

**STATE OF WYOMING
RETIREMENT SYSTEM**

**REPORT ON ACTUARIAL VALUATION
AS OF JANUARY 1, 2002**

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

STATE OF WYOMING RETIREMENT SYSTEM

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STATE OF WYOMING RETIREMENT SYSTEM

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, 2002. 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, 2002.
2. The characteristics of covered active employees, inactive nonretired participants, and pensioners and beneficiaries as of December 31, 2001.
3. The assets of the Retirement System as of December 31, 2001.
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.

STATE OF WYOMING RETIREMENT SYSTEM

II. SUMMARY OF VALUATION RESULTS

This section summarizes financial results for the Retirement System Plan based upon actuarial valuations as of January 1, 2002 and January 1, 2001.

	January 1, 2002	January 1, 2001
Contribution Requirements (as % of pay)		
Total Normal Cost	11.87%	10.47%
Employee Contributions	<u>5.72</u>	<u>5.72</u>
Employer Share	6.15	4.75
Amortization of Unfunded Liability	(0.95)	(3.59)
Administrative Expenses	<u>0.14</u>	<u>0.14</u>
Total Employer Cost	5.34%	1.30%
Total Cost (Employee + Employer)	11.06%	7.02%
Funded Status		
Actuarial Value of Assets (AV)	\$ 4,582,462,000	\$ 4,190,440,000
Actuarial Accrued Liability (AAL)	4,442,033,000	3,683,174,000
AAL Funded Percentage (AV ÷ AAL)	103.2%	113.8%

STATE OF WYOMING RETIREMENT SYSTEM

III. MEMBERSHIP CHARACTERISTICS

As of December 31, 2001, there were 32,811 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.

	2001	2000
Number of active employees	32,811	31,492
Average age	44.9	44.8
Average years of service	9.9	10.1
Total annual salary	\$ 964,121,422	\$ 897,641,161
Average annual salary	\$ 29,384	\$ 28,504
Total accumulated contributions	\$ 738,227,921	\$ 710,209,150
Average accumulated contributions	\$ 22,499	\$ 22,552

During 2001, the average age increased slightly, average service decreased slightly, and the number of active employees increased by about 4%.

* * * * *

In addition to the data received on active employees, data were provided on 4,797 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.

	2001	2000
Number of inactive employees	4,797	4,420
Average age	51.1	50.0
Average years of service	9.4	9.6
Total accumulated contributions	\$ 107,527,598	\$ 94,362,973
Average accumulated contributions	\$ 22,416	\$ 21,349

The average age increased from last year while average service decreased slightly. The number of inactive members increased by 8.5% since last year.

* * * * *

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Of the 32,811 employees in active service on December 31, 2001, 1,202 were law enforcement officers who are eligible for special benefits from the Retirement System. A comparison of the law enforcement officers and the other employees (hereafter referred to as "general members") is summarized below:

	Law Enforcement Officers	General Members
Average age	40.3	45.1
Average years of service	7.9	10.0
Average age at hire	32.4	35.1

On the average, the law enforcement officers are younger than the general members and have fewer years of service. In addition, the average age at hire for law enforcement officers is approximately three years less than that for general members.

* * * * *

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 2001 salaries reported. For calculating active employee liabilities, the actual 2001 salaries reported were increased by 2.50% (one half of the 5.0% salary scale) to approximate a pay rate.

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IV. BENEFIT EXPERIENCE

During the year ended December 31, 2001, the Board approved 688 pension awards. Of that total, approximately 36% commenced before becoming eligible for unreduced benefits. 28% of new retirees have unreduced benefits due solely to reaching age 60 while 19% of new retirees have attained the rule of 85 without reaching age 60. The remaining 17% of new retirees have both age 60 and rule of 85.

On December 31, 2001, a total of 13,123 pensioners were receiving retirement benefits from the Plan. The average monthly benefit for the pensioners was \$915 compared to \$815 as of the end of 2000. In addition, 1,323 beneficiaries were receiving monthly payments at December 31, 2001.

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, 2001 for the 14,446 pensioners and beneficiaries were \$155.8 million.
- ◆ Of the 14,446 pensioners and beneficiaries, approximately 31% are under age 65, 39% are 65 through 74 and 30% are 75 or older.
- ◆ Approximately 41% of the 13,123 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 14,446 pensioners and beneficiaries were receiving monthly benefits of less than \$200 and 70% were receiving at least \$400 per month.
- ◆ For members retiring from active service during 2001, the average age of early and normal retirements was 59.3.
- ◆ Benefit payments from Plan assets in 2001 totaled \$156,186,100, including refund payments of \$10,377,884. In 2000, benefit payments were \$144,620,949, including refund payments of \$12,886,541.

The actuarial accrued liability for pension benefits to the 14,446 pensioners and beneficiaries amounted to over \$1,824 million as of January 1, 2002. 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.

STATE OF WYOMING RETIREMENT SYSTEM

V. ASSETS

As shown in the auditor's report as of December 31, 2001, net assets totaled \$4,160,838,910 at market value, compared to a value of \$4,412,034,881 as of December 31, 2000. However, assets are taken at a somewhat different value 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. The determination of the actuarial value of investments is shown in Table A that follows. There was approximately \$422 million of deferred depreciation that will be recognized in future years. A statement of the actuarial assets for the years ended December 31, 2001 and 2000 is provided in Table B. The asset value on this basis is \$4,582,462,306 and \$4,190,440,152, 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 of the market value of assets has also been reflected in the actuarial value of assets.

The investment portfolio is summarized in Table C. On December 31, 2001, 54% of the assets at market value consisted of equities.

Income and disbursements for 2001 and 2000 on the actuarial value basis are given in Table D. The progress of the fund for the last sixteen years is provided in Table E. It shows that assets have increased consistently from year to year, 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 sixteen years. Over the full period, the earnings of \$3,906,597,000 on an actuarial value basis represents an average annual return of 11.4%.

A picture of the financial development of the fund over the last fifteen years is provided in Chart 2. Investment income is increasing the assets of the fund.

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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 thirteen years on a *market value basis* as reported by your investment advisors are as follows:

<u>Year</u>	<u>Rate of Return</u>	<u>Year</u>	<u>Rate of Return</u>
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%		

These values can be used to illustrate the smoothing effect that results from using an actuarial value of assets. Chart 3 illustrates that the volatility of market values 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, 2001 AND 2000

Year Ending	Total Appreciation (Depreciation)	Expected Appreciation	Difference From Expected	OF TOTAL APPRECIATION December 31, 2001			OF TOTAL APPRECIATION December 31, 2000		
				% Deferred	\$ Deferred	% Deferred	\$ Deferred	% Deferred	\$ Deferred
12/31/97	460,692,092	-	460,692,092	0%	0	20%	92,138,418		
12/31/98	536,509,994	-	536,509,994	20%	107,301,999	40%	214,603,998		
12/31/99	410,364,157	-	410,364,157	40%	164,145,663	60%	246,218,494		
12/31/00	(178,515,645)	235,692,081	(414,207,726)	60%	(248,524,636)	80%	(331,366,181)		
12/31/01	(327,172,738)	228,510,289	(555,682,027)	80%	(444,546,422)	0%	0		
(a) Total Deferred as of Valuation Date					\$ (421,623,396)		\$ 221,594,729		
(b) Total Appreciation (Depreciation) for Last Five Plan Years					437,675,490		1,162,023,346		
(c) Write-Up/(Down) Amount for the Year-- Equals 20% of (b) Plus Rounding Adjustment					87,535,099		232,404,669		
Market Value of Investments					January 1, 2002		January 1, 2001		
Less: Deferred Appreciation (Depreciation)					\$ 4,311,141,485		\$ 4,508,422,179		
Preliminary Actuarial Value of Investments					(421,623,396)		221,594,729		
Adjustment for 20% Corridor					\$ 4,732,764,881		\$ 4,286,827,450		
Actuarial Value of Investments*					0		0		
					\$ 4,732,764,881		\$ 4,286,827,450		

* See Table B for actuarial value of assets.

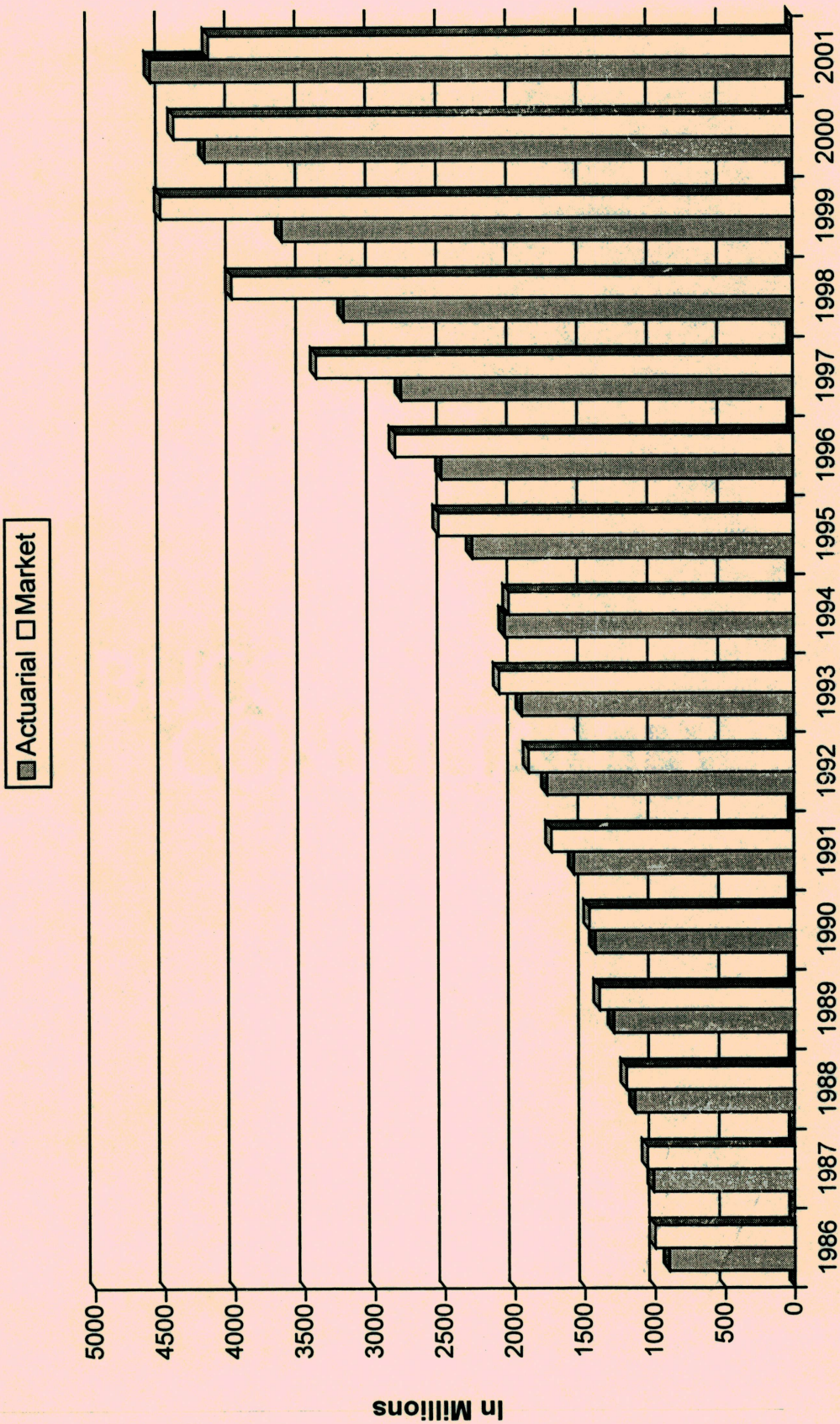
TABLE B

**ASSETS OF THE FUND AS OF DECEMBER 31, 2001 AND 2000
(ACTUARIAL VALUE BASIS)**

	<u>2001</u>	<u>2000</u>
Accounts Receivable		
Employer Contributions	\$ 2,851,303	\$ 2,793,439
Employee Contributions	2,947,798	2,825,889
Investment Income	17,845,792	20,572,415
Other	416,704,009	298,212,476
Total Receivables	\$ 440,348,902	\$ 324,404,219
Preliminary Actuarial Value of Investments	4,732,764,881	4,286,827,450
Total Assets	\$ 5,173,113,783	\$ 4,611,231,669
Accounts Payable		
Benefits and Refunds	\$ (162,425)	\$ (503,597)
Other	(590,489,052)	(420,287,920)
Total Payables	(590,651,477)	(420,791,517)
Net Assets	\$ 4,582,462,306	\$ 4,190,440,152
Market Value of Assets	\$ 4,160,838,910	\$ 4,412,034,881
80% Minimum Actuarial Value	\$ 3,328,671,128	\$ 3,529,627,905
120% Maximum Actuarial Value	\$ 4,993,006,692	\$ 5,294,441,857
Adjustment for 20% Corridor	\$ 0	\$ 0
Actuarial Value of Assets	\$ 4,582,462,306	\$ 4,190,440,152

CHART 1

Value of Assets



Year Ended December 31

TABLE C

INVESTMENT PORTFOLIO

Type of Investment	December 31, 2001		December 31, 2000	
	Market Value	Percentage Distribution	Market Value	Percentage Distribution
Cash Investments	\$ 230,007,644	5.3%	\$ 138,969,892	3.1%
Fixed Income Investments	\$ 1,770,830,723	41.1%	\$ 1,743,453,983	38.7%
Equity Investments	\$ 2,310,303,118	53.6%	\$ 2,625,998,304	58.2%
Total Investments*	\$ 4,311,141,485	100.0%	\$ 4,508,422,179	100.0%

* Total market value of assets (after adjusting for accruals) is \$4,160,838,910 and \$4,412,034,881 as of December 31, 2001 and 2000.

**SUMMARY STATEMENT OF INCOME AND DISBURSEMENTS
FOR THE YEARS ENDED DECEMBER 31, 2001 AND 2000
(ACTUARIAL VALUE BASIS)**

	2001	2000
Contribution Income:		
Employer Contributions	\$ 56,465,278	\$ 50,489,314
Employee Contributions	53,792,429	51,868,059
Other	52,099	50,361
Total Contribution Income	\$ 110,309,806	\$ 102,407,734
Less: Administrative Expenses	(1,387,930)	(1,096,747)
Net Contribution Income	\$ 108,921,876	\$ 101,310,987
Investment Income:		
Interest and Dividends	\$ 130,085,149	\$ 133,718,867
Less: Investment Expenses	(7,523,216)	(10,289,407)
Net Interest and Dividends	\$ 122,561,933	\$ 123,429,460
Gross Write-Up of Assets	87,535,099	232,404,669
Expected Appreciation	228,510,289	235,692,081
Net Adjustment for 20% Corridor Around Market Value	0	0
Net Investment Income	438,607,321	591,526,210
Net Income from Securities Lending	679,058	853,529
Total Income Available for Benefit Payments and Reserves	\$ 548,208,255	\$ 693,690,726
Benefit Payments:		
Pension Benefits	\$ (145,808,216)	\$ (131,734,408)
Refunds	(10,377,884)	(12,886,541)
Total Benefit Payments	(156,186,100)	(144,620,949)
Addition to Reserve for Future Benefit Payments	\$ 392,022,155	\$ 549,069,777
Actuarial Value of Assets, Beginning of Year	4,190,440,151	3,641,370,374
Actuarial Value of Assets, End of Year	\$ 4,582,462,306	\$ 4,190,440,151

TABLE E

PROGRESS OF THE FUND THROUGH DECEMBER 31, 2001
(ACTUARIAL VALUE BASIS)

Plan Year	Employer Contributions*	Employee Contributions	Administrative Expenses	Net Investment Income	Benefit Payments	Fund at Year End
16 Years Through December 31, 2001	\$ 694,224,578	\$ 687,156,474	\$ (14,626,747)	\$ 3,906,597,901	\$ (1,457,123,897)	\$ 4,582,462,306
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

* 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.

**SUMMARY OF INVESTMENT RESULTS
(ACTUARIAL VALUE BASIS)**

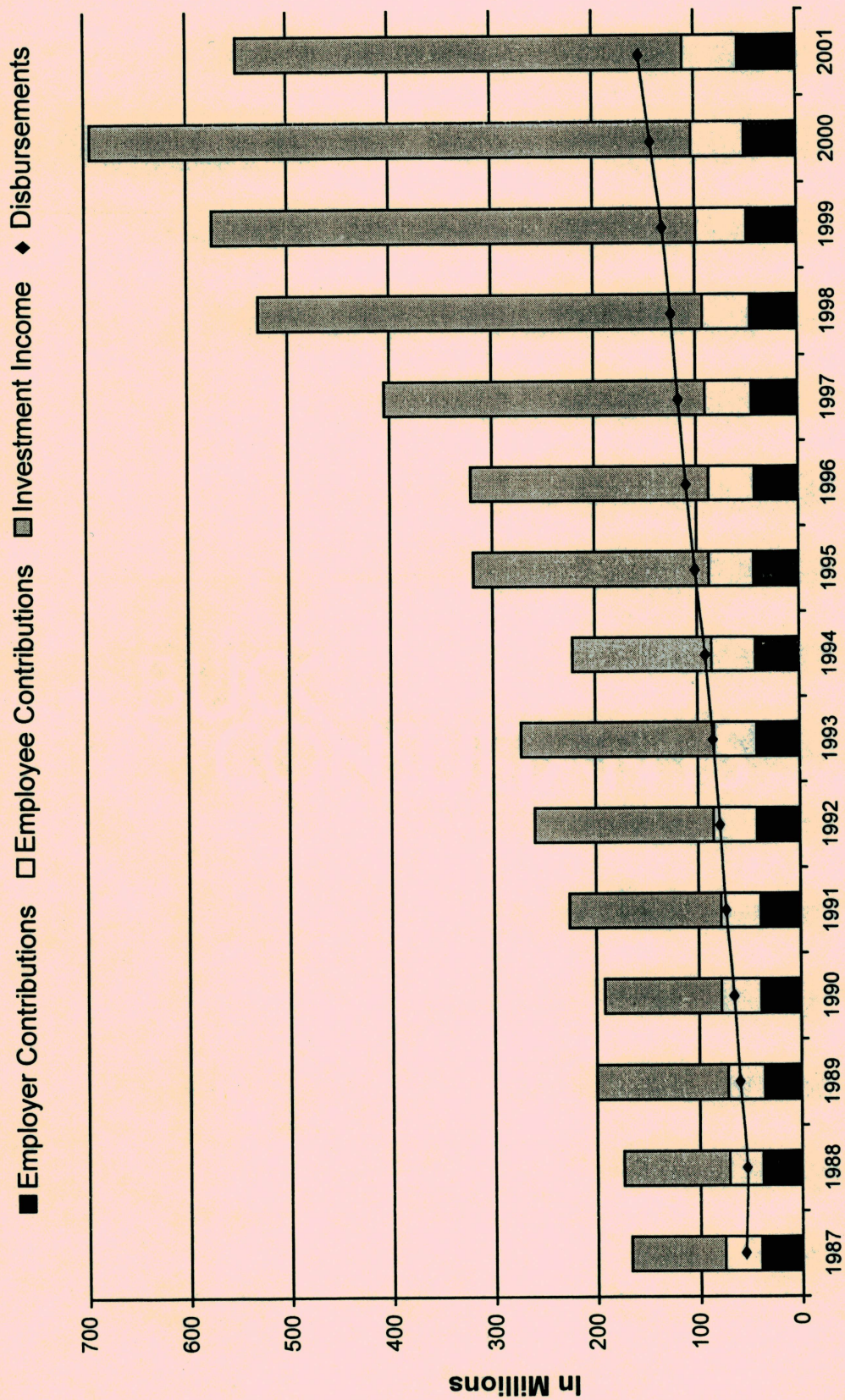
Plan Year	Average Amount of Assets in Fund	Assumed Investment Income		Net Dividends & Interest Income*	Appreciation Recognized**	Total Investment Income		Investment Gain (Loss)
		Amount	%			Amount	%	
1986	\$ 783,667,000	\$ 58,775,000	7.50%	\$ 75,380,000	\$ 23,618,000	\$ 98,998,000	12.6%	\$ 40,223,000
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
Total Amount		\$ 2,578,447,000		\$ 1,689,352,000	\$ 2,217,245,000	\$ 3,906,597,000		\$ 1,328,150,000
Average Rate of Investment Income Over Period							11.4%	

* 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

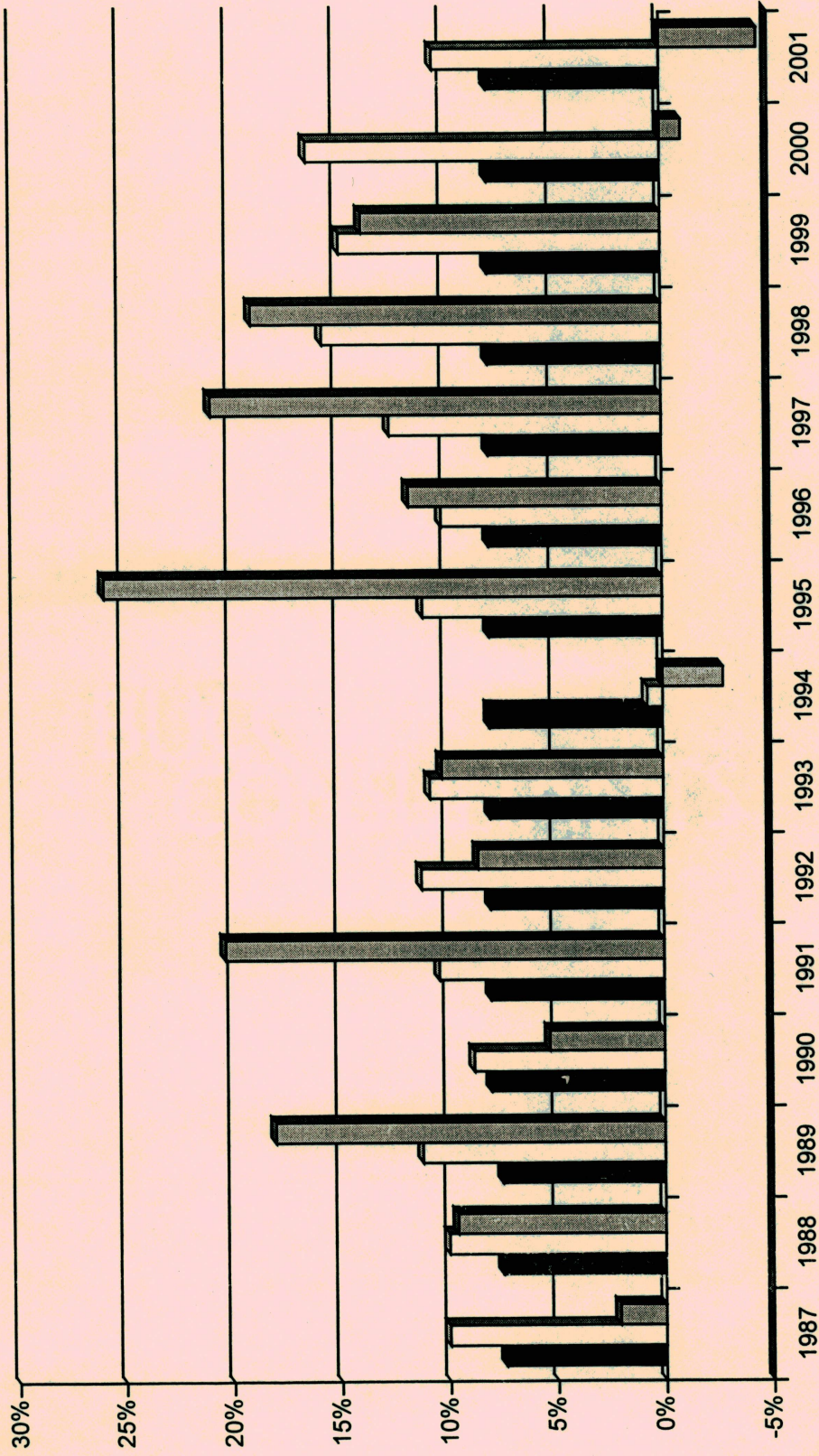
Income and Disbursements



Year Ended December 31

Investment Return

■ Actuarial Assumption □ Actuarial Value ■ Market Value



Year Ended December 31

STATE OF WYOMING RETIREMENT SYSTEM

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 22 years as of January 1, 2002. The amortization method uses payments that are assumed to increase at 4.5% per annum, the rate at which the covered payroll is assumed to increase.

The use of a level percentage of payroll for amortization results in contributions in the early years that are not sufficient to cover the interest on the UAAL. The UAAL will therefore increase for years before declining in dollars, if experience matches assumptions.

Also, 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

	2002 Cost as a % of Salaries	2002 Dollar Cost*	2001 Cost as a % of Salaries
1. Entry Age Normal Cost			
a. Total employee and employer	11.87%	\$ 114,483,000	10.47%
b. Employee share**	5.72%	55,173,000	5.72%
c. Employer share equals (a) - (b)	6.15%	\$ 59,310,000	4.75%
2. Cost to Amortize Unfunded Actuarial Accrued Liability	(0.95)%	(9,180,000)	(3.59)%
3. Administrative Expenses	0.14%	1,333,000	0.14%
4. Total Employer Cost	5.34%	\$ 51,463,000	1.30%
5. Total Cost (Employee + Employer)	11.06%	\$ 106,636,000	7.02%

* Dollar costs based on 2002 estimated payroll of \$964,121,000.

** Represents 5.57% of salaries for general members and 9.30% of salaries for law enforcement officers.

STATE OF WYOMING RETIREMENT SYSTEM

VI. RESULTS OF ACTUARIAL VALUATION (continued)

The total employer cost of \$51,463,000 is 5.34% of payroll. This is less than the statutory contribution rate of 5.68% covered payroll. Hence, the current contribution rate more than meets the contribution requirements based upon the actuarial assumptions, actuarial method and financing objectives accepted by the Board.

As of January 1, 2001, the employer cost rate was 1.30%. An explanation of the change since the previous actuarial valuation is as follows:

Employer Cost Rate as of January 1, 2001	1.30%
Decrease due to actuarial investment return more than 8%	(0.72)%
Decrease due to contributions in excess of actuarially determined rate	(0.33)%
Increase due to change in plan provisions	4.21%
Increase due to other experience factors	<u>0.88%</u>
Employer Cost Rate as of January 1, 2002	5.34%

Law Enforcement Officers

Law enforcement officers can receive their pension without an actuarial reduction as early as age 50. The following table illustrates their normal costs and liabilities based on the plan designs applied to the law enforcement officer population.

	Cost as a Percentage of Salaries	Dollar Cost*
1. Total Entry Age Normal Cost		
a. Enhanced benefits	15.72%	\$ 6,204,200
b. Regular benefit formula	<u>11.87%</u>	<u>4,684,600</u>
c. Cost of benefit improvement (a) - (b)	3.85%	\$ 1,519,600
d. Benefit improvement amortization**	<u>1.36%</u>	<u>538,500</u>
e. Total cost of benefit improvement (c) + (d)	5.21%	\$ 2,058,100

* Dollar cost is based on 2002 estimated payroll for Law Enforcement Officers of \$39,466,000.

** Amortized over 14-year average future work life from January 1, 1994.

STATE OF WYOMING RETIREMENT SYSTEM

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 this ratio, the actuarial value of assets is used.

Historical Results

The benefit security ratios for the last sixteen years are graphed in Chart 4. These ratios are developed in Table G. The graphs show that on a funding basis, the benefit security ratio has steadily improved.

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

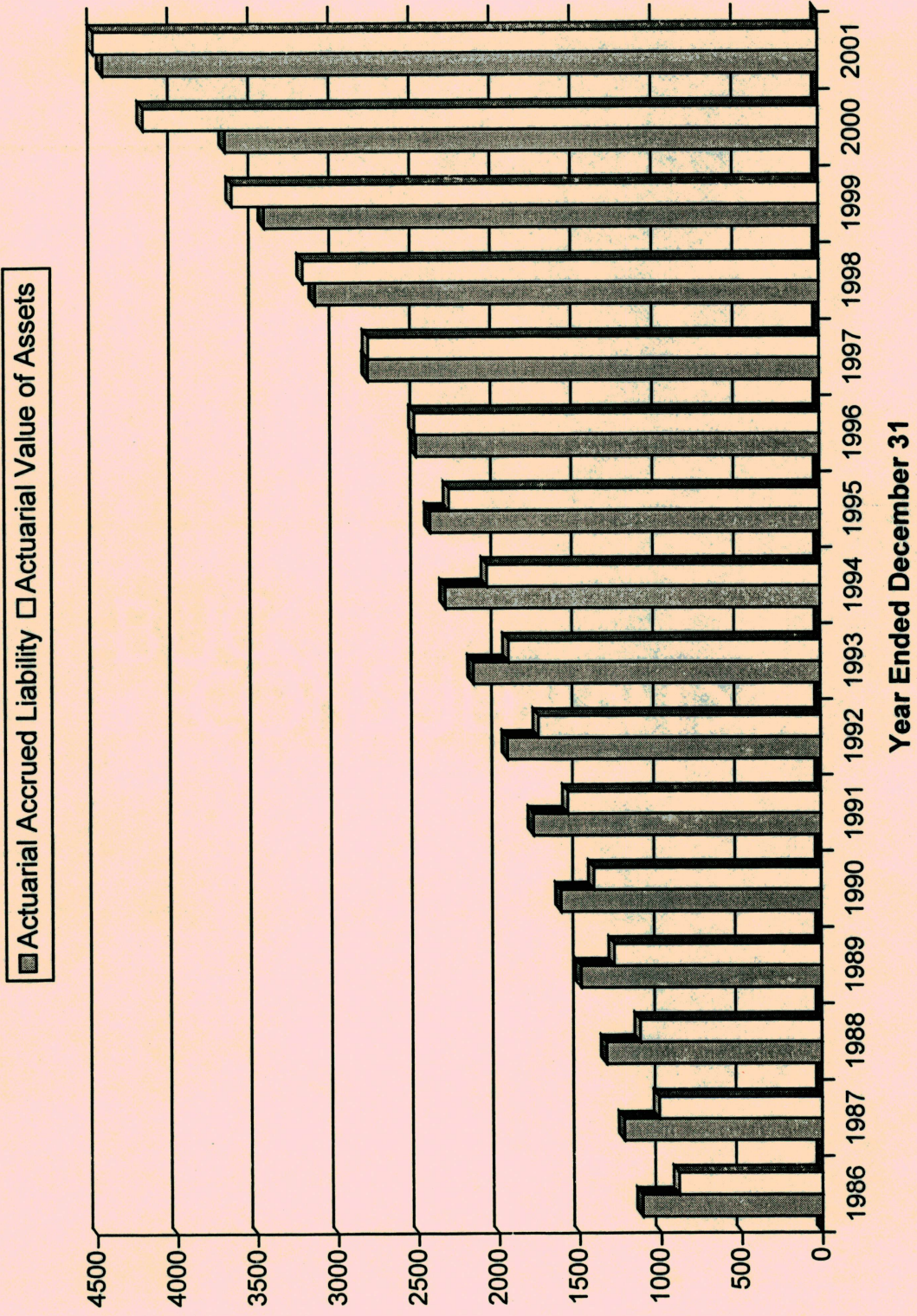


TABLE G

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)

STATE OF WYOMING RETIREMENT SYSTEM

VIII. ACTUARIAL ASSUMPTIONS AND COST METHOD

The actuarial assumptions and cost method used in this actuarial valuation are the same as that used in the previous valuation. 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 4.0% for inflation and 4.0% 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 4.0% for inflation, as assumed in the investment yield. There is an allowance for 0.5% for standard-of-living growth per year and 0.5% 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	4.00%

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.

STATE OF WYOMING RETIREMENT SYSTEM

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 22 years from January 1, 2002, using payments that rise 4.5% 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 4.5% 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.

April 1, 2002

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, 2002, in accordance with generally accepted actuarial principles and practices.

The certificate contains the following attached exhibits:

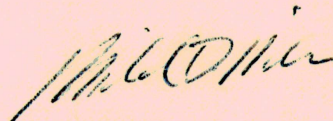
- I. Actuarial Valuation Results
- II. Changes in Actuarial Assumptions and Methods
- III. Actuarial Assumptions and Cost Method
- IV. Plan Amendments
- V. Summary of Plan Provisions

The valuation is based on information supplied by the Retirement Office with respect to participants and by Porter, Muirhead, Cornia & Howard 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. Forna, FSA, MAAA, EA
Principal and Consulting Actuary



Michael D. Mills, ASA
Senior Consultant, Actuary

ACTUARIAL VALUATION RESULTS

1. Actuarial Accrued Liability on January 1, 2002:	
a. Active employees	\$ 2,498,486,000
b. Retired members and beneficiaries	1,824,246,000
c. Inactive nonretired members	119,301,000
d. Total.....	\$ 4,442,033,000
2. Assets of the Fund on December 31, 2001 at actuarial value*.....	\$ 4,582,462,000
3. Unfunded actuarial accrued liability -- equals (1) - (2)	\$ (140,429,000)
4. Employee and employer normal cost for ensuing year.....	\$ 114,483,000
5. Estimated annual salaries of covered employees.....	\$ 964,122,000
6. Employee normal cost	\$ 55,173,000
7. Employer normal cost for ensuing year equals (4) - (6).....	\$ 59,310,000
8. Amortization payment -- equals 22-year amortization of item (3) as a level percent of aggregate salary	\$ (9,180,000)
9. Expected Administrative expenses.....	\$ 1,333,000
10. Total employer cost for ensuing year -- equals (7) + (8) + (9).....	\$ 51,463,000
11. Total employer cost as percentage of payroll -- equals (10) ÷ (5)	5.34%

* \$4,160,838,910 at market value.

CHANGES IN ACTUARIAL ASSUMPTIONS & METHODS

There were no changes in actuarial assumptions or methods in 2001.

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:

Age	RATE					
	Death			Withdrawal		
	Male	Female	Disability	General Members		Law Enforcement Officers
			Male	Female		
25	.07%	.03%	--	21.27%	24.37%	9.33%
30	.08%	.04%	.01%	14.70%	18.00%	5.54%
35	.09%	.05%	.01%	10.03%	13.10%	3.21%
40	.11%	.07%	.01%	7.25%	10.21%	2.45%
45	.16%	.10%	.04%	5.61%	7.94%	1.85%
50	.26%	.14%	.08%	4.21%	5.62%	1.38%
55	.44%	.23%	.20%	3.08%	4.13%	--
60	.80%	.44%	--	--	--	--

Retirement Rates: General Members

Age	Rate of Retirement (Examples Shown)
50	2%
55	6%
60	15%
62	25%
65	33%
70	100%

ACTUARIAL ASSUMPTIONS AND COST METHOD

Retirement Rates: Law Enforcement Officers

Age	Rate of Retirement (Examples Shown)	
	Under 25 Years of Service	25 or More Years of Service
50	2%	10%
55	6%	25%
60	15%	50%
62	25%	100%
65	33%	100%
70	100%	100%

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.

PLAN AMENDMENTS

Effective July 1, 2001, the 2.5% annual cost-of-living adjustment increased to 3.0% annually.

Effective July 1, 2001, the 2.0% multiplier for all service increased to 2.125% for the first 15 years of service and 2.25% for service beyond 15 years.

Effective July 1, 2001, all retirees and beneficiaries were given an ad-hoc benefit increase of \$3.00 per month for each year of service.

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 Age 50 with at least four years of service, or any age with at least 25 years of service, reduced by 5.0% per year for retirement prior to age 60. Those retiring from active service with combined age plus service of 85 or more points do not have their benefits reduced on account of early retirement. Law enforcement officers receive unreduced benefits at age 50 with 25 years of service. Effective July 1, 1997, Law enforcement officers may also retire with unreduced benefits at age 55 with combined age plus service of 75 or more points.

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 (no service requirement for law enforcement officers). Disability must be duty-related for law enforcement officers.

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 (9.30% for law enforcement officers) 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. The first increase for a retiree is on the July 1 following two years of retirement. The first adjustments occurred in 1991.

CENSUS TABLES

Table Designation

I. Active Employees

A. Number of active employees grouped by five-year age and service cells

Males	1-A
Females	1-B
Males and Females, combined	1-C

B. Salaries of active employees grouped by five-year age and service cells

Members excluding Law Enforcement	2-A
Law Enforcement Members only	2-B
All Members	2-C

II. Inactive Participants

A. Number of inactive participants grouped by five-year age and service cells

Males	3-A
Females	3-B
Males and Females, combined	3-C

III. Retired Participants

A. Summary of all retired participants by benefit option and sex	4
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C. Distribution of pensions in force by age and benefit option	
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Females	6-B
Males and Females, combined	6-C
D. Distribution of pensions awarded during 2001 by amount of benefit and benefit option	7
E. Distribution of pensions awarded during 2001 by age and benefit option	8
F. Average monthly benefit by years elapsed since retirement and years of service at retirement	9
G. Distribution of retired participants by date of retirement	10

NOTE: See page 31 for description of benefit options by Code number.

CENSUS OF EMPLOYEES IN ACTIVE SERVICE ON DECEMBER 31, 2001

MALES

Age Last Birthday	Years of Service										Total
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	Over 34			
15-19	49										49
20-24	376	3									379
25-29	706	87									793
30-34	738	373	88	2							1,201
35-39	577	349	322	119	20						1,387
40-44	577	337	379	348	176	8					1,825
45-49	509	294	344	406	482	133	1				2,169
50-54	452	266	348	370	424	347	84				2,291
55-59	284	185	208	212	230	209	136	27			1,491
60-64	137	98	98	94	86	60	38	26			637
Over 64	80	50	41	33	20	9	10	5			248
Total	4,485	2,042	1,828	1,584	1,438	766	269	58			12,470

Average Age = 45.3

Average Service = 11.0

CENSUS OF EMPLOYEES IN ACTIVE SERVICE ON DECEMBER 31, 2001

FEMALES

Age Last Birthday	Years of Service								Total
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	Over 34	
15-19	60								60
20-24	666	1							667
25-29	1,247	122	3						1,372
30-34	1,234	440	95	4					1,773
35-39	1,324	522	335	124	17				2,322
40-44	1,453	768	528	440	244	8			3,441
45-49	1,245	845	709	551	596	165	1		4,112
50-54	785	590	637	620	562	339	76	2	3,611
55-59	420	261	298	420	384	200	72	11	2,066
60-64	136	105	122	131	137	68	22	16	737
Over 64	56	25	35	28	15	12	7	2	180
Total	8,626	3,679	2,762	2,318	1,955	792	178	31	20,341

Average Age = 44.5 Average Service = 9.3

CENSUS OF EMPLOYEES IN ACTIVE SERVICE ON DECEMBER 31, 2001

MALES AND FEMALES COMBINED

Age Last Birthday	Years of Service										Total
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	Over 34			
15-19	109										109
20-24	1,042	4									1,046
25-29	1,953	209	3								2,165
30-34	1,972	813	183	6							2,974
35-39	1,901	871	657	243	37						3,709
40-44	2,030	1,105	907	788	420	16					5,266
45-49	1,754	1,139	1,053	957	1,078	298	2				6,281
50-54	1,237	856	985	990	986	686	160	2			5,902
55-59	704	446	506	632	614	409	208	38			3,557
60-64	273	203	220	225	223	128	60	42			1,374
Over 64	136	75	76	61	35	21	17	7			428
Total	13,111	5,721	4,590	3,902	3,393	1,558	447	89			32,811

Average Age = 44.9 Average Service = 9.9

CENSUS OF EMPLOYEES IN ACTIVE SERVICE ON DECEMBER 31, 2001
MEMBERS EXCLUDING LAW ENFORCEMENT

Age Last Birthday	Years of Service										Total	
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	Over 34				
15-19	Number 108											108
	Tot. Salary 960,914											960,914
	Avg. Salary 8,897											8,897
20-24	Number 967	4										971
	Tot. Salary 14,374,639	121,002										14,495,641
	Avg. Salary 14,865	30,251										14,929
25-29	Number 1,816	194	3									2,013
	Tot. Salary 37,623,633	5,480,979	63,407									43,168,019
	Avg. Salary 20,718	28,252	21,136									21,445
30-34	Number 1,845	756	171	6								2,778
	Tot. Salary 40,172,807	24,258,518	5,859,307	188,264								70,478,896
	Avg. Salary 21,774	32,088	34,265	31,377								25,370
35-39	Number 1,829	824	623	227								3,539
	Tot. Salary 35,171,944	24,232,555	22,304,235	8,116,403	1,312,414							91,137,551
	Avg. Salary 19,230	29,408	35,801	35,755	36,456							25,752
40-44	Number 1,960	1,079	857	764	410							5,086
	Tot. Salary 37,010,569	29,360,002	28,752,352	29,358,857	16,044,964	16						141,082,633
	Avg. Salary 18,883	27,210	33,550	38,428	39,134	34,743						27,739
45-49	Number 1,706	1,108	1,020	919	1,048							6,096
	Tot. Salary 33,087,471	28,749,234	32,619,298	34,484,295	44,461,446	293	2					185,839,307
	Avg. Salary 19,395	25,947	31,980	37,524	42,425	42,171	40,686					30,465
50-54	Number 1,207	841	958	955	954							5,753
	Tot. Salary 25,647,494	22,633,176	30,026,656	33,226,385	39,150,598	676	160					189,009,116
	Avg. Salary 21,249	26,912	31,343	34,792	41,038	45,472	46,933					32,854
55-59	Number 688	439	494	615	599							3,488
	Tot. Salary 14,516,763	11,657,941	15,345,064	20,836,222	22,830,464	407	208					115,121,944
	Avg. Salary 21,100	26,556	31,063	33,880	38,114	44,476	48,354					33,005
60-64	Number 270	199	212	223	221							1,354
	Tot. Salary 4,968,161	4,932,645	6,141,934	7,170,913	7,616,163	127	60					41,035,906
	Avg. Salary 18,401	24,787	28,971	32,157	34,462	41,066	49,720					30,307
Over 64	Number 136	75	74	59	34							423
	Tot. Salary 1,706,884	1,681,949	1,817,092	1,646,378	1,063,096	21	17					9,773,050
	Avg. Salary 12,551	22,426	24,555	27,905	31,268	32,363	43,145					23,104
Total	Number 12,532	5,519	4,412	3,768	3,302	1,540	447					31,609
	Tot. Salary 245,241,279	153,108,001	142,929,345	135,027,717	132,479,145	67,648,070	21,364,978					902,102,977
	Avg. Salary 19,569	27,742	32,396	35,835	40,121	43,927	47,796					28,539

Average Age = 45.1 Average Service = 10.0

**CENSUS OF EMPLOYEES IN ACTIVE SERVICE ON DECEMBER 31, 2001
LAW ENFORCEMENT MEMBERS ONLY**

Age Last Birthday	Years of Service										Total		
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	Over 34					
15-19	Number	1											1
	Tot. Salary	22,591											22,591
	Avg. Salary	22,591											22,591
20-24	Number	75											75
	Tot. Salary	1,707,035											1,707,035
	Avg. Salary	22,760											22,760
25-29	Number	137	15										152
	Tot. Salary	3,908,787	520,995										4,429,782
	Avg. Salary	28,531	34,733										29,143
30-34	Number	127	57	12									196
	Tot. Salary	3,498,893	1,873,730	474,861									5,847,484
	Avg. Salary	27,550	32,872	39,572									29,834
35-39	Number	72	47	34	16								170
	Tot. Salary	1,987,901	1,583,202	1,296,938	664,680								5,569,144
	Avg. Salary	27,610	33,685	38,145	41,543								32,760
40-44	Number	70	26	50	24								180
	Tot. Salary	1,642,649	826,671	1,837,598	984,836								5,700,233
	Avg. Salary	23,466	31,795	36,752	41,035								31,668
45-49	Number	48	31	33	38								185
	Tot. Salary	1,232,727	1,045,667	1,215,667	1,434,147								6,475,624
	Avg. Salary	25,682	33,731	36,838	37,741								35,003
50-54	Number	30	15	27	35								149
	Tot. Salary	905,709	452,770	958,339	1,432,102								5,630,085
	Avg. Salary	30,190	30,185	35,494	40,917								37,786
55-59	Number	16	7	12	17								69
	Tot. Salary	404,297	207,477	394,818	590,153								2,295,998
	Avg. Salary	25,269	29,640	32,902	34,715								33,275
60-64	Number	3	4	8	2								20
	Tot. Salary	70,286	105,644	274,614	87,585								668,588
	Avg. Salary	23,429	26,411	34,327	43,793								33,429
Over 64	Number			2	2	1							5
	Tot. Salary			70,003	58,184	28,546							156,733
	Avg. Salary			35,002	29,092	28,546							31,347
Total	Number	579	202	178	134	91	18						1,202
	Tot. Salary	15,380,875	6,616,156	6,522,838	5,251,687	3,899,176	832,565						38,503,297
	Avg. Salary	26,565	32,753	36,645	39,192	42,848	46,254						32,033

Average Age = 40.3 Average Service = 7.9

CENSUS OF EMPLOYEES IN ACTIVE SERVICE ON DECEMBER 31, 2001
ALL MEMBERS

Age Last Birthday	Years of Service										Total		
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	Over 34					
15-19	Number 109												109
	Tot. Salary 938,505												983,505
	Avg. Salary 9,023												9,023
20-24	Number 1,042	4											1,046
	Tot. Salary 16,081,674	121,002											16,202,676
	Avg. Salary 15,433	30,251											15,490
25-29	Number 1,953	209	3										2,165
	Tot. Salary 41,532,420	6,001,974	63,407										47,597,801
	Avg. Salary 21,266	28,718	21,136										21,985
30-34	Number 1,972	813	183	6									2,974
	Tot. Salary 43,671,700	26,132,248	6,334,168	188,264									76,326,380
	Avg. Salary 22,146	32,143	34,613	31,377									25,665
35-39	Number 1,901	871	657	243	37								3,709
	Tot. Salary 37,159,845	25,815,757	23,601,173	8,781,083	1,348,837								96,706,695
	Avg. Salary 19,548	29,639	35,923	36,136	36,455								26,074
40-44	Number 2,030	1,105	907	788	420	16							5,266
	Tot. Salary 38,653,218	30,186,673	30,589,950	30,343,693	16,453,443	555,889							146,782,866
	Avg. Salary 19,041	27,318	33,727	38,507	39,175	34,743							27,874
45-49	Number 1,754	1,139	1,053	957	1,078	298	2						6,281
	Tot. Salary 34,320,198	29,794,901	33,834,965	35,918,442	45,779,810	12,585,243	81,372						192,314,931
	Avg. Salary 19,567	26,159	32,132	37,532	42,467	42,232	40,686						30,619
50-54	Number 1,237	856	985	990	986	686	160	2					5,902
	Tot. Salary 26,553,203	23,085,946	30,984,995	34,658,487	40,548,379	31,222,579	7,509,246	76,366					194,639,201
	Avg. Salary 21,466	26,970	31,457	35,009	41,124	45,514	46,933	38,183					32,979
55-59	Number 704	446	506	632	614	409	208	38					3,557
	Tot. Salary 14,921,060	11,865,418	15,739,882	21,426,375	23,457,526	18,173,968	10,057,693	1,776,020					117,417,942
	Avg. Salary 21,195	26,604	31,106	33,902	38,204	44,435	48,354	46,737					33,010
60-64	Number 273	203	220	225	223	128	60	42					1,374
	Tot. Salary 5,038,447	5,038,289	6,416,548	7,258,498	7,698,684	5,263,327	2,983,198	2,007,503					41,704,494
	Avg. Salary 18,456	24,819	29,166	32,260	34,523	41,120	49,720	47,798					30,353
Over 64	Number 136	75	76	61	35	21	17	7					428
	Tot. Salary 1,706,884	1,681,949	1,887,095	1,704,562	1,091,642	679,629	733,469	444,553					9,929,783
	Avg. Salary 12,551	22,426	24,830	27,944	31,190	32,363	43,145	63,508					23,200
Total	Number 13,111	5,721	4,590	3,902	3,393	1,558	447	89					32,811
	Tot. Salary 260,622,154	159,724,157	149,452,183	140,279,404	136,378,321	68,480,635	21,364,978	4,304,442					940,606,274
	Avg. Salary 19,878	27,919	32,560	35,951	40,194	43,954	47,796	48,365					28,667

Average Age = 44.9 Average Service = 9.9

CENSUS OF DEFERRED VESTED PARTICIPANTS ON DECEMBER 31, 2001

MALES

Age Last Birthday	Years of Service										Total	
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	Over 34				
15-19												
20-24												
25-29	3	8										11
30-34	10	39	6									55
35-39	27	72	25	2								126
40-44	34	113	58	27	5							237
45-49	30	154	105	62	23	2						376
50-54	57	167	103	62	29	13	2					433
55-59	45	137	71	43	18	14	3					331
60-64	17	48	21	5	6		3	1				101
Over 64	16	30	14	3	3			2				68
Total	239	768	403	204	84	29	8	3				1,738

Average Age = 50.1 Average Service = 9.9

CENSUS OF DEFERRED VESTED PARTICIPANTS ON DECEMBER 31, 2001

FEMALES

Age Last Birthday	Years of Service										Total	
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	Over 34				
15-19												
20-24		1										1
25-29	14	14										28
30-34	28	75	9									112
35-39	47	131	42	4	1							225
40-44	89	201	103	31	5							429
45-49	87	305	165	72	26	2						657
50-54	89	323	176	104	50	13	2					757
55-59	75	228	129	63	21	13	4					533
60-64	29	102	39	14	6	3						193
Over 64	36	59	19	10								124
Total	494	1,439	682	298	109	31	6					3,059

Average Age = 51.7 Average Service = 9.1

CENSUS OF DEFERRED VESTED PARTICIPANTS ON DECEMBER 31, 2001

MALES AND FEMALES COMBINED

Age Last Birthday	Years of Service										Total	
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	Over 34				
15-19												
20-24		1										1
25-29	17	22										39
30-34	38	114	15									167
35-39	74	203	67	6	1							351
40-44	123	314	161	58	10							666
45-49	117	459	270	134	49	4						1,033
50-54	146	490	279	166	79	26	4					1,190
55-59	120	365	200	106	39	27	7					864
60-64	46	150	60	19	12	3	3	1				294
Over 64	52	89	33	13	3			2				192
Total	733	2,207	1,085	502	193	60	14	3				4,797

Average Age = 51.1 Average Service = 9.4

RETIRES AS OF DECEMBER 31, 2001

	NUMBER			MONTHLY AMOUNT		
	Male	Female	Total	Male	Female	Total
<u>Pensioners</u>						
Option 1	1,591	4,345	5,936	1,578,328	3,179,865	4,758,193
Option 2	2,627	1,161	3,788	3,036,279	830,104	3,866,383
Option 3	479	252	731	758,088	232,326	990,414
Option 4	267	346	613	257,716	241,313	499,029
Option 5	268	945	1,213	265,647	646,782	912,429
Option 6	336	275	611	392,780	242,454	635,234
Option 7	106	125	231	179,047	154,842	333,889
Total	5,674	7,449	13,123	6,467,885	5,527,686	11,995,571
Beneficiaries	202	1,121	1,323	125,995	861,195	987,190
Grand Total	5,876	8,570	14,446	6,593,880	6,388,881	12,982,761

RETIREE BENEFITS IN FORCE BY AMOUNT AND OPTION TYPE

	Total	PENSION OPTION							
		0	1	2	3	4	5	6	7
Males									
Under \$200	486	1	161	212	10	32	41	28	1
\$200-\$399	836	2	293	384	28	33	41	48	7
\$400-\$599	784	1	248	340	47	46	47	50	5
\$600-\$799	646	3	191	296	45	33	28	38	12
\$800-\$999	531		162	235	44	23	34	23	10
\$1,000-\$1,499	905	2	241	427	111	52	21	38	13
\$1,500-\$1,999	656		136	342	68	24	23	47	16
\$2,000-\$2,499	557		108	279	74	18	24	34	20
\$2,500 & Over	475		104	204	79	14	19	33	22
Total	5,876	9	1,644	2,719	506	275	278	339	106
Females									
Under \$200	1,157	6	598	259	17	59	191	25	2
\$200-\$399	1,843	5	989	412	66	85	222	54	10
\$400-\$599	1,493	4	819	318	58	70	159	46	19
\$600-\$799	1,172	3	664	257	52	48	101	35	12
\$800-\$999	757	3	414	150	37	34	75	29	15
\$1,000-\$1,499	1,117	6	567	251	76	42	105	44	26
\$1,500-\$1,999	579	1	270	142	37	20	58	28	23
\$2,000-\$2,499	312		158	68	7	14	33	19	13
\$2,500 & Over	140	1	75	21	3	5	22	6	7
Total	8,570	29	4,554	1,878	353	377	966	286	127
Males & Females									
Under \$200	1,643	7	759	471	27	91	232	53	3
\$200-\$399	2,679	7	1,282	796	94	118	263	102	17
\$400-\$599	2,277	5	1,067	658	105	116	206	96	24
\$600-\$799	1,818	6	855	553	97	81	129	73	24
\$800-\$999	1,288	3	576	385	81	57	109	52	25
\$1,000-\$1,499	2,022	8	808	678	187	94	126	82	39
\$1,500-\$1,999	1,235	1	406	484	105	44	81	75	39
\$2,000-\$2,499	869		266	347	81	32	57	53	33
\$2,500 & Over	615	1	179	225	82	19	41	39	29
Total	14,446	38	6,198	4,597	859	652	1,244	625	233

**PENSIONS IN FORCE ON DECEMBER 31, 2001
BY OPTION AND NEAREST AGE ON THAT DATE**

MALES

Age Last Birthday	Pension Option										Total
	0	1	2	3	4	5	6	7	8	9	
0-49		10	9	3	1		1				24
50-54	2	49	63	7	11	6	21	2			161
55-59		153	248	26	38	22	70	19			576
60-64	1	291	524	88	55	63	111	38			1,171
65-69		302	620	113	53	55	94	25			1,262
70-74	1	326	525	117	54	56	33	18			1,130
75-79	1	238	392	93	39	40	8	4			815
80-84	3	151	218	40	15	22	1				450
Over 84	1	124	120	19	9	14					287
Total	9	1,644	2,719	506	275	278	339	106			5,876

**PENSIONS IN FORCE ON DECEMBER 31, 2001
BY OPTION AND NEAREST AGE ON THAT DATE**

FEMALES

Age Last Birthday	Pension Option							Total	
	0	1	2	3	4	5	6		7
0-49		27	14	2	4	1			48
50-54	3	115	58	9	23	21	19	4	252
55-59	4	338	176	22	61	57	87	30	775
60-64	2	734	293	76	82	156	86	42	1,471
65-69	5	850	375	64	83	204	65	35	1,681
70-74	3	865	330	73	65	206	24	13	1,579
75-79	9	644	293	60	40	137	3	3	1,189
80-84	2	501	199	30	11	96	1		840
Over 84	1	480	140	17	8	88	1		735
Total	29	4,554	1,878	353	377	966	286	127	8,570

**PENSIONS IN FORCE ON DECEMBER 31, 2001
BY OPTION AND NEAREST AGE ON THAT DATE**

MALES & FEMALES COMBINED

Age Last Birthday	Pension Option							Total	
	0	1	2	3	4	5	6		7
0-49		37	23	5	5	1	1		72
50-54	5	164	121	16	34	27	40	6	413
55-59	4	491	424	48	99	79	157	49	1,351
60-64	3	1,025	817	164	137	219	197	80	2,642
65-69	5	1,152	995	177	136	259	159	60	2,943
70-74	4	1,191	855	190	119	262	57	31	2,709
75-79	10	882	685	153	79	177	11	7	2,004
80-84	5	652	417	70	26	118	2		1,290
Over 84	2	604	260	36	17	102	1		1,022
Total	38	6,198	4,597	859	652	1,244	625	233	14,446

PENSIONS AWARDED IN 2001 BY OPTION AND MONTHLY AMOUNT

MALES & FEMALES COMBINED

Monthly Amount	Pension Option							Total	
	0	1	2	3	4	5	6		7
0-199		17	18	1	2	9	3		50
200-399		35	16		10	7	15	1	84
400-599		31	25	1	10	7	9	1	84
600-799		23	22	3	4	8	11	5	76
800-999		16	18	4		2	12	2	54
1000-1499	1	36	33	4	6	7	18	4	109
1500-1999		27	26	1	6	7	3	3	73
2000-2499		22	29	5	3	4	12	5	80
Over 2499		22	29	6	3	4	7	7	78
Total	1	229	216	25	44	55	90	28	688

**PENSIONS AWARDED IN 2001
BY OPTION AND NEAREST AGE ON THAT DATE
MALES & FEMALES COMBINED**

Nearest Age	Pension Option							Total	
	0	1	2	3	4	5	6		7
0-49		4	1						5
50-54	1	37	39	4	7	7	11	2	108
55-59		65	63	5	15	14	33	14	209
60-64		86	86	14	16	23	36	10	271
65-69		22	23	2	5	7	9	2	70
70-74		13	2			4			19
75-79		2	2		1		1		6
80-84									
Over 84									
Total	1	229	216	25	44	55	90	28	688

TABLE 9

AVERAGE MONTHLY BENEFIT OF RETIREES AS OF DECEMBER 31, 2001, 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										Total
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	Over 34			
0-4	Number 158	170	200	144	95	27	5				799
	Avg. Benefit 150.66	143.25	131.38	130.93	154.60	144.41	162.77				141.03
5-9	Number 500	615	650	460	302	142	42	4			2,715
	Avg. Benefit 316.61	276.01	305.17	284.70	250.27	251.73	239.69	257.88			287.22
10-14	Number 672	754	700	355	268	123	45	4			2,921
	Avg. Benefit 550.82	538.46	520.70	471.72	416.35	391.45	357.34	414.71			508.58
15-19	Number 730	740	504	329	173	113	28	3			2,620
	Avg. Benefit 846.69	809.51	822.07	685.02	588.70	565.85	525.61	615.66			778.31
20-24	Number 570	542	411	248	159	106	9				2,045
	Avg. Benefit 1,207.83	1,144.13	1,140.37	999.06	763.80	732.18	675.34				1,090.55
25-29	Number 570	442	289	226	108	22	7	3			1,667
	Avg. Benefit 1,756.54	1,674.92	1,495.45	1,303.90	911.71	870.78	819.47	801.74			1,556.19
30-34	Number 412	451	235	154	22	18	4	3			1,299
	Avg. Benefit 2,312.15	2,327.91	2,040.78	1,699.12	1,058.51	961.11	903.34	863.69			2,148.22
35-39	Number 74	143	57	30	6	13	4	2			329
	Avg. Benefit 2,839.55	2,752.58	2,547.66	1,987.42	1,135.87	1,093.63	1,089.79	1,117.25			2,541.67
40 and over	Number 9	15	6	5	6	8	2				51
	Avg. Benefit 2,971.88	2,906.41	2,121.77	2,100.52	1,413.99	1,223.58	1,296.33				2,243.95
Total	Number 3,695	3,872	3,052	1,951	1,139	572	146	19			14,446
	Avg. Benefit 1,095.94	1,045.11	832.85	726.24	493.58	506.66	438.75	619.38			898.71

Average Service at Retirement = 17.0 Average Years Since Retirement = 10.3

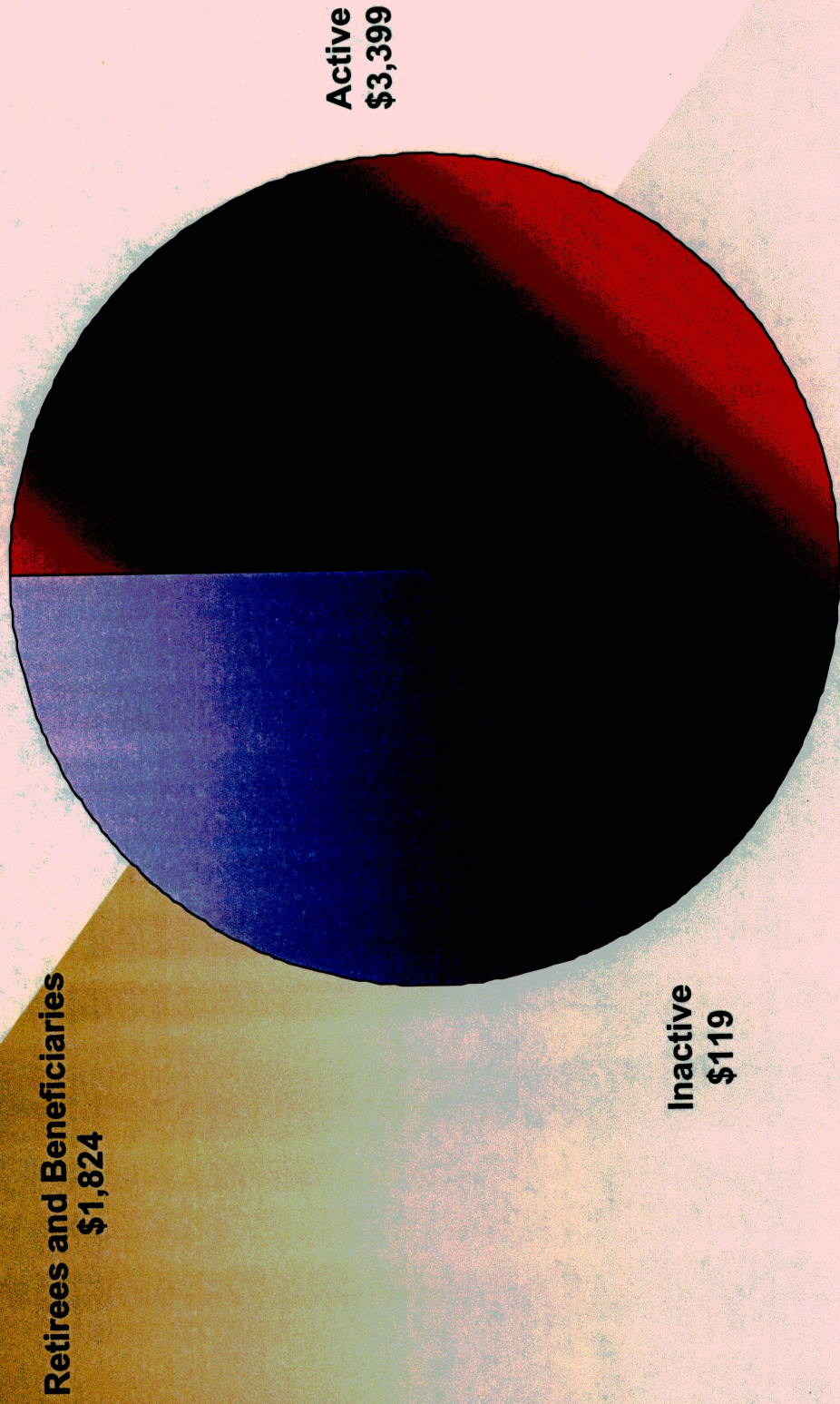
DISTRIBUTION OF RETIRED PARTICIPANTS BY DATE OF RETIREMENT

<u>Date of Retirement</u>	<u>Counts</u>	<u>Date of Retirement</u>	<u>Counts</u>
07/01/55 - 06/30/56	1	07/01/79 - 06/30/80	200
07/01/56 - 06/30/57	1	07/01/80 - 06/30/81	293
07/01/58 - 06/30/59	1	07/01/81 - 06/30/82	268
07/01/60 - 06/30/61	1	07/01/82 - 06/30/83	306
07/01/61 - 06/30/62	2	07/01/83 - 06/30/84	225
07/01/62 - 06/30/63	2	07/01/84 - 06/30/85	582
07/01/63 - 06/30/64	4	07/01/85 - 06/30/86	482
07/01/64 - 06/30/65	3	07/01/86 - 06/30/87	607
07/01/65 - 06/30/66	4	07/01/87 - 06/30/88	708
07/01/66 - 06/30/67	6	07/01/88 - 06/30/89	616
07/01/67 - 06/30/68	9	07/01/89 - 06/30/90	369
07/01/68 - 06/30/69	12	07/01/90 - 06/30/91	729
07/01/69 - 06/30/70	20	07/01/91 - 06/30/92	539
07/01/70 - 06/30/71	22	07/01/92 - 06/30/93	786
07/01/71 - 06/30/72	119	07/01/93 - 06/30/94	702
07/01/72 - 06/30/73	93	07/01/94 - 06/30/95	796
07/01/73 - 06/30/74	122	07/01/95 - 06/30/96	994
07/01/74 - 06/30/75	109	07/01/96 - 06/30/97	726
07/01/75 - 06/30/76	148	07/01/97 - 06/30/98	754
07/01/76 - 06/30/77	175	07/01/98 - 06/30/99	734
07/01/77 - 06/30/78	193	07/01/99 - 06/30/00	730
07/01/78 - 06/30/79	232	07/01/00 - 06/30/01	625
		07/01/01 - 01/01/02	396

Total: 14,446

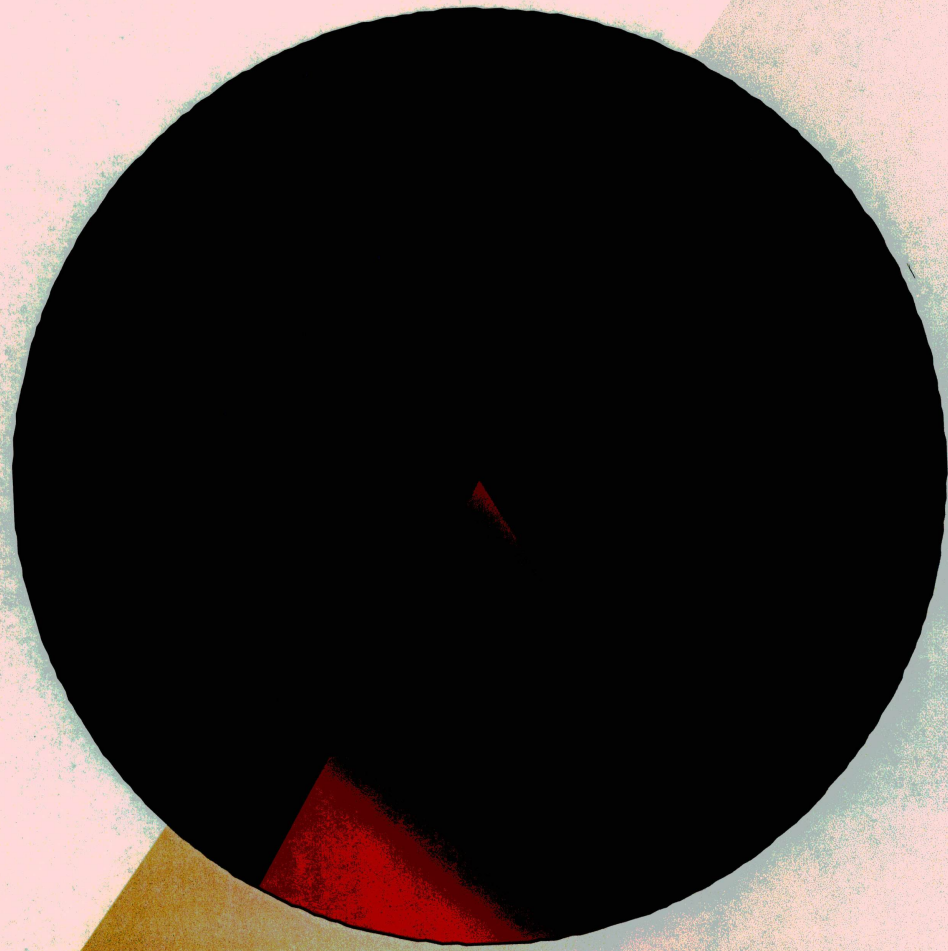
Wyoming Retirement System

Present Value of Future Benefits



Wyoming Retirement System

Present Value of Future Benefits



PV Future Normal
Costs
\$900

Actuarial Accrued
Liability
\$4,442

TOTAL VALUE: \$5.342 billion

Wyoming Retirement System

Development of Funding Margin

◆ Normal Cost	11.87%
◆ Member Contributions	<u>5.72%</u>
◆ Employer Share of Normal Cost	6.15%
◆ Amortization of Unfunded Liability	(0.95%)
◆ Administrative Expenses	<u>0.14%</u>
◆ Total Employer Cost	<u>5.34%</u>
◆ Statutory Employer Contribution	<u>5.68%</u>
◆ Funding Margin	<u>0.34%</u>

Highlights of Actuarial Valuation

- ◆ Investments Returned -4.47%
- ◆ Funding levels acceptable, but no room for benefit improvements
- ◆ This is due to dramatic improvements in benefits from last year coupled with a second consecutive year of negative returns
- ◆ Wyoming Retirement System Funding Margin decreased to 0.34%
- ◆ Significant benefit improvements made 7/1/2001 in several Plans
- ◆ We'll need a rebound in assets for positive funding margin to continue

Wyoming Retirement System Plans

Summary of Funding Position

	Actuarial Value of Assets	Actuarial Accrued Liability	Funded Percentage*
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%
As of January 1, 2001			
- Wyoming Retirement System	\$4,190	\$3,683	114%
- Paid Fire Plan A	195	132	147%
- Paid Fire Plan B	32	19	167%
- Warden and Patrol	73	66	111%
- Judges	2	5	31%

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	32,811	31,492	+ 1,319
- Retirees, Disableds and Beneficiaries	14,446	14,009	+ 437
- Inactive Vested Members	4,797	4,420	+ 377
Total	52,054	49,921	+ 2,133
Projected Payroll (\$ millions)	\$ 964	\$ 898	+ 66
Active Averages			
- Age (years)	44.9	44.8	+ 0.1 years
- Service (years)	9.9	10.1	- 0.2 years
Annual Disbursements			
- Pensions (\$millions)	\$ 145.8	\$ 131.7	+ \$14.1
- Refunds (\$millions)	\$ 10.4	\$ 12.9	- \$2.5

Wyoming Retirement System

Development of Funding Margin

◆ Normal Cost	11.87%
◆ Member Contributions	<u>5.72%</u>
◆ Employer Share of Normal Cost	6.15%
◆ Amortization of Unfunded Liability	(0.95%)
◆ Administrative Expenses	<u>0.14%</u>
◆ Total Employer Cost	<u>5.34%</u>
◆ Statutory Employer Contribution	<u>5.68%</u>
◆ Funding Margin	<u><u>0.34%</u></u>

Wyoming Retirement System

Present Value of Future Benefits

Retirees and Beneficiaries
\$1,824

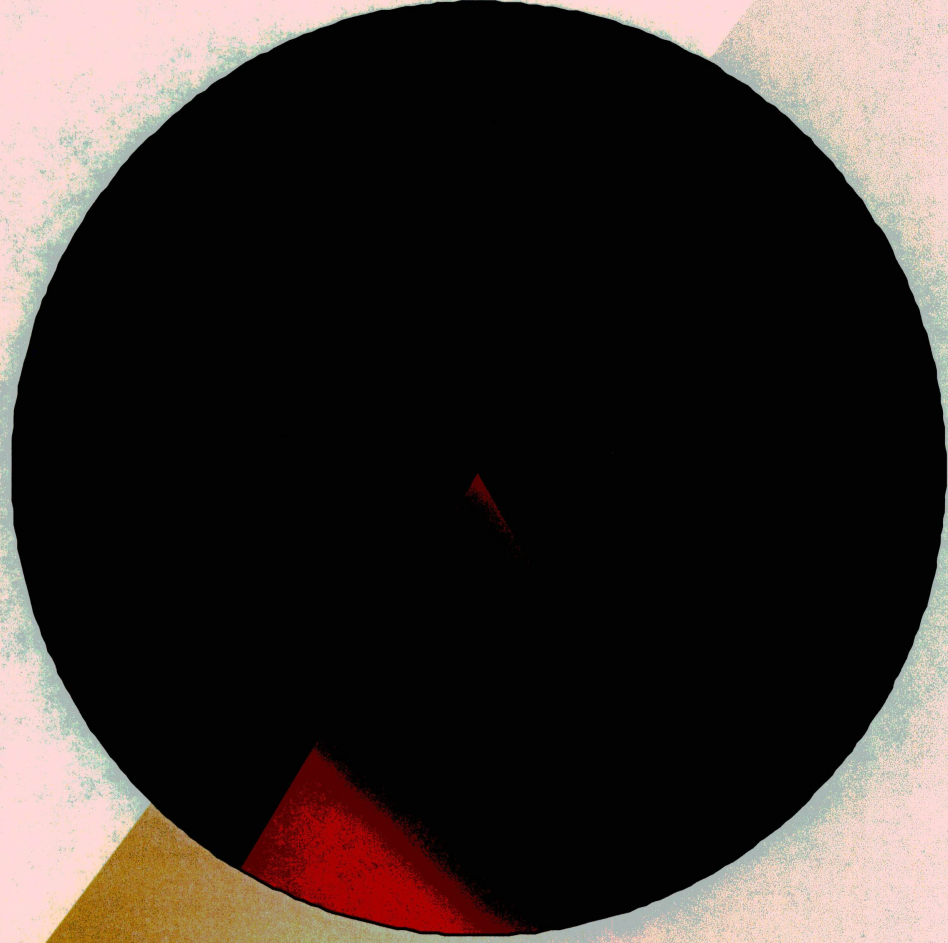
Active
\$3,399

Inactive
\$119

TOTAL VALUE: \$5.342 billion

Wyoming Retirement System

Present Value of Future Benefits



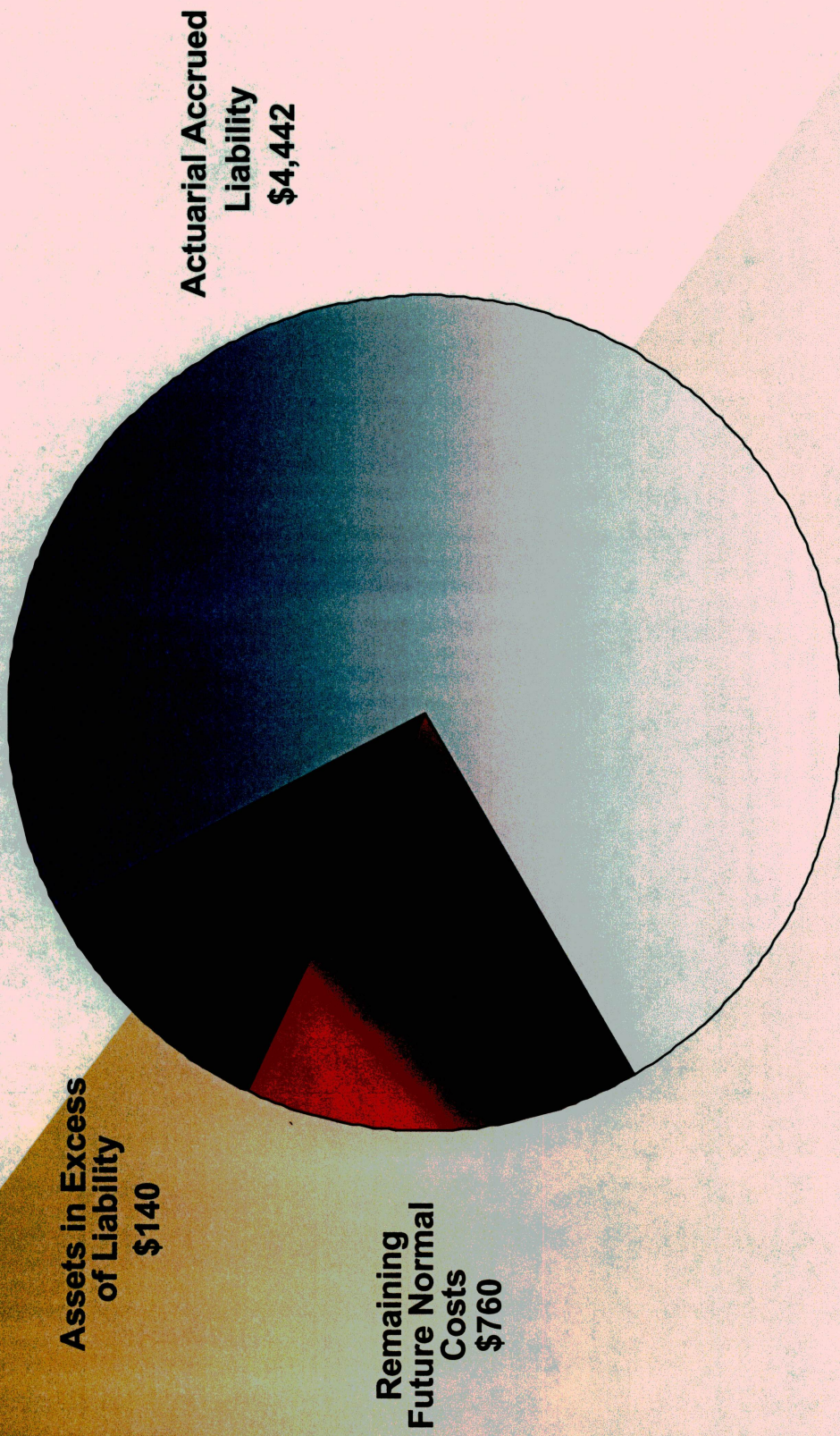
PV Future Normal
Costs
\$900

Actuarial Accrued
Liability
\$4,442

TOTAL VALUE: \$5.342 billion

Wyoming Retirement System

Projected Actuarial Assets



TOTAL VALUE: \$5.342 billion

Wyoming Retirement System

History of Funding Percentage

