	--	--		766,233,997**
12/31/86	41,364,465	36,365,804	(782,000)	98,998,090	(42,082,765)		900,097,591
12/31/87	39,901,834	36,039,418	(808,023)	91,374,783	(50,604,364)		1,016,001,239
12/31/88	38,414,939	33,222,264	(444,343)	103,025,282	(48,627,479)		1,141,591,902
12/31/89	36,139,394	36,231,108	(424,136)	128,370,680	(55,459,353)		1,286,449,595
12/31/90	38,668,634	38,960,372	(850,148)	114,218,588	(61,154,261)		1,416,292,780
12/31/91	38,903,350	39,288,267	(863,301)	148,064,188	(69,348,501)		1,572,336,783
12/31/92	42,354,843	42,883,874	(909,653)	175,246,400	(75,211,430)		1,756,700,817
12/31/93	41,596,571	42,266,219	(801,026)	189,281,426	(82,480,713)		1,946,563,294
12/31/94	42,791,243	43,415,880	(888,518)	136,210,578	(89,707,717)		2,078,384,760
12/31/95	43,714,263	44,435,762	(937,480)	230,731,781	(99,689,985)		2,296,639,101
12/31/96	43,495,146	44,761,611	(1,028,163)	233,212,720	(108,536,621)		2,508,543,794
12/31/97	44,958,544	46,152,691	(1,147,818)	314,340,179	(117,126,096)		2,795,721,294
12/31/98	46,183,091	47,366,181	(1,074,562)	436,098,461	(123,858,991)		3,200,435,474
12/31/99	48,681,209	50,106,535	(1,182,899)	475,758,627	(132,428,572)		3,641,370,374
12/31/2000	50,539,675	51,868,059	(1,096,747)	592,379,739	(144,620,949)		4,190,440,151***
12/31/2001	56,517,377	53,792,429	(1,387,930)	439,286,379	(156,189,100)		4,582,462,306
12/31/2002	57,377,428	58,234,324	(1,281,554)	(66,209,697)	(171,160,286)	(106,998,719)	4,352,423,802

* Includes other state funding sources.
** Includes contributions and investment income net of expenses and benefit payments through December 31, 1985.
*** Includes the effect of the change in actuarial asset method.

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SUMMARY OF INVESTMENT RESULTS
(ACTUARIAL VALUE BASIS)

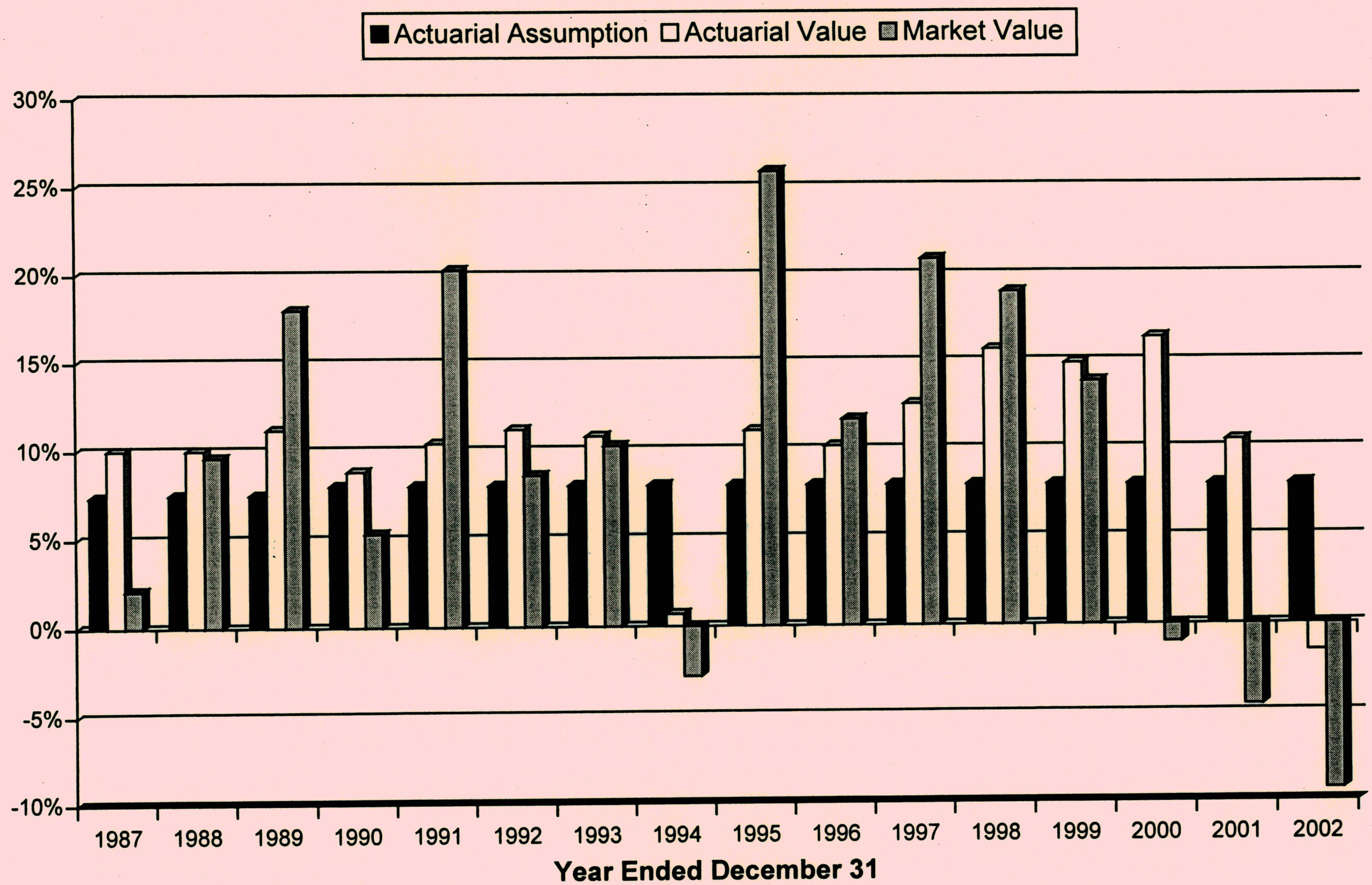
Plan Year	Average Amount of Assets in Fund	Assumed Investment Income Amount	Assumed Investment Income %	Net Dividends & Interest Income*	Appreciation Recognized**	Total Investment Income Amount	Total Investment Income %	Investment Gain (Loss)
1986	$ 783,667,000	$ 58,775,000	7.50%	$ 75,380,000	$ 23,618,000	$ 98,998,000	12.6%	$ 40,223,000
1987	912,362,000	68,427,000	7.50	76,183,000	15,192,000	91,375,000	10.0	22,948,000
1988	1,027,284,000	77,046,000	7.50	86,933,000	16,092,000	103,025,000	10.0	25,979,000
1989	1,149,835,000	86,238,000	7.50	88,865,000	39,506,000	128,371,000	11.7	42,133,000
1990	1,294,112,000	103,529,000	8.00	94,715,000	19,504,000	114,219,000	8.9	10,690,000
1991	1,420,283,000	113,623,000	8.00	99,550,000	48,514,000	148,064,000	10.4	34,441,000
1992	1,576,896,000	126,152,000	8.00	104,559,000	70,687,000	175,246,000	11.2	49,094,000
1993	1,757,392,000	140,591,000	8.00	106,022,000	83,259,000	189,281,000	10.8	48,690,000
1994	1,944,813,000	155,585,000	8.00	110,883,000	25,327,000	136,210,000	7.0	(19,375,000)
1995	2,072,615,000	165,809,000	8.00	117,721,000	113,011,000	230,732,000	11.1	64,923,000
1996	2,286,237,500	182,899,000	8.00	125,022,000	108,191,000	233,213,000	10.2	50,314,000
1997	2,495,225,000	199,618,000	8.00	123,671,000	190,669,000	314,340,000	12.6	114,722,000
1998	2,780,566,000	222,445,000	8.00	98,831,000	337,268,000	436,098,000	15.7	213,654,000
1999	3,183,615,000	254,689,000	8.00	133,493,000	342,266,000	475,759,000	14.9	221,070,000
2000	3,620,264,000	289,621,000	8.00	124,283,000	468,097,000	592,380,000	16.4	302,759,000***
2001	4,167,502,000	333,400,000	8.00	123,241,000	316,045,000	439,286,000	10.5	105,886,000
2002	4,501,189,000	360,095,000	8.00	112,650,000	(178,860,000)	(66,210,000)	(1.5)	(426,305,000)
Total Amount		$ 2,938,542,000		$ 1,802,002,000	$ 2,038,385,000	$ 3,840,387,000		$ 901,845,000
Average Rate of Investment Income Over Period							10.6%	

* Includes net effect of securities lending income, rebates and fees.

** Recognizes write-up of assets on an actuarial value basis and any adjustments necessary to bring the actuarial value within the 80% to 120% of market value corridor.

*** Includes effect of change in actuarial asset method

Investment Return



VI. RESULTS OF ACTUARIAL VALUATION

We have utilized an actuarial cost procedure known as the entry age normal cost method for funding all benefits. This method is used in situations where a cost is desired that will relatively remain level as a percentage of the participating payroll.

Under the entry age normal method, the total contribution requirement has three components: an annual normal cost, an allowance for expenses and a payment with respect to the unfunded actuarial accrued liability (UAAL).

The annual normal cost is calculated as the level percentage of pay required over each employee's period of covered employment to fund the total expected benefits. If the average entry age remains stable, the total normal cost rate should remain a level percentage of payroll.

The normal cost payments are not sufficient to finance the benefit program because credit is given for periods of prior service during which the normal cost contributions were not paid. Additional actuarial liability was also created by changes in the benefits, actuarial assumptions, funding method and by experience which differed from that projected by the actuarial assumptions.

We have calculated the cost of funding (or amortizing) this unfunded actuarial accrued liability over a period of 21 years as of January 1, 2003. The amortization method uses payments that are assumed to increase at 4.0% per annum, the rate at which the covered payroll is assumed to increase.

The use of a level percentage of payroll amortization can result in an increase in cost on a percentage of payroll basis if the growth in aggregate payroll is less than assumed. This is because, in this situation, the amortization payment would be spread over a lower-than-expected aggregate payroll.

The contribution requirements are shown below.

Contribution Requirements

	2003 Cost as a % of Salaries	2003 Dollar Cost*	2002 Cost as a % of Salaries
1. Entry Age Normal Cost			
a. Total employee and employer	11.19%	$ 110,569,000	11.87%
b. Employee share**	5.57%	55,039,000	5.72%
c. Employer share equals (a) - (b)	5.62%	$ 55,530,000	6.15%
2. Cost to Amortize Unfunded Actuarial Accrued Liability	2.61%	25,772,000	(0.95%)
3, Administrative Expenses	0.14%	1,438,000	0.14%
4. Total Employer Cost	8.37%	$ 82,740,000	5.34%
5. Total Cost (Employee + Employer)	13.94%	$ 137,779,000	11.06%

* Dollar costs based on 2003 estimated payroll of $988,135,000.
** Represents 5.57% of salaries.

VI. RESULTS OF ACTUARIAL VALUATION (continued)

The total employer cost of $82,740,000 is 8.37% of payroll. This is more than the statutory contribution rate of 5.68% covered payroll. Hence, the current contribution rate does not meet the contribution requirements based upon the actuarial assumptions, actuarial method and financing objectives adopted by the Board.

This is the first year in recent memory where the cost of the system exceeded its funding sources. There are three basic options for addressing this. First, increase contributions. Second, reduce benefits. Third, do nothing and hope that fuure experience is more favorable than assumed. It is possible that asset performance will improve and eliminate the funding shortfall. However, there are still unrecognized asset losses, so the funding shortfall is likely to become larger in the next few years.

The benefit tool the board has most readily at its disposal is the COLA. The funding margin is calculated assuming that a COLA of 3.0% is granted each year. This COLA is granted by the board each year based on the system's ability to afford the COLA. This actuarial valuation demonstrates that current funding does not support a 3.0% COLA in every single future year. The plan is more than adequately funded if a COLA were granted this year, but not in every future year. There are many possible scenarios the board might wish to consider.

As of January 1, 2002, the employer cost rate was 5.34%. An explanation of the change since the previous actuarial valuation is as follows:

Employer Cost Rate as of January 1, 2002	5.34%
Increase due to actuarial investment return less than 8%	3.04%
Decrease due to contributions in excess of actuarially determined rate	(0.09%)
Decrease due to change in actuarial assumptions	(0.44%)
Increase due to other experience factors	0.52%
Employer Cost Rate as of January 1, 2003	8.37%

VII. FUNDING STATUS

One measure of the progress of funding a retirement Plan is by benefit security ratios. The benefit security ratio is the ratio of Plan assets to Plan liabilities. The greater the ratio, the better funded the retirement Plan. This ratio can be calculated using different measures of the retirement Plan's liabilities.

Funding Basis -- Actuarial Accrued Liability

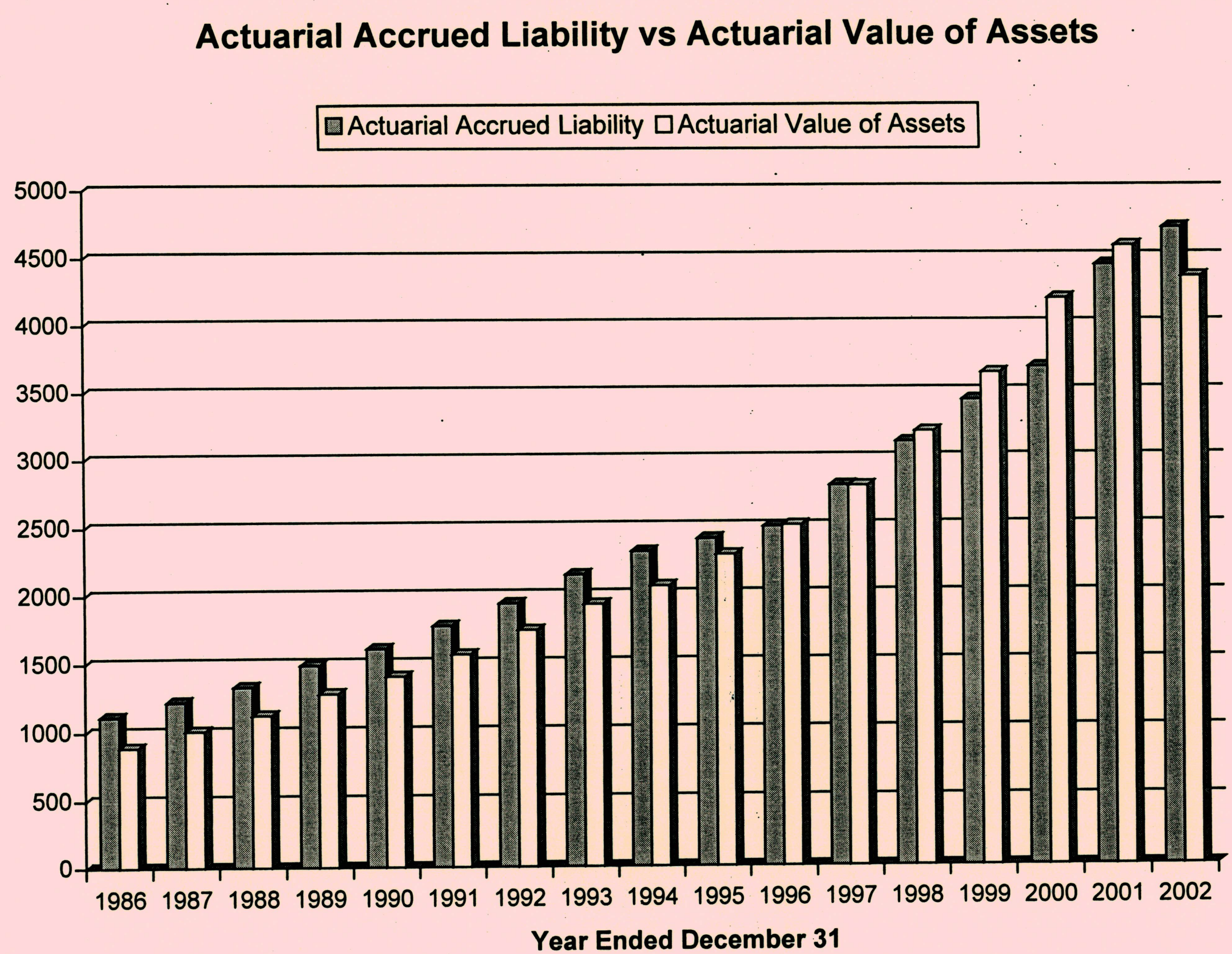
This measure of liabilities is used in calculating pension costs. It uses the Entry Age Normal Actuarial Cost method that spreads costs as a level percentage of payroll over a participant's working career.

For determining Plan costs, a smoothed value of assets (called actuarial value) is used. Hence, for the benefit security ratio, the actuarial value of assets is used.

Historical Results

A comparison of the Actuarial Accrued Liabilities and Actuarial Values of Assets for the last seventeen years are graphed in Chart 3. These ratios are developed in Table G. The graphs show that on a funding basis, the benefit security ratio steadily improved until 2001. The benefit security ratio has decreased by over 20% since then due to benefit improvements and investment return lower than expected.

Funding ratios change over time due to several factors. These factors include the level of contributions, actual experience (including investment returns), Plan amendments and changes in assumptions.


Actuarial Accrued Liability vs Actuarial Value of Assets
Actuarial Accrued Liability
Actuarial Value of Assets
5000
4500
4000
3500
3000
2500
2000
1500
1000
500
0
1986
1987
1988
1989
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
Year Ended December 31

BENEFIT SECURITY RATIOS

As of Jan. 1	Actuarial Accrued Liability	Actuarial Value of Assets	Unfunded Actuarial Accrued Liability (UAAL)	Benefit Security Ratio	Covered Payroll	UAAL as %. of Covered Payroll
1987	$ 1,119,666,000	$ 900,098,000	$ 219,568,000	80.4%	$ 700,527,000	31.3%
1988	1,225,515,000	1,016,001,000	209,514,000	82.9	679,401,000	30.8
1989	1,334,110,000	1,141,592,000	192,518,000	85.6	681,101,000	28.3
1990	1,482,235,000	1,286,450,000	195,785,000	86.8	712,693,000	27.5
1991	1,627,934,000	1,416,293,000	211,641,000	87.0	712,860,000	29.7
1992	1,777,417,000	1,572,337,000	205,080,000	88.5	743,632,000	27.6
1993	1,944,477,000	1,756,701,000	187,776,000	90.3	756,248,000	24.8
1994	2,151,784,000	1,946,563,000	205,221,000	90.5	760,859,000	27.0
1995	2,310,624,000	2,078,385,000	232,239,000	90.0	793,782,000	29.3
1996	2,408,980,000	2,296,639,000	112,341,000	95.3	789,639,000	14.2
1997	2,500,667,000	2,508,544,000	(7,877,000)	100.3	803,239,000	(1.0)
1998	2,799,891,000	2,795,721,000	4,170,000	99.9	827,991,000	0.5
1999	3,125,121,000	3,200,435,000	(75,314,000)	102.4	873,530,000	(8.6)
2000	3,440,152,000	3,641,370,000	(201,218,000)	105.8	862,512,000	(23.3)
2001	3,683,174,000	4,190,440,000	(507,266,000)	113.8	897,641,000	(56.5)
2002	4,442,033,000	4,582,462,000	(140,429,000)	103.2	964,121,000	(14.6)
2003	4,718,618,000	4,352,424,000	366,194,000	92.2	988,135,000	37.1

VIII. ACTUARIAL ASSUMPTIONS AND COST METHOD

The actuarial assumptions and cost method used in this actuarial valuation are the same as those used in the previous valuation with the exception of retirement, withdrawal, and disability rates. The changes in actuarial assumptions were adopted last year after an experience study indicated the need for changes. The changes in termination, retirement, and disability rates are described in Exhibit II. The assumptions and cost method applied in the valuation are described below.

Investment Return

The actuarial calculations are based on the assumption that the effective return on the assets of the Retirement System will be 8.0% per annum net of investment expenses. This includes 3.0% for inflation and 5.0% real rate of return.

Salary Increases and Inflation

A salary scale is used in an actuarial valuation to estimate the salary progression of employees in the future.

The long-term salary increase assumption is 5.0% per year. It includes 3.0% for inflation, as assumed in the investment yield. There is an allowance for 1.0% for standard-of-living growth per year and 1.0% annually for merit, promotion and longevity.

The salary scale used in this actuarial valuation does not necessarily take full account of general across-the-board increases in salaries resulting from inflation and other factors under short-term current conditions. This is because actuarial assumptions are meant to be reasonable over the long-term and should not be unduly influenced by short-term economic conditions.

The following is a summary of the long-term economic assumptions applied in this valuation:

Investment yield	8.00%
Salary increases	5.00%
Inflation	3.00%

Demographic Assumptions

Assumptions as to retirement incidence, withdrawal, disability and mortality are specified in Exhibit III of the actuarial certification.

Funding Method

For purposes of determining pension costs, the entry age normal actuarial cost method has been used. It is used in situations where a cost is desired that will remain relatively level as a percentage of the participating payroll.

Under the entry age normal actuarial cost method, the total contribution requirement has three components: an annual normal cost, an operating expense component and a payment with respect to the unfunded actuarial accrued liability.

The annual normal cost is calculated for each employee as the level percentage of pay required over the employee's period of covered employment to pay the total expected benefits. If the actuarial assumptions remain unchanged and actuarial experience matches them, the normal cost rate for each employee will remain a level percentage of payroll.

VIII. ACTUARIAL ASSUMPTIONS AND COST METHOD (continued)

Unfunded actuarial accrued liability amounts are created by actuarial losses, changes in the actuarial assumptions and liberalizations in the benefit provisions. The unfunded liability is amortized over 21 years from January 1, 2003, using payments that rise 4.0% per annum. Such payments should remain a level percentage of aggregate salaries, since covered payroll is assumed to increase at the combined inflation and standard-of-living growth of 4.0% annually.

Assets

The assets are valued on a moving market-related basis for actuarial purposes. Interest and dividends are recognized immediately. The actuarial value includes the difference between expected appreciation and actual appreciation and depreciation, whether realized or not, spread over five years beginning with the year of occurrence. This procedure results in recognition of all changes in market value after five years. If the actuarial asset value is less than 80% of market value, or more than 120%, an adjustment will be made to bring it within that range.

Beginning January 1, 2001, the amount smoothed is the difference between the actual appreciation or depreciation and the expected appreciation, based on the market value of assets and on 8% total investment return.

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May 2, 2003

STATE OF WYOMING RETIREMENT SYSTEM

Actuarial Valuation Certificate

This is to certify that we have prepared an Actuarial Valuation of the Plan as of January 1, 2003, in accordance with generally accepted actuarial principles and practices.

The certificate contains the following attached exhibits:

I. Actuarial Valuation Results

II. Changes in Actuarial Assumptions and Methods

III. Actuarial Assumptions and Cost Method

IV. Plan Amendments

V. Summary of Plan Provisions

The valuation is based on information supplied by the Retirement Office with respect to participants and by McGee, Hearne & Paiz, LLP for financial data. We have not verified, and customarily would not verify, such information, but we have had no reason to doubt its substantial accuracy.

In our opinion, the assumptions used in the aggregate: (a) are reasonably related to the experience of the Plan and to reasonable expectations; and (b) represent our best estimate of anticipated experience under the Plan.

William B. Fornia, FSA, MAAA, EA
Principal and Consulting Actuary

Michael D. Mills, ASA
Senior Consultant, Actuary

ACTUARIAL VALUATION RESULTS

1. Actuarial Accrued Liability on January 1, 2003:		
a. Active employees	$	2,644,277,000
b. Retired members and beneficiaries		1,954,378,000
c. Inactive nonretired members		119,963,000
d. Total	$	4,718,618,000
2. Assets of the Fund on December 31, 2002 at actuarial value*	$	4,352,424,000
3. Unfunded actuarial accrued liability -- equals (1) - (2)	$	366,194,000
4. Employee and employer normal cost for ensuing year	$	110,569,000
5. Estimated annual salaries of covered employees	$	988,135,000
6. Employee normal cost	$	55,039,000
7. Employer normal cost for ensuing year equals (4) - (6)	$	55,530,000
8. Amortization payment -- equals 21-year amortization of item (3) as a level percent of aggregate salary	$	25,772,000
9. Expected Administrative expenses	$	1,438,000
10. Total employer cost for ensuing year -- equals (7) + (8) + (9)	$	82,740,000
11. Total employer cost as percentage of payroll -- equals (10) ÷ (5)		8.37%

* $3,627,019,835 at market value.

CHANGES IN ACTUARIAL ASSUMPTIONS & METHODS

The experience analysis of Wyoming Retirement System (1997-2001, conducted in 2002) indicated a need for changes in certain actuarial assumptions to more closely reflect past experience of the Plan and match anticipated experience.

A change in termination assumption was implemented in the current valuation as follows:

	Prior Assumptions		Current Assumptions	
Age	Males	Females	Males	Females
25	21.3%	24.4%	31.9%	36.6%
30	14.7%	18.0%	18.4%	22.5%
35	10.0%	13.1%	10.0%	13.1%
40	7.3%	10.2%	7.6%	10.7%
45	5.6%	7.9%	7.3%	10.3%
50	4.2%	5.6%	6.3%	8.4%
55	3.1%	4.1%	4.6%	6.2%

Retirement incidence rates change as illustrated in the following table:

Age	Prior Assumptions	Current Assumptions
50-53	2.0%	2.0%
54	4.0%	4.0%
55-56	6.0%	6.0%
57-58	7.0%	7.0%
59	10.0%	10.0%
60	15.0%	15.0%
61	15.0%	17.0%
62	25.0%	25.0%
63	20.0%	17.0%
64	20.0%	20.0%
65	33.3%	35.0%
66-69	20.0%	20.0%
70 & above	100.0%	100.0%

And the disability rates change as indicated below:

Age	Prior Assumptions	Current Assumptions
40 & under	0.01%	0.01
45	0.04%	0.06
50	0.08%	0.16
55	0.20%	0.40

ACTUARIAL ASSUMPTIONS AND COST METHOD

Mortality Rates:

Healthy Lives: 1994 Group Annuity Mortality Table (with margins)

Disabled Lives: 1979 PBGC Disabled Lives Receiving Social Security

Termination Rates before retirement:

Sample Rates:

	RATE				
	Death			Withdrawal General Members	
Age	Male	Female	Disability	Male	Female
25	.07%	.03%	--	31.91%	36.56%
30	.08%	.04%	.01%	18.38%	22.50%
35	.09%	.05%	.01%	10.03%	13.10%
40	.11%	.07%	.01%	7.61%	10.72%
45	.16%	.10%	.06%	7.29%	10.32%
50	.26%	.14%	.16%	6.32%	8.43%
55	.44%	.23%	.40%	4.62%	6.20%
60	.80%	.44%	--	--	--

Retirement Rates:

Age	Rate of Retirement (Examples Shown)
50	2%
55	6%
60	15%
62	25%
65	35%
70	100%

ACTUARIAL ASSUMPTIONS AND COST METHOD

Interest Rate: 8.0% per annum, net of investment expenses

Salary Scale: 5.0% per annum

Cost Method: Entry Age Normal Actuarial Cost Method

Actuarial Value of Assets:

Adjusted market value that immediately recognizes interest and dividends. The procedure recognizes 20% of each plan year's total appreciation (depreciation) in excess of the expected return on a market value basis beginning with the year of occurrence. After five years, the appreciation (depreciation) is fully recognized. If the adjusted market value is less than 80% of market value, or more than 120%, an adjustment will be made to bring it within that range.

Administrative Expenses:

Annual administrative expenses are assumed to increase 5% per year. Expenses for the valuation year are projected at this rate based on the prior two years' average adjusted expenses.

Cost-of-Living Adjustments:

It is assumed that the maximum 3.0% COLA will be awarded every year.

PLAN AMENDMENTS

Effective July 1, 2002, certain members of the State of Wyoming Retirement System transferred into a new Plan, the Wyoming Law Enforcement Fund. There are no changes to the benefits for members remaining in the State of Wyoming Retirement System.

SUMMARY OF PLAN PROVISIONS

Following are the major benefit provisions of the State of Wyoming Retirement System. This summary is not intended to be a complete statement of all provisions of the Retirement System.

1. Service Retirement

Eligibility Members may retire from active service with age 60 and at least four years of service or combined age plus service of 85 or more points and receive full benefits. Members may take early retirement at age 50 with at least four years of service, or any age with at least 25 years of service, with benefits reduced by 5.0% per year for retirement prior to age 60.

Benefit Calculated in two parts, (A) plus (B)

A. ***Pre-1975 Benefits.*** The larger of the monthly benefits calculated under the following two formulas (1) and (2):

1. The amount of employee and matching employer contributions, with interest (currently 5.5%), is used to *purchase* an annuity based upon a unisex actuarial factor. The monthly benefit thus obtained is increased as approved by the 1967, 1973 and 1975 legislature as follows:

- 1967 increase -- 25% (but not more than $25 per month)
- 1973 increase -- 40%
- 1975 increase -- 20%

2. Calculate pre-1975 benefits as 2.125% of the average earnings for the three highest years of service, times years of service prior to July 1, 1975, for the first 15 years of service credit, plus 2.25% of the average earnings for the three highest years of service for any years of service credit exceeding 15 years. This amount is reduced by 5.0% per year for retirement prior to age 60. However, members retiring with a combined age and service of 85 receive an unreduced benefit prior to age 60.

B. ***Post-1975 Benefits.*** The larger of the monthly benefits calculated under the following two formulas (1) and (2):

1. The same formula as for 1953-1975 benefits, except that the 20% increase does not apply.

2. 2.125% of the average earnings for the three highest years of service, times years of service after July 1, 1975, for the first 15 years of service credit, plus 2.25% of the average earnings for the three highest years of service for any years of service credit exceeding 15 years. This amount is reduced by 5.0% per year for retirement prior to age 60. However, members retiring with a combined age and service of 85 receive an unreduced benefit prior to age 60.

NOTE: Employees hired on and after July 1, 1981 will only be entitled to the benefit described under B.2. above.

2. Options

Option 1 Monthly benefit for life, with a lump-sum death benefit equal to the excess (if any) of the employee contributions with interest over the total monthly benefits received. A choice of any option other than Option 1 changes the monthly benefit payable.

Option 2 Monthly benefit for life, with 100% of the benefit continuing for the life of the beneficiary.

Option 3 Monthly benefit for life, with 50% of the benefit continuing for the life of the beneficiary.

Option 4 Monthly benefit for life, with a guarantee of 120 monthly payments.

Option 5 Monthly benefit for life, with no death benefit. The choice of this option increases the monthly benefit slightly.

Option 6 Monthly benefit for life, with 100% of the benefit continuing for the life of the beneficiary. Benefit reverts to Option 1 amount but without cash refund feature at beneficiary's death.

Option 7 Monthly benefit for life, with 50% of the benefit continuing for the life of the beneficiary. Benefit reverts to Option 1 amount but without cash refund feature at beneficiary's death.

3. Disability Retirement

Eligibility Disability prior to age 60, after 10 or more years of service.

Benefit 100% of the service retirement benefit, calculated using Option 1 as if the employee were 60 years of age and service as of date of disability.

4. Vesting

An employee who terminates after at least 48 months of service can elect either to leave his contributions in the Retirement System and receive a service retirement benefit as described above, or to receive a lump-sum return of his contributions (including employer subsidies) with interest. An employee who terminates with less than 48 months of service is eligible only for the lump-sum benefit.

5. Preretirement Death Benefit

The beneficiary of a vested employee can elect either to receive a monthly benefit based on the beneficiary's age and the calculation method described above for service retirement, or to receive a lump-sum payment of two times the employee contributions, with interest. The beneficiary of an employee who dies prior to achieving vested status is eligible for the lump-sum benefit only.

6. Contributions

Currently 5.57% of salary by employee and 5.68% of salary by employer. The employer may subsidize all or part of the employee contributions. Interest is currently being credited at the rate of 5.50% on accumulated contributions.

7. Ad Hoc Benefit Increases to Retirees

Ad hoc adjustments have been made to benefit payments. The most recent one was effective July 2001, for all retirees and beneficiaries. This increased pensions by $3 monthly per year of service.

8. Cost-of-Living Adjustments

Benefits will increase by the lesser of 3.0% per year, or the increase in the Consumer Price Index (CPI). If the increase in the CPI exceeds 3.0% in any year, the excess increase will be set aside and applied toward any future year in which the CPI increase is less than 3.0%. The first increase for a retiree is on the July 1 following two years of retirement. The first adjustments occurred in 1991.

CENSUS TABLES

NOTE: See page 30 for description of benefit options by Code number.

CENSUS OF EMPLOYEES IN ACTIVE SERVICE ON DECEMBER 31, 2002

MALES

Age Last Birthday	Years of Service								
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	Over 34	Total
15-19	36								36
20-24	249	3							252
25-29	562	74	1						637
30-34	620	312	64	1					997
35-39	503	302	291	82	11				1,189
40-44	502	318	315	308	168	5			1,616
45-49	462	266	338	335	409	145	2		1,957
50-54	426	237	301	302	424	354	71	4	2,119
55-59	309	194	217	203	232	245	148	36	1,584
60-64	148	88	104	101	87	68	39	32	667
Over 64	94	55	40	34	15	14	10	10	272
Total	3,911	1,849	1,671	1,366	1,346	831	270	82	11,326

Average Age = 46.3 Average Service = 11.8

CENSUS OF EMPLOYEES IN ACTIVE SERVICE ON DECEMBER 31, 2002

FEMALES

Age Last Birthday	Years of Service								
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	Over 34	Total
15-19	61								61
20-24	592	3							595
25-29	1,146	116	4						1,266
30-34	1,116	459	86	4					1,665
35-39	1,151	456	352	92	13				2,064
40-44	1,343	709	497	390	214	13			3,166
45-49	1,191	812	678	502	574	169	5		3,931
50-54	789	596	672	598	614	387	83	1	3,740
55-59	471	296	368	414	395	247	92	18	2,301
60-64	156	111	119	152	152	82	23	20	815
Over 64	67	25	42	31	20	8	7	5	205
Total	8,083	3,583	2,818	2,183	1,982	906	210	44	19,809

Average Age = 45.2 Average Service = 10.0

CENSUS OF EMPLOYEES IN ACTIVE SERVICE ON DECEMBER 31, 2002

MALES AND FEMALES COMBINED

Age Last Birthday	Years of Service								
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	Over 34	Total
15-19	97								97
20-24	841	6							847
25-29	1,708	190	5						1,903
30-34	1,736	771	150	5					2,662
35-39	1,654	758	643	174	24				3,253
40-44	1,845	1,027	812	698	382	18			4,782
45-49	1,653	1,078	1,016	837	983	314	7		5,888
50-54	1,215	833	973	900	1,038	741	154	5	5,859
55-59	780	490	585	617	627	492	240	54	3,885
60-64	304	199	223	253	239	150	62	52	1,482
Over 64	161	80	82	65	35	22	17	15	477
Total	11,994	5,432	4,489	3,549	3,328	1,737	480	126	31,135

Average Age = 45.6　　Average Service = 10.4

CENSUS OF EMPLOYEES IN ACTIVE SERVICE ON DECEMBER 31, 2002

ALL MEMBERS

Age Last Birthday		Years of Service 0-4	5-9	10-14	15-19	20-24	25-29	30-34	Over 34	Total
15-19	Number	97								97
	Tot Salary	754,659								754,659
	Avg. Salary	7,780								7,780
20-24	Number	841	6							847
	Tot. Salary	14,012,386	145,677							14,158,064
	Avg. Salary	16,662	24,280							16,716
25-29	Number	1,708	190	5						1,903
	Tot. Salary	39,733,765	5,585,272	148,307						45,467,344
	Avg. Salary	23,263	29,396	29,661						23,892
30-34	Number	1,736	771	150	5					2,662
	Tot. Salary	41,737,167	25,717,636	5,350,044	165,015					72,969,862
	Avg. Salary	24,042	33,356	35,667	33,003					27,412
35-39	Number	1,654	758	643	174	24				3,253
	Tot. Salary	36,414,815	24,249,202	24,970,009	6,405,070	919,841				92,958,937
	Avg. Salary	22,016	31,991	38,834	36,811	38,327				28,576
40-44	Number	1,845	1,027	812	698	382	18			4,782
	Tot. Salary	38,579,118	29,989,179	29,325,125	28,651,431	16,029,739	672,626			143,247,218
	Avg. Salary	20,910	29,201	36,115	41,048	41,963	37,368			29,956
45-49	Number	1,653	1,078	1,016	837	983	314	7		5,888
	Tot. Salary	35,131,847	29,668,475	34,774,610	33,149,617	44,098,488	14,028,089	309,528		191,160,654
	Avg. Salary	21,253	27,522	34,227	39,605	44,861	44,675	44,218		32,466
50-54	Number	1,215	833	973	900	1,038	741	154	5	5,859
	Tot. Salary	27,776,455	23,375,150	32,301,879	33,214,892	45,230,032	35,459,286	7,379,871	199,780	204,937,343
	Avg. Salary	22,861	28,061	33,198	36,905	43,574	47,853	47,921	39,956	34,978
55-59	Number	780	490	585	617	627	492	240	54	3,885
	Tot. Salary	18,561,708	13,743,524	19,008,717	22,535,107	25,870,886	22,850,645	12,729,461	2,698,601	137,998,649
	Avg. Salary	23,797	28,048	32,494	36,524	41,261	46,444	53,039	49,974	35,521
60-64	Number	304	199	223	253	239	150	62	52	1,482
	Tot. Salary	6,121,666	5,088,988	7,057,256	8,545,337	9,091,303	6,678,353	3,094,530	2,746,909	48,424,342
	Avg. Salary	20,137	25,573	31,647	33,776	38,039	44,522	49,912	52,825	32,675
Over 64	Number	161	80	82	65	35	22	17	15	477
	Tot. Salary	2,212,380	1,840,700	2,456,648	2,036,531	1,134,004	830,984	655,726	789,677	11,956,650
	Avg. Salary	13,741	23,009	29,959	31,331	32,400	37,772	38,572	52,645	25,066
Total	Number	11,994	5,432	4,489	3,549	3,328	1,737	480	126	31,135
	Tot. Salary	261,035,966	159,403,803	155,392,595	134,703,000	142,374,293	80,519,983	24,169,116	6,434,967	964,033,723
	Avg. Salary	21,764	29,345	34,616	37,955	42,781	46,356	50,352	51,071	30,963

Average Age = 45.6 Average Service = 10.4

CENSUS OF VESTED INACTIVE PARTICIPANTS ON DECEMBER 31, 2002

MALES

Age Last Birthday	Years of Service								
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	Over 34	Total
15-19									0
20-24									0
25-29	3	9							12
30-34	16	29	1						46
35-39	19	66	20	1					106
40-44	31	103	49	17	5				205
45-49	33	143	87	57	17	2			339
50-54	53	175	105	50	21	12			416
55-59	40	129	78	50	20	8	4		329
60-64	21	61	17	10	1		1	1	112
Over 64	21	29	10		3				63
Total	237	744	367	185	67	22	5	1	1,628

Average Age = 50.4　　Average Service = 9.6

CENSUS OF VESTED INACTIVE PARTICIPANTS ON DECEMBER 31, 2002

FEMALES

Age Last Birthday	Years of Service								
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	Over 34	Total
15-19									0
20-24									0
25-29	9	9							18
30-34	43	69	3						115
35-39	39	122	27	4					192
40-44	90	173	94	21	5				383
45-49	87	311	170	63	22	2			655
50-54	85	322	163	104	50	10	1		735
55-59	76	249	133	66	23	12			559
60-64	38	113	44	16	6	3			220
Over 64	35	56	19	7	1		1		119
Total	502	1,424	653	281	107	27	2	0	2,996

Average Age = 51.6 Average Service = 9.0

CENSUS OF VESTED INACTIVE PARTICIPANTS ON DECEMBER 31, 2002

MALES AND FEMALES COMBINED

Age Last Birthday	Years of Service								
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	Over 34	Total
15-19									0
20-24									0
25-29	12	18							30
30-34	59	98	4						161
35-39	58	188	47	5					298
40-44	121	276	143	38	10				588
45-49	120	454	257	120	39	4			994
50-54	138	497	268	154	71	22	1		1,151
55-59	116	378	211	116	43	20	4		888
60-64	59	174	61	26	7	3	1	1	332
Over 64	56	85	29	7	4		1		182
Total	739	2,168	1,020	466	174	49	7	1	4,624

Average Age = 51.2 Average Service = 9.2

RETIREES AS OF DECEMBER 31, 2002

	NUMBER			AVERAGE MONTHLY AMOUNT		
	Male	Female	Total	Male	Female	Total
Pensioners						
Option 1	1,578	4,376	5,954	1,000	763	839
Option 2	2,682	1,243	3,925	1,214	752	1,068
Option 3	476	259	735	1,631	988	1,409
Option 4	269	373	642	999	728	841
Option 5	276	956	1232	1,050	708	784
Option 6	387	330	717	1,193	940	1,077
Option 7	119	141	260	1,763	1,250	1,485
Total	5,787	7,678	13,465	1,196	777	957
Beneficiaries	208	1,177	1,385	650	802	779
Grand Total	5,995	8,855	14,850	1,177	780	940

RETIREE/BENEFICIARY BENEFITS IN FORCE BY AMOUNT AND OPTION TYPE

	Total	PENSION OPTION 1	2	3	4	5	6	7
Males								
Under $200	458	148	199	9	29	43	29	1
$200-$399	825	283	383	26	34	39	54	6
$400-$599	749	229	320	47	44	45	57	7
$600-$799	648	189	295	47	35	29	42	11
$800-$999	529	154	235	43	22	33	33	9
$1,000-$1,499	932	248	439	108	51	24	46	16
$1,500-$1,999	686	145	360	66	27	23	50	15
$2,000-$2,499	610	123	297	74	19	28	43	26
$2,500 & Over	558	118	250	86	16	22	38	28
Total	5,995	1,637	2,778	506	277	286	392	119
Females								
Under $200	1,132	580	259	19	56	186	29	3
$200-$399	1,844	967	433	67	90	217	59	11
$400-$599	1,511	808	341	55	72	162	53	20
$600-$799	1,193	654	265	57	50	111	42	14
$800-$999	794	431	167	37	39	67	36	17
$1,000-$1,499	1,192	594	282	80	46	109	49	32
$1,500-$1,999	613	274	160	40	18	64	35	22
$2,000-$2,499	383	192	84	13	19	35	23	17
$2,500 & Over	193	97	33	6	8	27	15	7
Total	8,855	4,597	2,024	374	398	978	341	143
Males & Females								
Under $200	1,590	728	458	28	85	229	58	4
$200-$399	2,669	1,250	816	93	124	256	113	17
$400-$599	2,260	1,037	661	102	116	207	110	27
$600-$799	1,841	843	560	104	85	140	84	25
$800-$999	1,323	585	402	80	61	100	69	26
$1,000-$1,499	2,124	842	721	188	97	133	95	48
$1,500-$1,999	1,299	419	520	106	45	87	85	37
$2,000-$2,499	993	315	381	87	38	63	66	43
$2,500 & Over	751	215	283	92	24	49	53	35
Total	14,850	6,234	4,802	880	675	1,264	733	262

PENSIONS IN FORCE ON DECEMBER 31, 2002
BY OPTION AND NEAREST AGE ON THAT DATE

MALES

	Pension Option							
Age Last Birthday	1	2	3	4	5	6	7	Total
0-49	9	8	2	1		1		21
50-54	44	59	6	14	4	19	2	148
55-59	141	236	26	32	25	78	19	557
60-64	314	538	85	55	67	135	46	1,240
65-69	296	631	114	57	60	98	31	1,287
70-74	322	549	108	44	55	46	15	1,139
75-79	234	402	102	46	40	14	6	844
80-84	164	219	46	20	24	1		474
Over 84	113	136	17	8	11			285
Total	1,637	2,778	506	277	286	392	119	5,995

PENSIONS IN FORCE ON DECEMBER 31, 2002
BY OPTION AND NEAREST AGE ON THAT DATE

FEMALES

Age Last Birthday	Pension Option 1	2	3	4	5	6	7	Total
0-49	25	18	2	1	1			47
50-54	118	51	6	16	12	23	3	229
55-59	321	193	28	67	65	96	38	808
60-64	734	333	72	93	158	113	44	1,547
65-69	877	384	73	78	196	77	40	1,725
70-74	837	336	79	73	208	27	14	1,574
75-79	701	322	60	45	156	3	3	1,290
80-84	475	227	38	17	95	1	1	854
Over 84	509	160	16	8	87	1		781
Total	4,597	2,024	374	398	978	341	143	8,855

PENSIONS IN FORCE ON DECEMBER 31, 2002
BY OPTION AND NEAREST AGE ON THAT DATE

MALES & FEMALES COMBINED

	Pension Option							
Age Last Birthday	1	2	3	4	5	6	7	Total
0-49	34	26	4	2	1	1		68
50-54	162	110	12	30	16	42	5	377
55-59	462	429	54	99	90	174	57	1,365
60-64	1,048	871	157	148	225	248	90	2,787
65-69	1,173	1,015	187	135	256	175	71	3,012
70-74	1,159	885	187	117	263	73	29	2,713
75-79	935	724	162	91	196	17	9	2,134
80-84	639	446	84	37	119	2	1	1,328
Over 84	622	296	33	16	98	1		1,066
Total	6,234	4,802	880	675	1,264	733	262	14,850

PENSIONS AWARDED IN 2002 BY OPTION AND MONTHLY AMOUNT

MALES & FEMALES COMBINED

	Pension Option							
Monthly Amount	1	2	3	4	5	6	7	Total
0-199	26	14	1	5	11	9	1	67
200-399	41	29	1	6	12	15	1	105
400-599	25	22	4	7	5	15	3	81
600-799	24	22	4	4	4	13	2	73
800-999	22	19	0	5	4	14	3	67
1000-1499	38	36	2	4	9	17	7	113
1500-1999	34	24	3	4	5	13	4	87
2000-2499	24	24	6	1	4	7	8	74
Over 2499	14	33	3	3	5	12	3	73
Total	248	223	24	39	59	115	32	740

PENSIONS AWARDED IN 2002
BY OPTION AND NEAREST AGE ON THAT DATE

MALES & FEMALES COMBINED

	Pension Option							
Nearest Age	1	2	3	4	5	6	7	Total
0-49	1	1						2
50-54	40	25		8	3	15	2	93
55-59	69	76	10	12	17	39	17	240
60-64	99	87	12	17	23	45	10	293
65-69	29	28	2	2	12	15	3	91
70-74	7	4			3	1		15
75-79	3	2			1			6
80-84								
Over 84								
Total	248	223	24	39	59	115	32	740

AVERAGE MONTHLY BENEFIT OF RETIREES AS OF DECEMBER 31, 2002, BY YEARS ELAPSED SINCE RETIREMENT AND BY YEARS OF SERVICE AT RETIREMENT (EACH CELL INCLUDES NUMBER OF RETIREES AND AVERAGE BENEFIT)

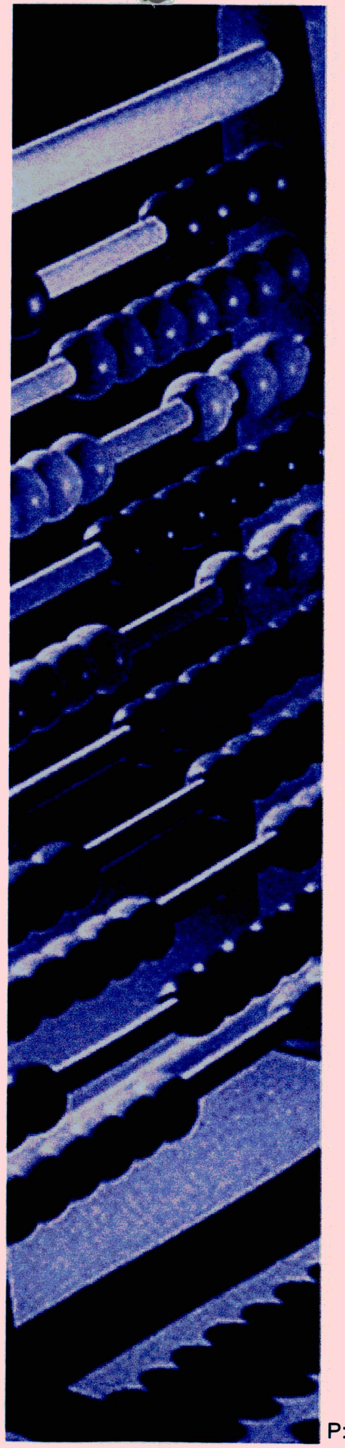
Service at Retirement		Years Elapsed Since Retirement								
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	Over 34	Total
0-4	Number	156	166	198	160	99	29	6	1	815
	Avg. Benefit	179.34	151.25	135.71	151.84	149.91	170.52	184.83	130.25	153.71
5-9	Number	498	595	635	506	306	178	53	3	2,774
	Avg. Benefit	326.76	288.22	307.10	303.27	260.80	259.24	244.80	306.94	296.50
10-14	Number	639	754	688	424	256	147	50	6	2,964
	Avg. Benefit	566.27	563.36	525.64	509.29	427.82	404.17	370.85	416.24	524.35
15-19	Number	696	759	469	400	194	109	38	2	2,667
	Avg. Benefit	881.44	838.69	828.24	762.35	615.56	575.65	572.54	610.96	805.61
20-24	Number	607	564	356	324	150	123	13		2,137
	Avg. Benefit	1,243.00	1,193.15	1,155.83	1,105.68	784.86	758.54	750.44		1,131.47
25-29	Number	593	465	265	274	124	25	3	2	1,751
	Avg. Benefit	1,833.99	1,726.90	1,587.89	1,425.03	990.76	884.37	820.28	784.70	1,628.10
30-34	Number	431	414	223	246	23	15	3		1,355
	Avg. Benefit	2,382.00	2,389.85	2,257.07	1,909.34	1,197.04	999.65	891.02		2,239.31
35-39	Number	79	109	92	33	8	10	3	4	338
	Avg. Benefit	2,939.35	2,903.02	2,664.86	2,156.09	1,315.22	1,137.14	1,090.16	1,167.08	2,647.30
40 and over	Number	6	17	4	7	5	8	2		49
	Avg. Benefit	2,464.73	3,351.95	1,787.58	2,212.58	1,624.64	1,271.45	1,335.22		2,354.60
Total	Number	3,705	3,843	2,930	2,374	1,165	644	171	18	14,850
	Avg. Benefit	1,155.66	1,066.01	873.68	844.00	523.90	504.96	439.84	611.56	940.40

Average Service at Retirement = 17.1   Average Years Since Retirement = 10.6

DISTRIBUTION OF RETIRED PARTICIPANTS & BENENFICIARIES BY DATE OF RETIREMENT

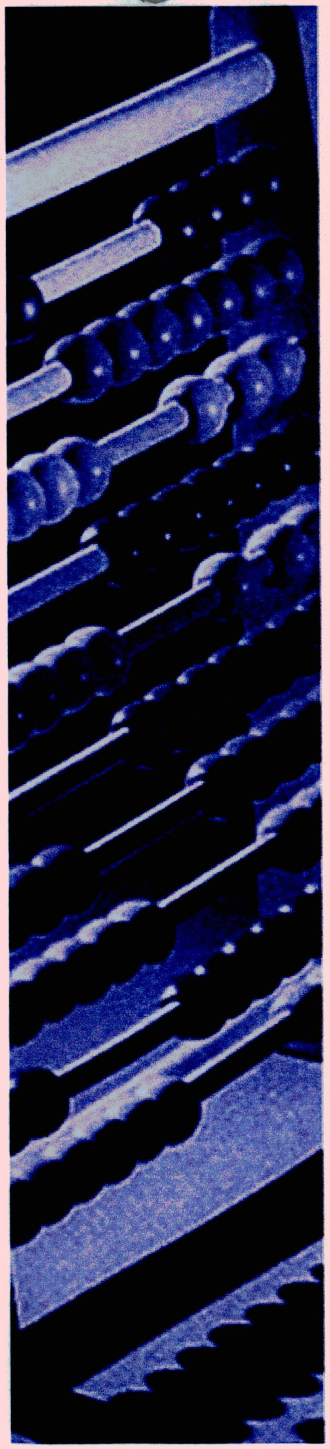
Year of Retirement	Counts	Year of Retirement	Counts
1956	1	1980	208
1957	0	1981	278
1958	0	1982	269
1959	0	1983	286
1960	0	1984	391
1961	0	1985	435
1962	0	1986	501
1963	2	1987	761
1964	2	1988	591
1965	2	1989	536
1966	4	1990	533
1967	7	1991	568
1968	9	1992	702
1969	10	1993	638
1970	15	1994	688
1971	82	1995	1,081
1972	55	1996	709
1973	95	1997	727
1974	116	1998	725
1975	120	1999	738
1976	145	2000	719
1977	168	2001	786
1978	203	2002	737
1979	207		

Total: 14,850

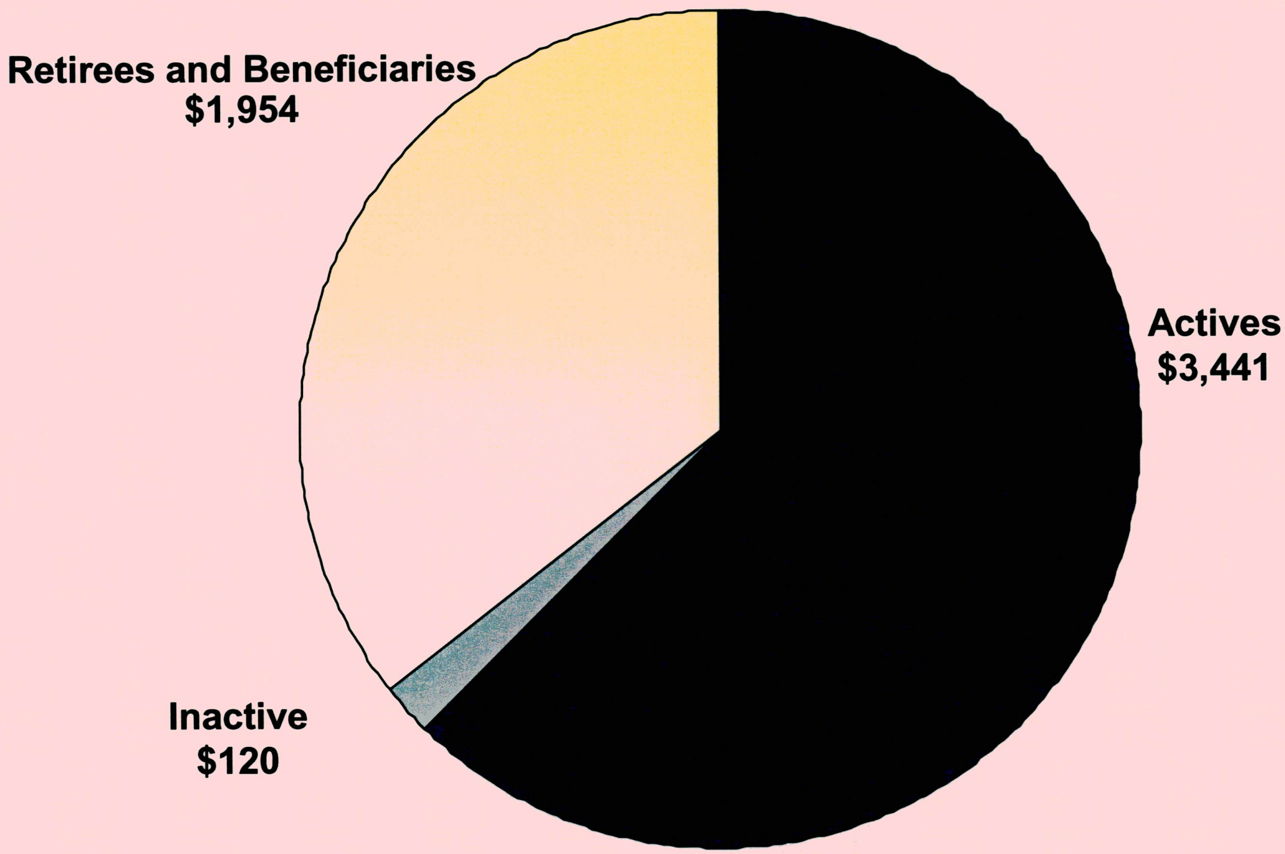


Principal Actuarial Assumptions
Big System

• Investment Return	8.0%, net of expenses
• Salary Increases	5.0% individual; 4.0% system-wide
• Retirement Age	Varying retirement rates
• Cost of Living	3% Annual increase
• Mortality	1994 Group Annuity Mortality table
• Termination	Experience table



Wyoming Retirement System
Present Value of Future Benefits
($ millions)



TOTAL PRESENT VALUE: $5.515 billion

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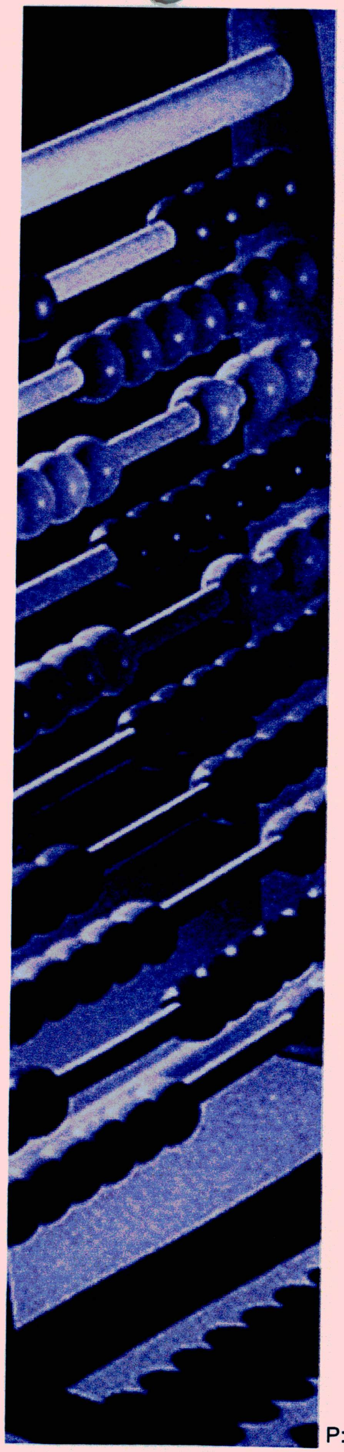
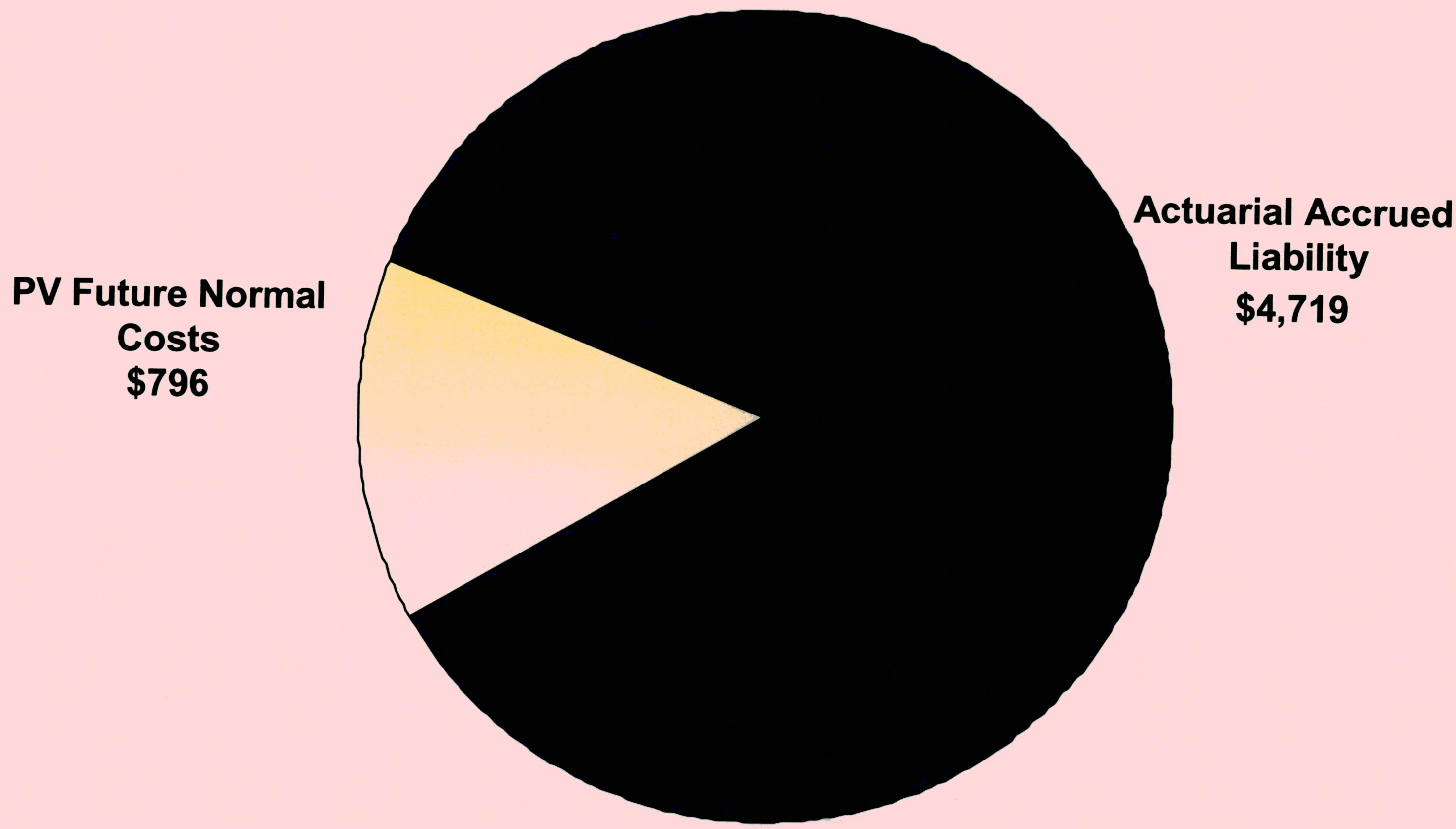
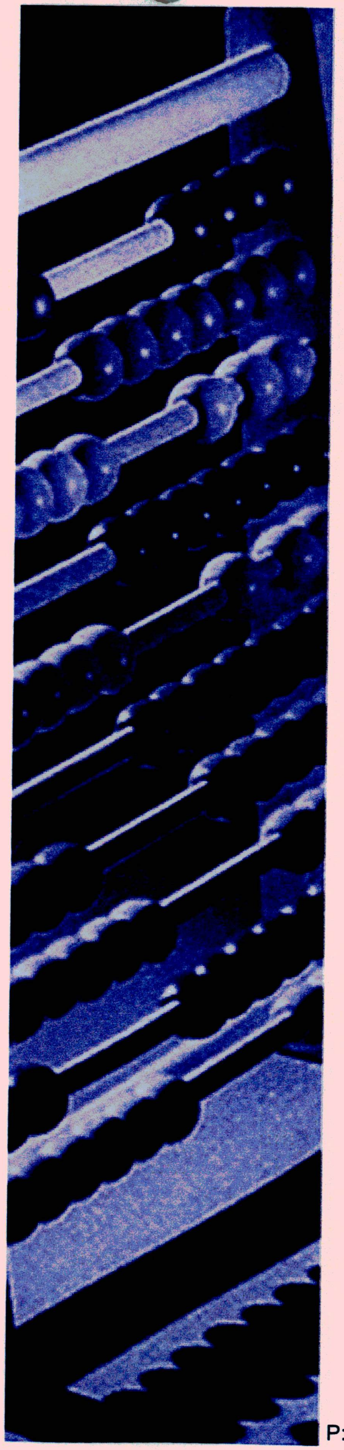
Wyoming Retirement System
Present Value of Future Benefits



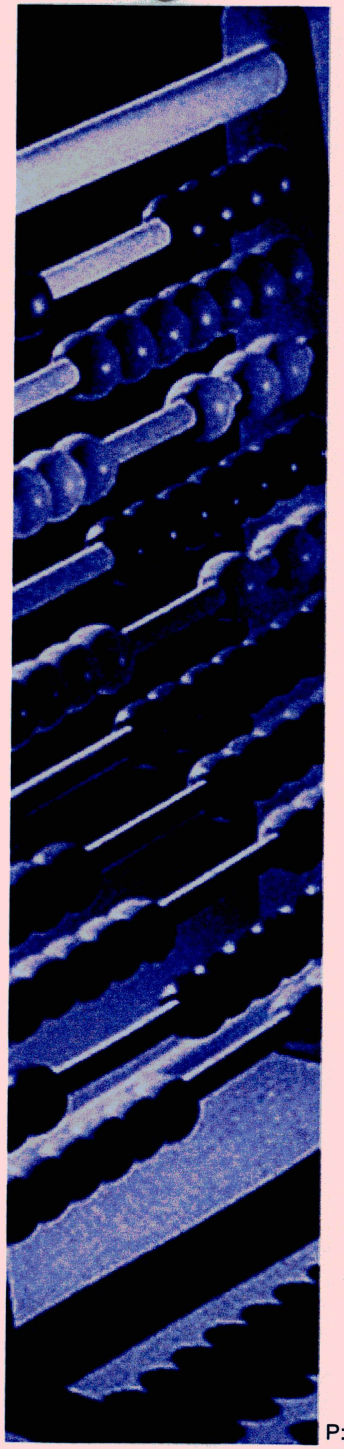


TOTAL PRESENT VALUE : $5.515 billion



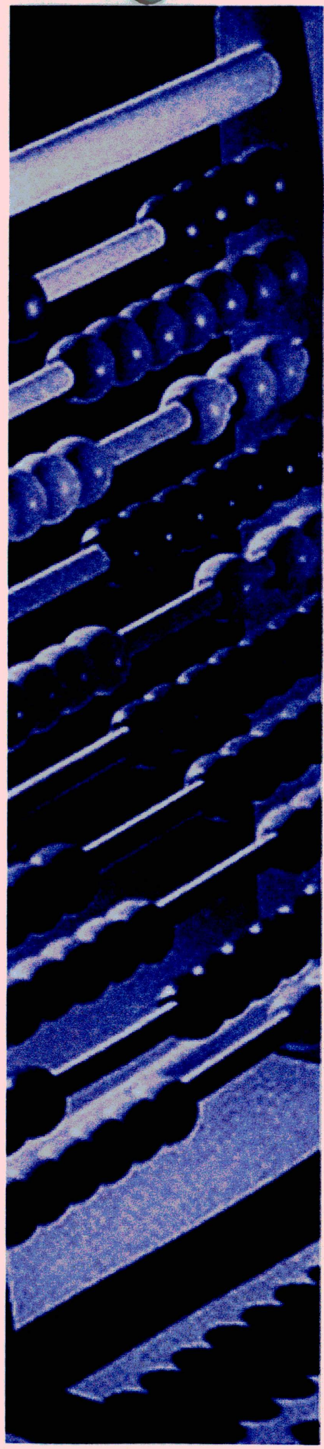
Key Findings of Actuarial Valuation

- Investments Returned negative 9.29%
- Funding levels acceptable in some systems, but others are in shortfall
- This is due to improvements in benefits from two years ago along with a third consecutive year of negative returns
- First actuarial valuation for Law Enforcement system: contains some former members of the State System, members of the Wyoming Association of Municipalities, and some without prior DB plan.
- Wyoming Retirement System Funding Margin shortfall is 2.69%
- We need to consider taking action on: State System, Paid Fire A, Warden and Patrol
- We'll need a big rebound in assets for positive funding margin



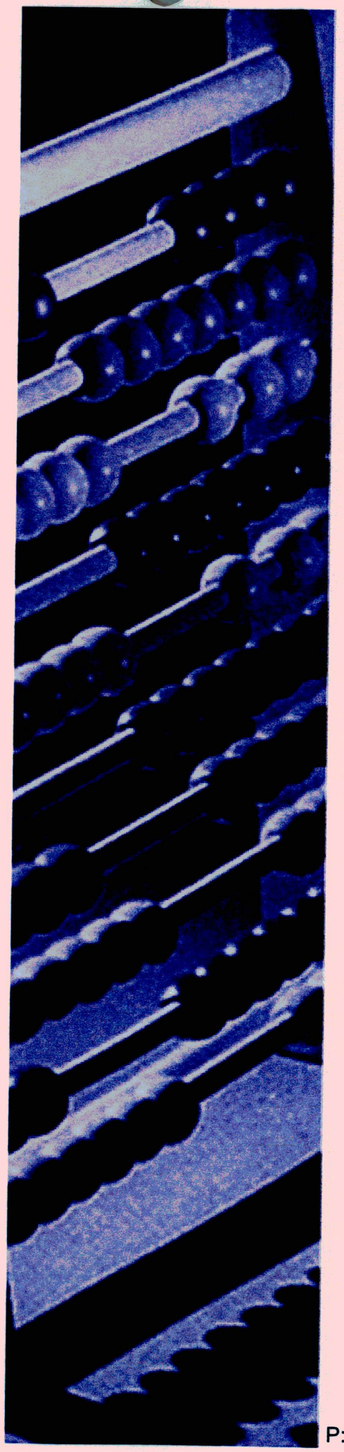
Key Issues for Wyoming Retirement System ("Big System")

- Current Funding level does not support ongoing plan with 3% COLAs
- What action can the board take?
  - Do nothing?
  - Increase contributions?
  - Decrease future benefit increases?



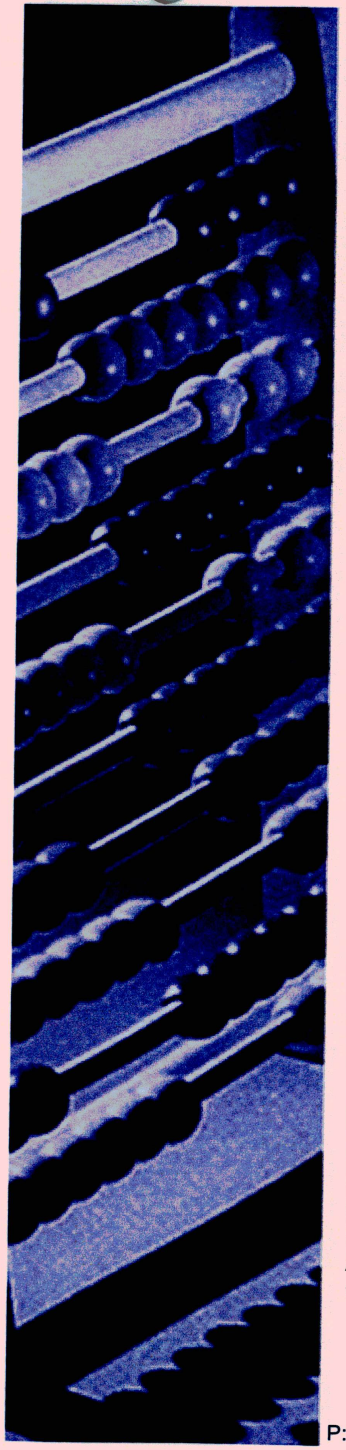
What does it mean to decrease future benefit increases?

- No current benefits would be decreased
  - Not for current recipients
  - Not for current active members
- The Board currently has the authority to grant COLA
  - Not more than inflation
  - Not more than 3%
  - Not unless actuarially sound
- Current law does not seem to give the flexibility to give between 0% and 3% COLA
- Actuarial results support a 1.8% COLA



What about COLA increase assumptions?

- Actuarial valuation performed using 3% assumption
- 3% assumption not affordable in the long run
  - Based on current actuarial valuation
  - Based on current asset levels
    - $4.4 billion actuarial value of assets
    - $3.6 billion market value of assets
  - Based on 8% future return
- Actuarial results support a 1.8% COLA
- If we (Board & Buck) believe that 1.8% COLA is the correct long term assumption, then the plan is actuarially sound



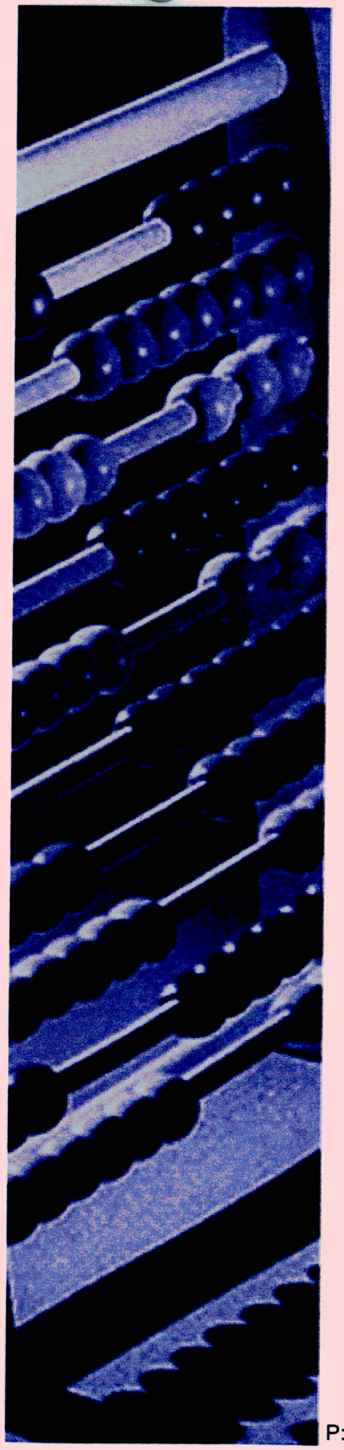
Wyoming Retirement System Plans

Summary of Funding Position

	Actuarial Value of Assets	Actuarial Accrued Liability	Funded Percentage*
As of January 1, 2003			
- Wyoming Retirement System	$4,352	$4,719	92%
- Law Enforcement	186	206	90%
- Paid Fire Plan A	193	212	91%
- Paid Fire Plan B	38	31	123%
- Warden and Patrol	79	84	94%
- Judges	3	7	49%
As of January 1, 2002			
- Wyoming Retirement System	$4,582	$4,442	103%
- Paid Fire Plan A	207	218	95%
- Paid Fire Plan B	36	24	152%
- Warden and Patrol	80	79	101%
- Judges	2	6	29%

All $ figures are in millions

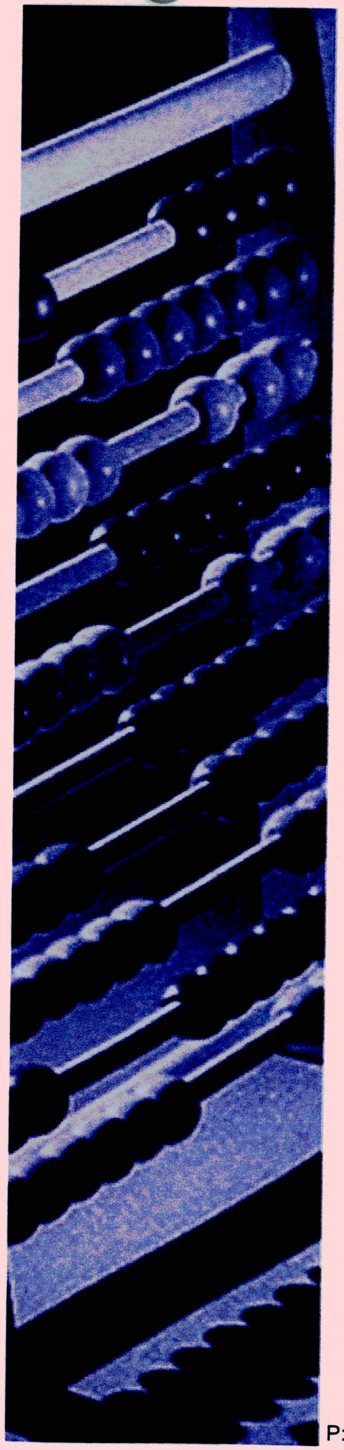
*Funded percentage shown is based on AVA and AAL before rounding to nearest million



Wyoming Retirement System

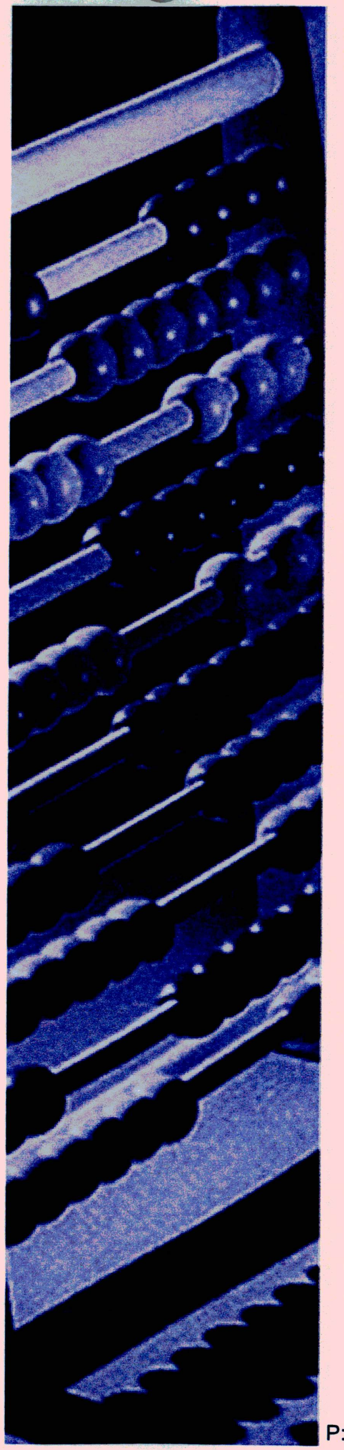
Comparative Summary of Key Demographic Information

	Valuation Date		Change
	01/01/02	01/01/01	
Number of Members			
- Active	31,135	31,609	- 474
- Retirees, Disableds and Beneficiaries	14,850	14,446	+ 404
- Inactive Vested Members	4,624	4,797	- 173
Total	50,609	50,852	- 243
Projected Payroll ($ millions)	$ 964	$ 898	+ 66
Active Averages			
- Age (years)	45.6	45.1	+ 0.5 years
- Service (years)	10.4	10.0	+ 0.4 years
Annual Disbursements			
- Pensions ($millions)	$ 162.6	$ 145.8	+ $16.8
- Refunds ($millions)	$ 8.7	$ 10.4	- $1.7

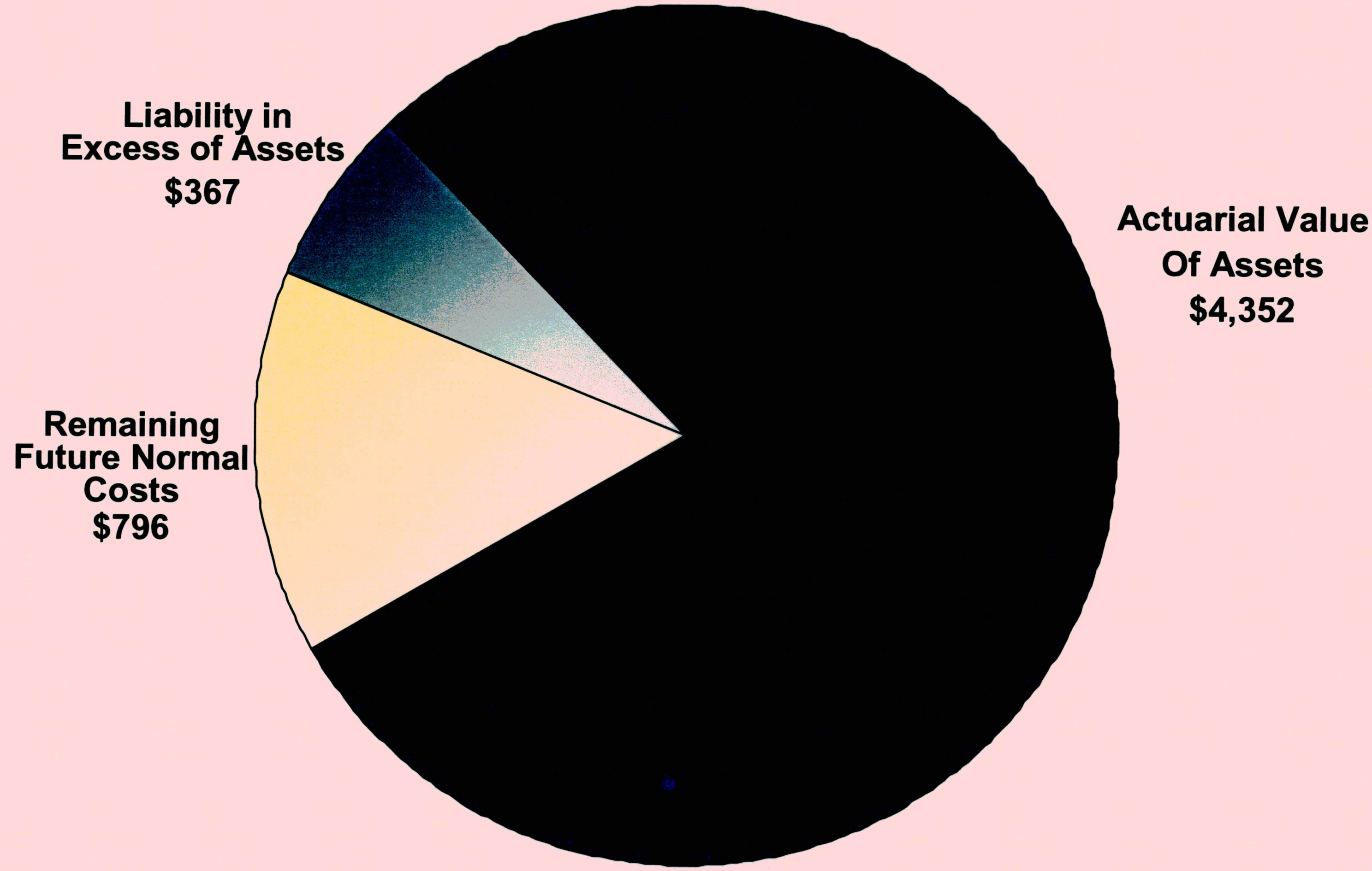


Wyoming Retirement System
Development of Funding Margin

• Normal Cost	11.19%
• Member Contributions	5.57%
• Employer Share of Normal Cost	5.62%
• Amortization of Unfunded Liability	2.61%
• Administrative Expenses	0.14%
• Total Employer Cost	8.37%
• Statutory Employer Contribution	5.68%
• Funding Margin	(2.69%)



Wyoming Retirement System
Projected Actuarial Assets



TOTAL PRESENT VALUE: $5.515 billion

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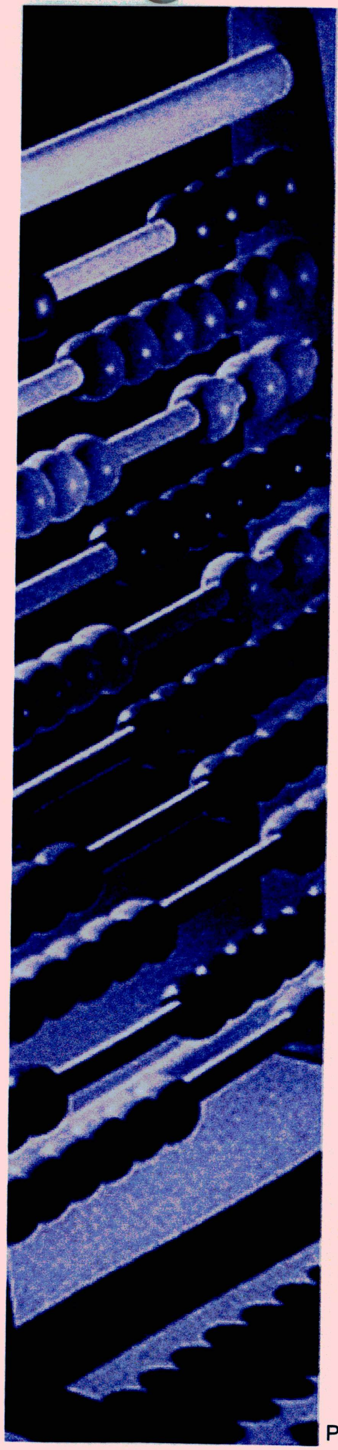
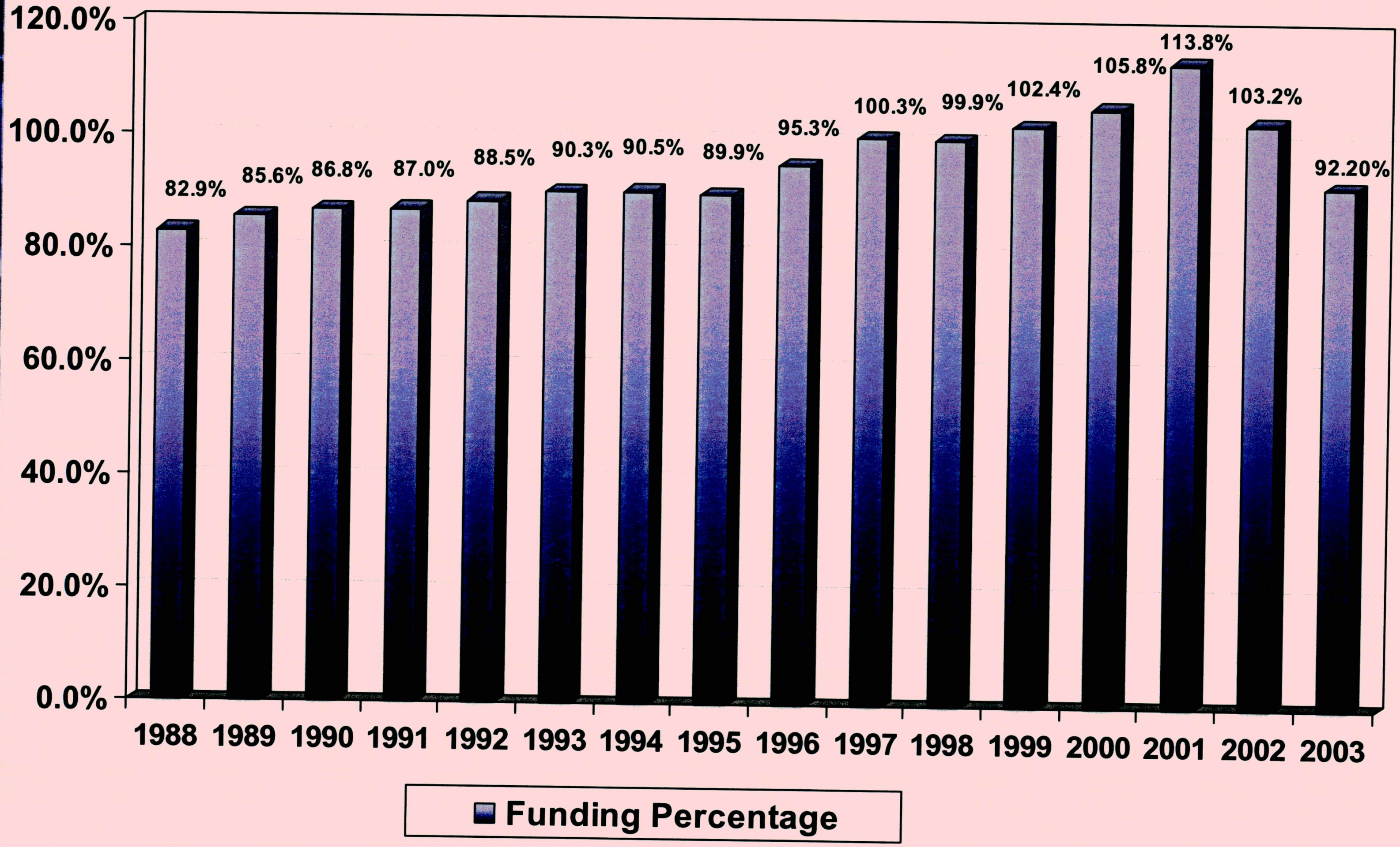


Wyoming Retirement System
History of Funding Percentage



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