

LOUISIANA STATE EMPLOYEES'  
RETIREMENT SYSTEM  
JUNE 30, 1994  
ACTUARIAL VALUATION

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**HALL ACTUARIAL ASSOCIATES**

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*Charles G. Hall*  
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October 3, 1994

Board of Trustees  
**LOUISIANA STATE EMPLOYEES'**  
**RETIREMENT SYSTEM**  
Post Office Box 44213  
Baton Rouge, Louisiana 70804-4213

Ladies and Gentlemen:

This report presents the results of the actuarial valuation of assets and liabilities, as well as funding requirements, for the Louisiana State Employees' Retirement System as of June 30, 1994.

This report has been prepared in accordance with generally accepted actuarial principles and practices and to the best of my knowledge, fairly reflects the actuarial present value of accrued benefits of the Louisiana State Employees' Retirement System.

In preparing this valuation, I have relied upon the information provided regarding plan provisions, plan membership, plan assets and other matters as detailed in the exhibits of this report. In particular, I have relied upon the statement of assets as certified by Postlethwaite & Netterville, Certified Public Accountants.

The present values shown herein have been estimated on the basis of actuarial methods as specified in Louisiana Revised Statutes Title 11 Section 22(6), and assumptions which are appropriate for the purposes of this valuation, are reasonable in the aggregate and when applied in combination represents my best estimates of the anticipated experience under the plan.

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A brief summary of the more important figures developed in this valuation, with comparable results from previous valuations are as follows:

	<u>June 30, 1994</u>	<u>-----Prior Years-----</u>	
		<u>June 30, 1993</u>	<u>June 30, 1992</u>
I. Membership Census			
1) Retirees	27,093	25,887	25,602
2) Actives	68,966	68,463	67,798
3) DROP	1,072	521	538
II. Annual Benefits	\$ 265,438,765	\$ 258,006,601	\$ 252,746,768
III. Total Payroll	1,546,464,828	1,504,147,368	1,454,370,594
IV. Assets	3,347,602,209	3,044,726,905	2,802,666,924
V. Experience Account	37,627,187	26,706,597	27,274 847
VI. Investment Yield			
Realized Income	7.95%	6.38%	10.92%
Actuarial Value	8.88%	8.05%	10.40%
VII. Cost to Fund Annual Pension Accruals (Normal Costs)	206,164,105 13.33%	199,518,564 13.26%	187,654,358 12.90%
VIII. Unfunded Actuarial Accrued Liability	2,055,792,343	2,078,682,672	2,081,841,850
IX. Funded Percentage	61.95%	59.43%	57.38%
X. Funding Requirements to Pay (Mid-year Payment)			
1) Employee Contribution Rate	122,398,135 7.664%	119,469,491 7.689%	115,536,720 7.682%
2) Employer Contribution Rate - Current Year	190,782,765 11.9%	186,691,176 12.0%	181,016,661 12.0%
3) Projected Employer Contribution - Next Year	199,282,281 11.9%	196,748,840 11.9%	190,935,676 11.9%

The above funding requirements measure the cost of benefits that were in effect on June 30, 1994, plus Acts of the 1993 Legislative Session which have prospective effects on current active members. There was no Retirement Legislation during the 1994 Session.

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**Current Funding**

The Actuarial Valuation for the plan year ending June 30, 1994 discloses a general decrease in the value of the plan's unfunded accrued liability as well as prospective funding requirements. It is generally appropriate for the current valuation process to disclose the source or cause of any significant changes in the plan from year to year. Changes that occur are usually the result of changes in actuarial assumptions, gains or losses resulting from actual experience which differs significantly from expected plan experience.

The basic elements of the annual required contribution are the normal cost and amortization of the Unfunded Actuarial Liability (UAL). The normal cost is the annual cost to provide an additional year of benefit accrual. The normal cost is divided into two parts, the employee portion and the employer portion, both expressed as a percentage of payroll. Act 81 of the 1988 Legislative Session provides for the amortization of the initial UAL, plus subsequent changes in benefits, methods or gain/loss experience.

To assist the Board of Trustees in reconciling changes in the unfunded actuarial accrued liability, the following gain/loss analysis is presented as follows:

**CHANGE IN UNFUNDED LIABILITY**

Unfunded Liability 6/30/93	\$ 2,078,682,672
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**INCREASES**

Interest on Unfunded Liability	\$ 171,491,320
Experience Account Allocation	8,548,243
Employer Deficit	<u>2,609,956</u>
Incurred Increases	182,649,519

**DECREASES**

Texaco Settlement	36,000,000
Investment Gains	17,096,487
Employer Amtz. Payment	114,415,379
Experience Gain	<u>38,028,116</u>
Incurred Decreases	205,539,982

Unfunded Liability 6/30/94	\$ 2,055,792,209
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The employer contribution rate established by the Actuarial Forecast Committee for the 1994-1995 plan year was 11.9%. The actual employer contribution rates determined by this valuation for the current plan year is 11.9%, and 11.9% when adjusted for the prior year's employer credit. The current adjusted rate represents a stabilized rate in the required employer's contributions when compared to the projected rates. Since the contribution rate is affected by many factors, the following sections address the source and respective impact to the required employer contribution rate.

#### Investment Experience

The investment yield on the actuarial value of assets during the last five (5) years has been as follows for plan years ending June 30:

<u>1990</u>	<u>1991</u>	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>5 Yr. Aver.</u>
10.3%	10.0%	10.40%	8.05%	8.88%	9.52%

The net actuarial rate of return assumed in the valuation was 8.25%. For the plan year ending June 30, 1994 the net yield to Actuarial Assets was greater than the long term Actuarial Investment Assumption used to project benefits. The result was a net investment experience gain of \$17,096,487 in excess of valuation investment income.

Act 572 of 1992 establishes the Experience Account. Each year the fund is credited/debited with 50% of the net investment experience gain/loss together with interest on the beginning account balance for the purpose of granting cost-of-living benefits for retirees. This year \$8,548,243 will be added to the Experience Account with a like amount used to decrease future employer contributions.

Act 257 of 1992 as amended requires this investment gain to be amortized over the later of the year 2029 or a fifteen year period as a 4.5% increasing annuity. Therefore, as a result of the shared investment experience gain, the employer's contribution will be decreased by \$434,640 during the next 35 years. This amortization debit represents a .03% decrease in the rate projected by the Actuarial Forecast Committee.

#### Plan Experience

The actuary is charged with making the best estimate of future plan experience to properly fund future benefits. If the actual experience differs from the projected plan experience, a gain or loss occurs. This gain or loss is then amortized over the later of the year 2029 or a fifteen year period to make a mid-course adjustment in future funding requirements. During the 1993-1994 plan year, the system incurred a \$38,028,116 plan experience gain. This gain will decrease the employer's contribution by \$1,933,562 during the next 35 years and represents a .12% decrease in the rate projected by the Actuarial Forecast Committee.

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### Funding as a Percentage of Payroll

The funding requirements mandated by Act 81 require the employee to contribute 7.5% of payroll for the plan year beginning in 1989. The employer will pay a percentage of the normal cost plus a dollar amount sufficient to amortize the unfunded liability over a 40 year period. However, in no event can the employer contribution rate drop below 12% without regard to employer credits without a corresponding adjustment to the employee contribution rate. To convert the dollar amortization payment to a percentage of payroll would suggest that the aggregate employer contribution rate would remain level as a percentage of pay provided aggregate salaries increase in unison with the rate of increase in annuity payments. This would imply that aggregate salaries should increase at a rate of at least 4.5% during the next thirty-five (35) years. To determine whether this is a reasonable expectation, aggregate salary growth during the past seven (7) years is illustrated as follows:

<u>June 30</u>	<u>Payroll/\$1000</u>	<u>Percent Increase</u>
1988	1,111,015	1.6%
1989	1,141,080	2.7%
1990	1,226,065	7.4%
1991	1,368,480	11.6%
1992	1,454,370	6.3%
1993	1,504,147	6.2%
1994	1,546,465	5.7%

During the last six (6) years the aggregate salaries have increased at an annualized rate of 5.7%. If this trend continues during the next six (6) years the percentage of pay required to amortize the unfunded liability can be expected to slightly decrease in the absence of other experience gains or losses.

### Comments and Disclosures

Exhibit 3 "Pension Accounting and Financial Disclosure" contains the ten (10) year comparative statistical studies required by the Governmental Accounting Standards Board.

Finally, the actuarial disclosure form required by the Actuarial Department of the Legislative Auditor's office (see Exhibit 7) makes specific provisions for the determination of whether or not a retirement system is systematically approaching the targeted funding ratio.

This is an important consideration for both retired members and members of the Board of Trustees. The Board is specifically prohibited from granting a cost-of-living raise in the absence of the Experience Account Fund to retirees and survivors by Act 256 of the 1986 regular legislative session unless the system has met the Funding Target.

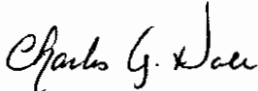
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*HALL ACTUARIAL ASSOCIATES*

For the plan year ending June 30, 1994 the funding target is .67098, which is greater than the current .61954 funding ratio. Therefore, the Board is prohibited from granting a cost-of-living increase by statute.

The format of this report was designed with the intent of highlighting the pertinent results of the valuation's funding requirements. Should you have any questions or comments, please do not hesitate to contact me.

Sincerely,



Charles G. Hall, ASA, MAAA  
Actuary

CGH/tt

Enclosure

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**EXHIBIT 1**

**DEVELOPMENT  
OF  
COSTS, LIABILITIES AND CONTRIBUTIONS**

Normal Costs and Accrued Liabilities are calculated in accordance with the Projected Unit Credit Cost Method, and the Actuarial Assumptions outlined in Exhibit 6 based on the Provisions of the Plan as summarized in Exhibit 5.

		<u>June 30, 1994</u>		<u>---Prior Year---</u> <u>June 30, 1993</u>	
		<u>Dollar</u>	<u>% of</u>	<u>Dollar</u>	<u>% of</u>
		<u>Amount</u>	<u>Salary</u>	<u>Amount</u>	<u>Salary</u>
<b>I. Normal Costs</b>					
(to fund annual pension accruals)					
Active Members with Complete Data					
a)	Retirement Benefits	\$ 156,803,491	10.14%	\$ 152,247,378	10.12%
b)	Disability Benefits	7,830,777	.51%	7,509,398	.50%
c)	Survivor Benefits	8,427,396	.54%	8,114,019	.54%
d)	Voluntary Termination	28,302,441	1.83%	27,347,729	1.82%
e)	Expenses	<u>4,800,000</u>	<u>.31%</u>	<u>4,300,000</u>	<u>.28%</u>
	TOTAL	206,164,105	13.33%	199,518,524	13.26%
<b>II. Actuarial Accrued Liability</b>					
a)	Active Members				
1)	Retirement Benefits	2,395,938,996		2,292,099,826	
2)	Disability Benefits	101,706,264		96,845,729	
3)	Survivor Benefits	91,272,611		88,010,304	
4)	Voluntary Termination	168,734,778		163,024,349	
5)	DROP Deposits	<u>438,362</u>		<u>21,436,653</u>	
		2,758,091,011		2,661,416,861	
b)	Retired and Inactive Members				
1)	Regular Retirees	1,906,069,761		1,875,623,577	
2)	Disabled Retirees	65,764,041		60,928,600	
3)	Survivors	299,249,108		280,808,599	
4)	Vested Deferred	27,121,259		22,616,419	
5)	Contributions Refunded	8,468,462		7,652,144	
6)	DROP Deferral	233,495,260		109,861,514	
7)	DROP Deposits	<u>31,679,790</u>		<u>13,069,147</u>	
		2,571,847,681		2,370,560,000	
c)	SUB TOTAL	5,329,938,692		5,031,976,861	

**HALL ACTUARIAL ASSOCIATES**

**Exhibit 1 (Continued)**

**Costs, Liabilities & Contributions**

	<u>June 30, 1994</u>	<u>---Prior Year---</u> <u>June 30, 1993</u>
<b>II. Actuarial Accrued Liability</b>		
c) SUB TOTAL (Preceding page)	\$ 5,329,938,692	\$ 5,031,976,861
d) Adjustments to Regular Plan		
1) Active Judges	66,765,210	82,993,694
2) Active Legislators	<u>6,690,650</u>	<u>8,439,022</u>
Adjusted TOTAL	5,403,394,552	5,123,409,577
<b>III. Assets</b>	3,347,602,209	3,044,726,905
<b>IV. Unfunded Actuarial Accrued Liabilities - Projected Unit Credit*</b>		
	2,055,792,343	2,078,682,672
a) Change over prior year	(22,890,329)	(3,159,178)
b) Funded Percentage	61.95%	59.43%
<b>V. Employer Contributions To Fund Current Plan Year*</b>		
a) Employer Portion of Normal Cost	85,553,023	82,194,513
b) Amortization Payments	106,620,160	106,519,504
c) Prior Contribution Variance	<u>(1,390,418)</u>	<u>(2,022,841)</u>
TOTAL Required Contribution	190,782,765	186,691,176
	11.9%	12.0%
Plus State Appropriation	3,604,711	3,449,541
Actuarial Forecast Rate**	11.9%	11.9%
<b>VI. Projected Employer Contributions To Fund Next Plan Year*</b>		
a) Employer Portion of Normal Cost	89,641,695	87,457,870
b) Amortization Payments	111,031,004	110,922,091
c) Prior Contribution Variance	<u>(1,390,418)</u>	<u>(1,631,121)</u>
TOTAL Projected Contribution	199,282,281	196,748,840
	11.9%	11.9%
Plus State Appropriation	3,766,986	3,604,770
<b>VII. Current Payroll</b>		
Projected Payroll - Mid Year	1,546,464,828	1,504,147,368
Projected Payroll - Next Year	1,597,053,170	1,553,771,505
	1,673,378,080	1,653,267,858

\*Dollar Amounts reflect estimated payments due mid-year on January 1st per Act 81.

\*\*Constitutional Minimum is 12% without regards to Employer Credits.

**EXHIBIT 2**

**FINANCIAL SUMMARY  
STATEMENT OF REVENUES AND EXPENSES  
FOR FISCAL YEAR ENDING**

	<u>June 30, 1994</u>	<u>June 30, 1993</u>	<u>June 30, 1992</u>
		<b>-----Prior Years-----</b>	
<b><u>OPERATING REVENUES:</u></b>			
1. Contribution Income			
Member	\$ 118,255,907	\$ 114,443,629	\$ 109,370,451
Employer	183,608,465	177,407,603	205,072,699
2. Other Income			
Legislative Appropriations	3,449,541	3,301,000	3,917,102
Miscellaneous	4,611,685	6,118,816	6,246,552
Texaco Settlement	<u>36,000,000</u>	<u>N/A</u>	<u>N/A</u>
TOTAL CONTRIBUTIONS	345,925,598	301,271,048	324,606,804
3. Investment Income			
Realized Income	246,845,710	186,157,194	277,560,124
Less, investment expenses	<u>-8,358,479</u>	<u>-6,754,812</u>	<u>-3,907,551</u>
TOTAL INVESTMENT INCOME	238,487,231	179,402,382	273,652,573
4. Total Revenues	584,412,829	480,673,430	598,259,377
<b><u>OPERATING EXPENSES:</u></b>			
1. General Administration	4,787,926	4,307,150	2,973,182
Other Expenses	936,571	395,774	520,988
2. Benefits Paid			
a) Pension Benefits	275,503,281	261,822,720	250,765,789
b) Return of Contrib.	<u>23,955,748</u>	<u>21,720,224</u>	<u>22,955,119</u>
3. Total Operating Expenses	305,183,526	288,245,868	278,080,890
<b><u>NET INCOME:</u></b>	279,229,303	192,427,562	320,178,487

**EXHIBIT 2 (Continued)**  
**Financial Summary**

**FINANCIAL SUMMARY**  
**STATEMENT OF ASSETS**  
**FOR FISCAL YEAR ENDING**

	<u>June 30, 1994</u>	-----Prior Years----- <u>June 30, 1993</u>	<u>June 30, 1992</u>
<b><u>ASSETS:</u></b>			
1. Short Term Assets			
Cash in Banks	\$ 5,538,400	\$ 11,660,282	\$ 17,693,855
Commercial/Certificates	363,431,594	199,965,382	150,508,461
Securities	0	0	0
2. Bonds (at amortized cost)			
U.S. Government Agency	166,015,523	83,337,760	92,563,992
United States Issues	506,772,432	684,080,124	699,571,900
Corporate Issues	609,329,060	470,188,772	283,396,171
Long Term/Financial	304,739,570	286,151,141	362,742,980
3. Equities			
Common Stock	899,841,092	813,304,346	828,341,383
Foreign Stock	321,319,617	311,270,137	217,399,953
Preferred Stock	7,208,424	10,051,742	11,442,554
Fixed Assets	6,653,043	5,581,342	5,277,425
Mortgages - Real Estate	105,198,309	103,032,658	96,266,026
4. Receivables - Payables	<u>(20,777,761)</u>	<u>17,416,312</u>	<u>38,407,736</u>
TOTAL ASSETS			
Equities at Cost	3,275,269,303	2,996,039,998	2,803,612,436
Equities at Market	3,421,627,795	3,229,361,411	2,881,522,572
Market Value	3,286,926,370	3,238,127,283	2,942,146,597

<b><u>RATIO: ASSETS/EXPENSES:</u></b>	10.73	10.20	9.78
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**INVESTMENT YIELD:**

Realized Income	7.95%	6.38%	10.92%
Yield to Actuarial Value	8.88%	8.05%	10.40%
Five Year Actuarial Value	9.52%	9.75%	10.10%
Yield to Market Value	0.25%	9.60%	13.08%
DROP Account Yield	8.38%	7.55%	9.90%

**EXHIBIT 2 (Continued)**  
**Financial Summary**

**FINANCIAL SUMMARY  
STATEMENT OF ASSETS  
FOR FISCAL YEAR ENDING**

	<u>June 30, 1994</u>	-----Prior Years----- <u>June 30, 1993</u>	<u>June 30, 1992</u>
<b><u>ACTUARIAL VALUE OF ASSETS:</u></b>			
TOTAL ASSETS	\$ 3,421,627,795	\$ 3,229,361,411	\$ 2,881,522,572
Change in Unrealized (G/L)			
Plan Year - 2 (wt. 1/4)	62,857,846	2,697,378	12,354,912
Plan Year - 1 (wt. 2/4)	167,766,189	62,857,846	2,697,378
Plan Year (wt. 3/4)	<u>(84,265,543)</u>	<u>167,766,189</u>	<u>62,857,846</u>
Actuarial Value of Assets	3,385,229,396	3,071,433,502	2,829,941,771
<b><u>EXPERIENCE ACCOUNT FUND:</u></b>			
Prior Year Ending Balance	26,706,597	27,274,847	0
Experience Account Allocation	8,548,243	(2,765,143)	27,274,847
Benefit Disbursements	0	0	0
Accumulated Interest	2,372,347	2,196,893	0
Fund Balance - Year End	37,627,187	26,706,597	27,274,847
<b><u>DEVELOPMENT OF ACTUARIAL VALUATION ASSETS</u></b>			
Total Actuarial Value of Assets	3,385,229,396	3,071,433,502	2,829,941,771
Experience Account Fund	<u>37,627,187</u>	<u>26,706,597</u>	<u>27,274,847</u>
Valuation Assets	3,347,602,209	3,044,726,905	2,802,666,924

**EXHIBIT 3**

**PENSION ACCOUNTING  
AND  
FINANCIAL DISCLOSURE**

The Governmental Accounting Standards Board (GASB) was established as an arm of the Financial Accounting Foundation in April, 1984 by amendment to the Foundation's certificate of incorporation and by-laws. GASB's objective is to promulgate standards of financial accounting and reporting relative to the activities and transactions of state and local governmental entities. GASB is the successor organization to the National Council on Governmental Accounting. The following disclosures and statistical tables are in accordance with the NCGA's Statement No. 6.

	<u>June 30, 1994</u>		<u>June 30, 1993</u>	
	<u>Dollar Amt.</u>	<u>% of Payroll</u>	<u>Dollar Amt.</u>	<u>% of Payroll</u>
Actuarial Present Value of projected benefits for:				
1) Retirees & Beneficiaries	\$2,536,257,960	164%	\$2,340,291,437	156%
2) Terminated vested members	<u>35,589,721</u>	<u>2%</u>	<u>30,268,563</u>	<u>2%</u>
TOTAL	2,571,847,681	166%	2,370,560,000	158%
Actuarial Present Value of Credited Projected Benefits for active members:				
1) Member Contributions	839,157,422	54%	790,606,581	52%
2) Employer Contributions				
Vested Portion	1,624,134,547	105%	1,625,666,317	108%
Non-vested Portion	<u>368,254,902</u>	<u>24%</u>	<u>336,576,679</u>	<u>22%</u>
TOTAL	2,831,546,871	183%	2,752,849,577	182%
Total Actuarial Present Value of Credited Projected Benefits	5,403,394,552	349%	5,123,409,577	340%

The total actuarial present value of credited projected benefits increased by \$279,984,975 from June 30, 1993 to June 30, 1994. There were no significant changes in benefit provisions during the year. There was a net experience gain of \$48,680,987 after allocating \$8,548,243 of investment income to the Experience Account in accordance with Act 572.

**EXHIBIT 3 (Continued)**

**Pension Accounting & Financial Disclosure**

**STATISTICAL DATA**

**Comparative Summary of Net Assets Available for Benefits  
and  
Total Actuarial Present Value of Credited Projected Benefits**

<u>Fiscal Year</u>	<u>Net Assets Available for Benefits</u>	<u>Total Actuarial Present Value of Credited Projected Benefits*</u>	<u>Percentage Funded</u>
1985	1,520,811,190	3,043,552,222	50.0
1986	1,715,788,614	3,209,233,411	53.5
1987*	1,874,257,838	3,564,219,401	52.6
1988	2,019,831,530	3,845,252,565	52.5
1989	2,173,401,501	4,021,932,977	54.0
1990	2,321,259,028	4,210,106,529	55.1
1991	2,516,742,397	4,499,312,330	55.9
1992	2,802,666,924	4,884,508,774	57.4
1993	3,044,726,905	5,123,409,577	59.4
1994	3,347,602,209	5,403,394,552	61.9

Analysis of the percentage funded over a period of years will give a relative indication of the financial strength of the Louisiana State Employees' Retirement System.

\*Credited Projected Benefits were calculated beginning with the June 30, 1987 Actuarial valuation in accordance with The National Council on Governmental Accounting Statement No. 6. Prior to 1987, "Entry Age Normal" accrued benefits are illustrated.

EXHIBIT 3 (Continued)

## Pension Accounting &amp; Financial Disclosure

## STATISTICAL DATA

Comparative Summary of Unfunded Actuarial Present Value  
of Credited Projected Benefits  
and  
Annual Active Member Payroll

<u>Fiscal Year</u>	<u>Unfunded Actuarial Present Value of Credited Projected Benefits*</u>	<u>Annual Active Member Payroll</u>	<u>Percentage Payroll</u>
1985	1,522,741,032	1,146,506,762	132.8
1986	1,493,444,797	1,136,202,813	131.4
1987*	1,689,961,563	1,093,997,409	154.5
1988	1,825,421,035	1,111,015,208	159.0
1989	1,848,531,476	1,141,080,541	162.0
1990	1,888,847,501	1,226,065,067	154.1
1991	1,982,569,933	1,368,479,924	144.9
1992	2,081,841,850	1,454,370,594	143.1
1993	2,078,682,672	1,504,147,368	138.2
1994	2,055,792,343	1,546,464,828	132.9

\*Unfunded Actuarial Present Value of Credited Projected Benefits were calculated beginning with the June 30, 1987 Actuarial Valuation in accordance with The National Council on Governmental Accounting Statement No. 6. Prior to 1987, "Entry Age Normal" unfunded actuarial liabilities are illustrated.



**EXHIBIT 3 (Continued)**

**Pension Accounting & Financial Disclosure**

**STATISTICAL DATA**

**Comparative Summary of Actuarial Values and  
Percentage Covered by Net Assets Available for Benefits  
(in million of dollars)**

**Actuarial Present Value of Credited Projected Benefits\* for**

	(1)	(2)	(3)	(4)		Percentage Covered			
	Retirees	Terminated	Current	Actives	Net Assets	by Net Assets			
Fiscal	and	Vested	Member.	Empl'r.	Available				
Year	Survivors	Members	Contr.	Contr.	for Benefits	(1)	(2)	(3)	(4)
1987	2202.2	31.6	494.0	836.4	1874.3	85.1	0.	0.	0.
1988	2017.7	34.6	539.1	1,253.8	2019.8	100.	6.1	0.	0.
1989	2164.7	23.8	574.3	1,259.1	2173.4	100.	100.	36.6	0.
1990	2088.0	20.2	615.4	1,486.4	2321.2	100.	100.	34.6	0.
1991	2155.5	17.9	674.2	1,651.6	2516.7	100.	100.	50.9	0.
1992	2307.6	28.1	728.9	1,819.8	2802.7	100.	100.	64.1	0.
1993	2340.3	30.3	790.6	1,962.2	3044.7	100.	100.	85.3	0.
1994	2536.3	35.6	839.2	1,992.3	3347.6	100.	100.	92.4	0.

\*Actuarial Present Value of Credited Projected Benefits were calculated beginning with the June 30, 1987 Actuarial Valuation in accordance with The National Council on Governmental Accounting Standard No. 6. Prior to 1987, "Entry Age Normal" accrued benefits were calculated but are not illustrated.

**EXHIBIT 3 (Continued)**

**Pension Accounting & Financial Disclosure**

**STATISTICAL DATA**

**COMPARATIVE SUMMARY OF REVENUES BY SOURCE  
AND EXPENSES BY TYPE**

**Revenues by Source**

<u>Fiscal Year</u>	<u>Members Contribution</u>	<u>Employer Contribution</u>	<u>Investment Income</u>	<u>Total</u>
1985	82,716,304	119,696,836	143,986,873	345,400,013
1986	83,300,765	124,935,186	183,191,469	391,427,420
1987	80,984,576	121,880,055	183,843,426	386,708,057
1988	81,197,631	125,430,030	160,911,687	375,065,821
1989	81,925,366	134,314,360	181,179,170	397,418,896
1990	92,339,927	99,536,184	206,633,219	398,509,330
1991	104,020,927	149,859,389	225,267,421	479,147,276
1992	110,481,391	214,125,413	273,259,377	598,259,377
1993	114,443,629	186,827,419	179,402,382	480,673,430
1994	118,255,907	227,669,691	238,487,231	584,412,829

**Expenses by Type**

<u>Fiscal Year</u>	<u>Benefits</u>	<u>Refunds</u>	<u>Administrative Expenses**</u>	<u>Total</u>
1985*	163,504,275	17,844,634	5,392,375	186,741,284
1986	175,141,258	19,929,641	1,379,097	196,449,996
1987	202,019,494	24,736,748	1,482,591	226,756,242
1988	223,013,862	24,792,168	1,904,259	249,710,289
1989	228,603,084	32,548,038	2,267,848	263,418,970
1990	234,066,890	26,880,996	2,577,670	263,525,556
1991	240,622,226	22,955,119	3,145,390	266,722,735
1992	250,765,789	23,820,931	3,494,170	278,080,890
1993	261,822,720	21,720,224	4,702,924	288,245,868
1994	275,503,281	23,955,748	5,724,497	305,183,526

\*Beginning in 1985, expenses for professional investment advisory services are treated as an offset to Investment Income.

\*\*Includes other expenses incurred not directly related to the administration of daily operation.

## EXHIBIT 4

## CENSUS DATA

## GENERAL COMMENTS

The data contained in this valuation is summarized on the following pages with exceptions noted below. The profile depicted in the cellular graphs represents "error-free data," which serves as the basis for determining costs and liabilities. Active members are allocated to cells based upon attained age and years of service. Retirees and Survivors are allocated to cells based upon attained age and years elapsed since retirement or commencement of benefits.

The validity of the results of any actuarial valuation is dependent upon the accuracy of the data base. Prior to processing, suspicious data and data containing errors were purged from the data base and processed separately based on the following error types:

- missing sex code
- missing or invalid date of birth
- missing or invalid date of employment
- missing or invalid salary
- invalid retirement dates.

There were numerous records purged from the data base containing errors or categorized as suspicious data which is not necessarily significant. These records had the basic characteristic of a terminated non-vested participant which have balances of \$50 or less in their accumulated employee contribution account. Suspicious data are not necessarily errors, but data which falls outside the parameters of the editing process for further checking. There were 18,551 records for terminated non-vested members due a refund. Finally, 1,348 terminated vested members and Reciprocal Recognition records were purged as data in error. These participants were assumed to possess the same characteristics as the participants with "good data" in the same cohort.

Salary data contained in the profiles and valuation report exceed the amount reported by internal audit due to salary annualization. In the valuation process, membership data with fractional service in the first year of employment annualizes the salary.

The following is a summary by plan of the data submitted for valuation:

	---1994---	---1993---
	<u>Census</u>	<u>Census</u>
Active Members	68,966	68,463
Regular Retirees	20,407	20,120
Disability Retirees	994	956
Survivors	4,344	4,211
Vested & Reciprocals	1,348	600
Due Refunds	18,551	20,169
DROP Participants	<u>1,072</u>	<u>521</u>
TOTAL	115,682	115,040

**MEMBERSHIP PROFILE**  
**CATEGORIZED BY AGE AND YEARS EMPLOYED**

**STATE EMPLOYEES' SYSTEM**  
**ACTIVE REGULAR MEMBERS**

**CELLS DEPICT - MEMBER COUNT**  
**TOTAL SALARY**

**VALUATION DATE 6/30/94**

Age/Years :	(0-1)	[1-5)	[5-10)	[10-15)	[15-20)	[20-25)	[25-30)	[30-35)	[35- )	:	Total :
[ 0 - 19) :	201	0	0	0	0	0	0	0	0	:	201 :
:	908356	0	0	0	0	0	0	0	0	:	908356 :
:										:	:
[20 - 24) :	987	1281	8	0	0	0	0	0	0	:	2276 :
:	7806967	18983561	137923	0	0	0	0	0	0	:	26928451 :
:										:	:
[25 - 29) :	1412	3818	585	95	0	0	0	0	0	:	5910 :
:	14003512	72575272	10376527	1848673	0	0	0	0	0	:	98803984 :
:										:	:
[30 - 34) :	1343	3885	1508	1973	256	1	2	1	0	:	8969 :
:	14784029	77010968	33315394	43438664	6031029	19758	50195	4680	0	:	174654717 :
:										:	:
[35 - 39) :	1587	3665	1420	2823	2088	153	0	0	2	:	11738 :
:	19327107	75246243	31586853	71108950	54315658	3980891	0	0	42524	:	255608226 :
:										:	:
[40 - 44) :	898	3158	1194	2038	2568	1429	85	0	4	:	11374 :
:	10437052	67462155	27046302	51822192	77033153	42612023	2539550	0	112979	:	279065406 :
:										:	:
[45 - 49) :	604	2279	970	1461	1794	1617	821	41	1	:	9588 :
:	6942108	49163984	22408121	37488040	50433117	51097040	25556732	1234846	33894	:	244357882 :
:										:	:
[50 - 54) :	360	1372	601	1007	1088	898	964	181	9	:	6480 :
:	4465582	29571708	14085324	24152916	29024261	25954305	31346014	5780798	286184	:	164667092 :
:										:	:
[55 - 59) :	143	782	465	760	911	661	309	115	13	:	4159 :
:	2167449	16827193	10794236	18908720	23237561	17362127	9236888	4079967	440706	:	103054847 :
:										:	:
[60 - 64) :	75	283	268	395	390	251	108	37	24	:	1831 :
:	1309830	6507487	6943541	10167702	10087169	6363892	2977820	1159457	846638	:	46363536 :
:										:	:
[65 - 69) :	38	45	82	97	93	56	30	7	5	:	453 :
:	784508	1153884	2112823	2500989	2224278	1758898	852047	226854	110016	:	11724297 :
:										:	:
[70 - 74) :	17	12	3	46	39	28	8	4	13	:	170 :
:	378032	299940	64975	1106296	1010918	856836	191460	97162	472500	:	4478119 :
:										:	:
Total :	7665	20580	7104	10695	9227	5094	2327	386	71	:	63149 :
Total :	83314532	414802395	158872019	262543142	253397144	150005770	72750706	12583764	2345441	:	1410614913 :

**AVERAGES :**    **Attained Age**    41.57  
                   **Service Years**    9.80  
                   **Active Salary**   22,338

MEMBERSHIP PROFILE  
CATEGORIZED BY AGE AND YEARS EMPLOYED

STATE EMPLOYEES' SYSTEM  
ACTIVE LEGISLATORS

CELLS DEPICT - MEMBER COUNT  
TOTAL SALARY

VALUATION DATE 6/30/94

Age/Years :	(0-1)	(1-5)	(5-10)	(10-15)	(15-20)	(20-25)	(25-30)	(30-35)	(35- )	:	Total :
[ 0 - 19) :	0	0	0	0	0	0	0	0	0	:	0 :
:	0	0	0	0	0	0	0	0	0	:	0 :
:										:	:
[20 - 24) :	0	0	0	0	0	0	0	0	0	:	0 :
:	0	0	0	0	0	0	0	0	0	:	0 :
:										:	:
[25 - 29) :	0	0	0	0	0	0	0	0	0	:	0 :
:	0	0	0	0	0	0	0	0	0	:	0 :
:										:	:
[30 - 34) :	0	7	3	1	0	0	0	0	0	:	11 :
:	0	148700	75775	24900	0	0	0	0	0	:	249375 :
:										:	:
[35 - 39) :	0	9	0	2	1	0	0	0	0	:	12 :
:	0	205745	0	44325	21675	0	0	0	0	:	271745 :
:										:	:
[40 - 44) :	2	9	2	5	0	0	0	0	0	:	18 :
:	12137	197442	45450	123995	0	0	0	0	0	:	379024 :
:										:	:
[45 - 49) :	1	5	5	3	5	3	0	0	0	:	22 :
:	13925	112275	120900	63900	120225	69375	0	0	0	:	500600 :
:										:	:
[50 - 54) :	0	2	5	6	2	1	0	0	0	:	16 :
:	0	46650	135654	153124	47475	22125	0	0	0	:	405028 :
:										:	:
[55 - 59) :	0	4	2	1	1	2	3	0	0	:	13 :
:	0	91500	46575	24000	21300	46050	99657	0	0	:	329082 :
:										:	:
[60 - 64) :	0	5	0	1	0	1	0	2	0	:	9 :
:	0	113175	0	22200	0	22500	0	65904	0	:	223779 :
:										:	:
[65 - 69) :	0	0	1	0	0	1	0	0	0	:	2 :
:	0	0	22200	0	0	25875	0	0	0	:	48075 :
:										:	:
[70 - 74) :	0	1	0	0	0	0	1	0	0	:	2 :
:	0	21000	0	0	0	0	39045	0	0	:	60045 :
.....											
Total :	3	42	18	19	9	8	4	2	0	:	105 :
Total :	26062	936487	446554	456444	210675	185925	138702	65904	0	:	2466753 :
.....											

AVERAGES :    Attained Age    47.94  
                 Service Years    9.43  
                 Active Salary   23,493

**MEMBERSHIP PROFILE  
CATEGORIZED BY AGE AND YEARS EMPLOYED**

**STATE EMPLOYEES' SYSTEM  
ACTIVE JUDGES**

**CELLS DEPICT - MEMBER COUNT  
TOTAL SALARY**

**VALUATION DATE 6/30/94**

Age/Years :	(0-1)	[1-5)	[5-10)	[10-15)	[15-20)	[20-25)	[25-30)	[30-35)	[35- )	:	Total :
[ 0 - 19) :	0	0	0	0	0	0	0	0	0	:	0 :
:	0	0	0	0	0	0	0	0	0	:	0 :
:										:	:
[20 - 24) :	0	0	0	0	0	0	0	0	0	:	0 :
:	0	0	0	0	0	0	0	0	0	:	0 :
:										:	:
[25 - 29) :	0	0	0	0	0	0	0	0	0	:	0 :
:	0	0	0	0	0	0	0	0	0	:	0 :
:										:	:
[30 - 34) :	1	2	0	0	0	0	0	0	0	:	3 :
:	50927	167400	0	0	0	0	0	0	0	:	218327 :
:										:	:
[35 - 39) :	1	16	4	1	0	0	0	0	0	:	22 :
:	41700	1197042	272724	52023	0	0	0	0	0	:	1563489 :
:										:	:
[40 - 44) :	5	31	11	10	2	0	0	0	0	:	59 :
:	287467	2403078	869794	749397	167400	0	0	0	0	:	4477136 :
:										:	:
[45 - 49) :	3	23	13	20	20	3	0	0	0	:	82 :
:	85792	1806965	959000	1542504	1570849	251100	0	0	0	:	6216210 :
:										:	:
[50 - 54) :	0	8	8	14	9	4	0	0	0	:	43 :
:	0	646524	587668	1125824	728117	349812	0	0	0	:	3437945 :
:										:	:
[55 - 59) :	0	3	4	6	6	8	2	1	0	:	30 :
:	0	251100	305339	507405	448455	652158	177948	66252	0	:	2408657 :
:										:	:
[60 - 64) :	0	2	4	6	6	5	2	1	0	:	26 :
:	0	172404	334800	470046	465888	423504	149952	111696	0	:	2128290 :
:										:	:
[65 - 69) :	0	1	1	2	3	1	1	2	0	:	11 :
:	0	83700	83700	172404	216423	83700	83700	143736	0	:	867363 :
:										:	:
[70 - 74) :	1	0	0	0	0	0	0	0	1	:	2 :
:	84000	0	0	0	0	0	0	0	83491	:	167491 :
:										:	:
Total :	11	86	45	59	46	21	5	4	1	:	278 :
Total :	549886	6728213	3413025	4619603	3597132	1760274	411600	321684	83491	:	21484908 :

**AVERAGES :**    Attained Age    49.67  
                  Service Years    10.48  
                  Active Salary    77,284

**MEMBERSHIP PROFILE  
CATEGORIZED BY AGE AND YEARS EMPLOYED**

**STATE EMPLOYEES' SYSTEM  
ACTIVE WILDLIFE AGENTS**

**CELLS DEPICT - MEMBER COUNT  
TOTAL SALARY**

**VALUATION DATE 6/30/94**

Age/Years :	(0-1)	(1-5)	(5-10)	(10-15)	(15-20)	(20-25)	(25-30)	(30-35)	(35- )	:	Total :
[ 0 - 19) :	0	0	0	0	0	0	0	0	0	:	0 :
:	0	0	0	0	0	0	0	0	0	:	0 :
:										:	:
[20 - 24) :	0	13	0	0	0	0	0	0	0	:	13 :
:	0	241887	0	0	0	0	0	0	0	:	241887 :
:										:	:
[25 - 29) :	0	25	1	0	0	0	0	0	0	:	26 :
:	0	528049	28588	0	0	0	0	0	0	:	556637 :
:										:	:
[30 - 34) :	1	22	7	5	1	0	0	0	0	:	36 :
:	17264	505704	172665	139547	30936	0	0	0	0	:	866116 :
:										:	:
[35 - 39) :	0	7	5	12	9	0	0	0	0	:	33 :
:	0	132860	135592	332788	272215	0	0	0	0	:	873455 :
:										:	:
[40 - 44) :	0	4	1	12	16	7	0	0	0	:	40 :
:	0	93618	27256	328505	523447	250453	0	0	0	:	1223279 :
:										:	:
[45 - 49) :	0	1	4	15	14	8	0	0	0	:	42 :
:	0	27000	104111	399974	433438	277307	0	0	0	:	1241830 :
:										:	:
[50 - 54) :	0	0	0	1	2	6	0	0	0	:	9 :
:	0	0	0	25017	62696	230667	0	0	0	:	318380 :
:										:	:
[55 - 59) :	1	0	0	3	2	4	0	0	0	:	10 :
:	23000	0	0	79349	64729	133504	0	0	0	:	300582 :
:										:	:
[60 - 64) :	0	0	0	2	2	0	0	0	0	:	4 :
:	0	0	0	56680	58035	0	0	0	0	:	114715 :
:										:	:
[65 - 69) :	0	0	0	0	0	0	0	0	0	:	0 :
:	0	0	0	0	0	0	0	0	0	:	0 :
:										:	:
[70 - 74) :	0	0	0	0	0	0	0	0	0	:	0 :
:	0	0	0	0	0	0	0	0	0	:	0 :
:										:	:
Total :	2	72	18	50	46	25	0	0	0	:	213 :
Total :	40264	1529118	468212	1361860	1445496	891931	0	0	0	:	5736881 :

**AVERAGES :**    Attained Age    39.54  
                  Service Years    10.87  
                  Active Salary    26,934

**MEMBERSHIP PROFILE**  
**CATEGORIZED BY AGE AND YEARS EMPLOYED**

**STATE EMPLOYEES' SYSTEM**  
**CORRECTIONS before 1986**

**CELLS DEPICT - MEMBER COUNT**  
**TOTAL SALARY**

**VALUATION DATE 6/30/94**

Age/Years :	(0-1)	[1-5)	[5-10)	[10-15)	[15-20)	[20-25)	[25-30)	[30-35)	[35- )	:	Total :
<hr/>											
[ 0 - 19) :	0	0	0	0	0	0	0	0	0	:	0 :
:	0	0	0	0	0	0	0	0	0	:	0 :
:										:	:
[20 - 24) :	0	0	0	0	0	0	0	0	0	:	0 :
:	0	0	0	0	0	0	0	0	0	:	0 :
:										:	:
[25 - 29) :	0	0	36	13	0	0	0	0	0	:	49 :
:	0	0	752952	295295	0	0	0	0	0	:	1048247 :
:										:	:
[30 - 34) :	0	0	66	162	24	0	0	0	0	:	252 :
:	0	0	1478310	3981970	656233	0	0	0	0	:	6116513 :
:										:	:
[35 - 39) :	0	0	61	182	126	8	0	0	0	:	377 :
:	0	0	1391615	4681446	3446329	283015	0	0	0	:	9802405 :
:										:	:
[40 - 44) :	0	0	44	171	133	48	0	0	0	:	396 :
:	0	0	992528	4453935	3977552	1690238	0	0	0	:	11114253 :
:										:	:
[45 - 49) :	0	0	49	140	93	40	6	1	0	:	329 :
:	0	0	1107978	3671051	2743664	1414353	243389	33264	0	:	9213699 :
:										:	:
[50 - 54) :	0	0	25	87	42	14	7	1	0	:	176 :
:	0	0	536248	2260226	1172646	383724	292034	25169	0	:	4670047 :
:										:	:
[55 - 59) :	0	0	17	81	54	6	1	1	0	:	160 :
:	0	0	377808	2041909	1474099	141301	32244	50835	0	:	4118196 :
:										:	:
[60 - 64) :	0	0	11	32	20	4	2	0	0	:	69 :
:	0	0	219318	778698	533429	97556	78243	0	0	:	1707244 :
:										:	:
[65 - 69) :	0	0	4	3	2	0	1	1	0	:	11 :
:	0	0	86658	72492	49200	0	45930	24600	0	:	278880 :
:										:	:
[70 - 74) :	0	0	0	1	0	0	2	0	0	:	3 :
:	0	0	0	24600	0	0	66084	0	0	:	90684 :
<hr/>											
Total :	0	0	313	872	494	120	19	4	0	:	1822 :
Total :	0	0	6943415	22261622	14053152	4010187	757924	133868	0	:	48160168 :

**AVERAGES :**    Attained Age    43.86  
                  Service Years    13.97  
                  Active Salary    26,433



**MEMBERSHIP PROFILE**  
**CATEGORIZED BY AGE AND YEARS EMPLOYED**

**STATE EMPLOYEES' SYSTEM**  
**CORRECTIONS after 1986**

**CELLS DEPICT - MEMBER COUNT**  
**TOTAL SALARY**

**VALUATION DATE 6/30/94**

Age/Years :	(0-1)	[1-5)	[5-10)	[10-15)	[15-20)	[20-25)	[25-30)	[30-35)	[35- )	:	Total :
[ 0 - 19) :	9	0	0	0	0	0	0	0	0	:	9 :
:	48172	0	0	0	0	0	0	0	0	:	48172 :
:										:	:
[20 - 24) :	183	341	1	0	0	0	0	0	0	:	525 :
:	1364816	5756207	17373	0	0	0	0	0	0	:	7138396 :
:										:	:
[25 - 29) :	186	583	117	0	0	0	0	0	0	:	886 :
:	1651708	10796237	2251914	0	0	0	0	0	0	:	14699859 :
:										:	:
[30 - 34) :	92	441	74	0	0	0	0	0	0	:	607 :
:	1127588	8410601	1491882	0	0	0	0	0	0	:	11030071 :
:										:	:
[35 - 39) :	97	290	78	0	0	0	0	0	0	:	465 :
:	1191678	5641388	1548268	0	0	0	0	0	0	:	8381334 :
:										:	:
[40 - 44) :	56	246	69	0	0	0	0	0	0	:	371 :
:	587402	4741125	1405525	0	0	0	0	0	0	:	6734052 :
:										:	:
[45 - 49) :	45	173	55	0	0	0	0	0	0	:	273 :
:	476174	3397306	1119011	0	0	0	0	0	0	:	4992491 :
:										:	:
[50 - 54) :	17	83	35	0	0	0	0	0	0	:	135 :
:	194041	1602346	701754	0	0	0	0	0	0	:	2498141 :
:										:	:
[55 - 59) :	12	46	22	0	0	0	0	0	0	:	80 :
:	164426	888047	451595	0	0	0	0	0	0	:	1504068 :
:										:	:
[60 - 64) :	4	21	10	0	0	0	0	0	0	:	35 :
:	71456	398749	209792	0	0	0	0	0	0	:	679997 :
:										:	:
[65 - 69) :	4	5	0	0	0	0	0	0	0	:	9 :
:	92000	115000	0	0	0	0	0	0	0	:	207000 :
:										:	:
[70 - 74) :	3	1	0	0	0	0	0	0	0	:	4 :
:	69000	23000	0	0	0	0	0	0	0	:	92000 :
:										:	:
Total :	708	2230	461	0	0	0	0	0	0	:	3399 :
Total :	7038461	41770006	9197114	0	0	0	0	0	0	:	58005581 :

**AVERAGES :**    **Attained Age    34.34**  
                   **Service Years    3.18**  
                   **Active Salary    17,065**

# HALL ACTUARIAL ASSOCIATES

MEMBERSHIP PROFILE  
CATEGORIZED BY AGE AND YEARS RETIRED

STATE EMPLOYEES' SYSTEM  
ALL REGULAR RETIREES

CELLS DEPICT - MEMBER COUNT  
TOTAL BENEFIT

VALUATION DATE 6/30/94

Age/Years :	(0-1)	[1-2)	[2-3)	[3-4)	[4-5)	[5-10)	[10-15)	[15-20)	[20- )	:	Total :
[ 0 - 39) :	3	2	0	0	0	2	0	0	0	:	7 :
:	36085	32155	0	0	0	22853	0	0	0	:	91093 :
:										:	
[40 - 44) :	9	5	4	2	1	0	1	0	0	:	22 :
:	132708	76038	58060	11082	11069	0	15327	0	0	:	304284 :
:										:	
[45 - 49) :	21	15	8	6	5	13	0	0	0	:	68 :
:	376529	216477	192808	86973	69827	174160	0	0	0	:	1116774 :
:										:	
[50 - 54) :	64	69	35	18	21	167	5	0	0	:	379 :
:	1195946	1267018	642990	303371	341331	2599934	60307	0	0	:	6410897 :
:										:	
[55 - 59) :	166	201	106	74	80	1085	47	2	1	:	1762 :
:	2655759	3058272	1647880	1224909	1462931	17301843	733906	17433	4037	:	28106970 :
:										:	
[60 - 64) :	331	409	267	196	183	1660	381	65	8	:	3500 :
:	3304609	3908902	2706352	2353802	2176473	22707550	5194256	586896	39733	:	42978573 :
:										:	
[65 - 69) :	175	282	212	217	309	2234	942	270	45	:	4686 :
:	1466668	2323805	1758781	2368978	2938873	24605389	13122630	3158217	321034	:	52064375 :
:										:	
[70 - 74) :	34	65	63	82	114	1528	1707	621	87	:	4301 :
:	296470	586278	704849	1088158	1097035	16361006	17467336	7202924	851437	:	45655493 :
:										:	
[75 - 79) :	7	4	6	8	12	332	1238	1044	223	:	2874 :
:	69560	46159	81007	194703	141522	4144326	11077555	9250333	2250027	:	27255192 :
:										:	
[80 - 84) :	0	0	0	1	0	15	157	942	592	:	1707 :
:	0	0	0	13017	0	258326	1575177	7265022	4490532	:	13602074 :
:										:	
[85 - 89) :	0	0	0	0	0	2	5	83	754	:	844 :
:	0	0	0	0	0	56618	48783	605897	4976286	:	5687584 :
:										:	
[90 - 99) :	0	0	0	0	1	0	0	3	253	:	257 :
:	0	0	0	0	8107	0	0	36757	1470461	:	1515325 :
:										:	
Total :	810	1052	701	604	726	7038	4483	3030	1963	:	20407 :
Total :	9534334	11515104	7792727	7644993	8247168	88232005	49295277	28123479	14403547	:	224788634 :

AVERAGES :    Attained Age    70.26  
                  Years Retired    10.69  
                  Annual Benefit   11,015

# HALL ACTUARIAL ASSOCIATES

MEMBERSHIP PROFILE  
CATEGORIZED BY AGE AND YEARS RETIRED

STATE EMPLOYEES' SYSTEM  
ALL DISABILITY RETIREES

CELLS DEPICT - MEMBER COUNT  
TOTAL BENEFIT

VALUATION DATE 6/30/94

Age/Years :	(0-1)	(1-2)	(2-3)	(3-4)	(4-5)	(5-10)	(10-15)	(15-20)	(20- )	Total :
[ 0 - 39) :	8	12	7	4	3	8	1	0	0	43 :
:	58307	70963	37895	25174	11959	38392	3329	0	0	246019 :
:										:
[40 - 44) :	16	19	13	13	8	19	7	0	0	95 :
:	134100	180569	83982	93093	56833	129852	36872	0	0	715301 :
:										:
[45 - 49) :	25	35	24	18	15	60	15	2	0	194 :
:	257439	292351	204192	142629	91319	450004	113109	7184	0	1558227 :
:										:
[50 - 54) :	31	42	36	25	30	90	40	8	0	302 :
:	321024	362103	285530	205181	253833	699054	282663	50472	0	2459860 :
:										:
[55 - 59) :	37	32	26	38	24	110	55	22	3	347 :
:	323006	254147	196261	275444	148720	760302	340689	128483	10379	2437431 :
:										:
[60 - 64) :	1	0	2	2	0	3	4	0	0	12 :
:	42001	0	11532	42689	0	42462	32836	0	0	171520 :
:										:
[65 - 69) :	1	0	0	0	0	0	0	0	0	1 :
:	42213	0	0	0	0	0	0	0	0	42213 :
:										:
[70 - 74) :	0	0	0	0	0	0	0	0	0	0 :
:	0	0	0	0	0	0	0	0	0	0 :
:										:
[75 - 79) :	0	0	0	0	0	0	0	0	0	0 :
:	0	0	0	0	0	0	0	0	0	0 :
:										:
[80 - 84) :	0	0	0	0	0	0	0	0	0	0 :
:	0	0	0	0	0	0	0	0	0	0 :
:										:
[85 - 89) :	0	0	0	0	0	0	0	0	0	0 :
:	0	0	0	0	0	0	0	0	0	0 :
:										:
[90 - 99) :	0	0	0	0	0	0	0	0	0	0 :
:	0	0	0	0	0	0	0	0	0	0 :
:										:
Total :	119	140	108	100	80	290	122	32	3	994 :
Total :	1178090	1160133	819392	784210	562664	2120066	809498	186139	10379	7630571 :

AVERAGES :    Attained Age    51.91  
                  Years Retired    5.35  
                  Annual Benefit   7,677

MEMBERSHIP PROFILE  
CATEGORIZED BY AGE AND YEARS RETIRED

STATE EMPLOYEES' SYSTEM  
ALL SURVIVOR BENEFITS

CELLS DEPICT - MEMBER COUNT  
TOTAL BENEFIT

VALUATION DATE 6/30/94

Age/Years :	(0-1)	(1-2)	(2-3)	(3-4)	(4-5)	(5-10)	(10-15)	(15-20)	(20- )	:	Total :
[ 0 - 39) :	2	2	8	2	4	29	12	21	10	:	90 :
:	27842	25974	114994	73196	62811	309628	90075	120619	49058	:	874197 :
:										:	:
[40 - 44) :	2	6	5	0	5	30	13	1	2	:	64 :
:	30713	94882	48697	0	79518	373821	113635	1838	3958	:	747062 :
:										:	:
[45 - 49) :	11	6	4	7	4	41	32	4	2	:	111 :
:	181512	75814	20721	58177	66569	432361	327262	18585	4728	:	1185729 :
:										:	:
[50 - 54) :	46	40	64	59	38	65	38	13	10	:	373 :
:	655231	700805	989411	650879	566640	744312	387823	92089	41350	:	4828540 :
:										:	:
[55 - 59) :	2	8	5	8	1	355	69	42	8	:	498 :
:	21408	88838	95608	48861	2860	3769298	527369	275788	52516	:	4882546 :
:										:	:
[60 - 64) :	1	1	6	6	4	58	597	79	34	:	786 :
:	5985	9729	44863	43120	21733	465919	4776041	509837	174774	:	6052001 :
:										:	:
[65 - 69) :	1	0	3	4	6	74	75	836	69	:	1068 :
:	6725	0	20281	21686	27613	558032	592992	5192144	376623	:	6796096 :
:										:	:
[70 - 74) :	0	0	0	3	3	44	76	64	591	:	781 :
:	0	0	0	18433	10500	345824	561720	418924	3266352	:	4621753 :
:										:	:
[75 - 79) :	0	0	0	0	0	15	37	66	252	:	370 :
:	0	0	0	0	0	128373	274504	371424	1235356	:	2009657 :
:										:	:
[80 - 84) :	0	0	0	0	0	1	6	28	118	:	153 :
:	0	0	0	0	0	5168	75525	148288	546397	:	775378 :
:										:	:
[85 - 89) :	0	0	0	0	0	0	1	0	43	:	44 :
:	0	0	0	0	0	0	20017	0	203090	:	223107 :
:										:	:
[90 - 99) :	0	0	0	0	0	0	0	0	6	:	6 :
:	0	0	0	0	0	0	0	0	23494	:	23494 :
:										:	:
Total :	65	63	95	89	65	712	956	1154	1145	:	4344 :
Total :	929416	996042	1334575	914352	838244	7132736	7746963	7149536	5977696	:	33019560 :

AVERAGES :    Attained Age    64.94  
                  Years Retired    15.45  
                  Annual Benefit    7,601

**HALL ACTUARIAL ASSOCIATES**

**MEMBERSHIP PROFILE  
CATEGORIZED BY AGE AND YEARS RETIRED**

**STATE EMPLOYEES' SYSTEM  
DROP PARTICIPANTS**

**CELLS DEPICT - MEMBER COUNT  
TOTAL BENEFIT**

**VALUATION DATE 6/30/94**

Age/Years :	(0-1)	[1-2)	[2-3)	[3-4)	[4-5)	[5-10)	[10-15)	[15-20)	[20- )	:	Total :
[ 0 - 39) :	2	1	0	0	0	0	0	0	0	:	3 :
:	35153	13376	0	0	0	0	0	0	0	:	48529 :
:										:	:
[40 - 44) :	8	5	0	0	0	0	0	0	0	:	13 :
:	100329	71793	0	0	0	0	0	0	0	:	172122 :
:										:	:
[45 - 49) :	19	5	0	0	0	0	0	0	0	:	24 :
:	343401	101028	0	0	0	0	0	0	0	:	444429 :
:										:	:
[50 - 54) :	115	36	6	0	0	0	0	0	0	:	157 :
:	2677071	898506	122360	0	0	0	0	0	0	:	3697937 :
:										:	:
[55 - 59) :	168	93	29	2	0	0	0	0	0	:	292 :
:	4094247	2279016	734963	48252	0	0	0	0	0	:	7156478 :
:										:	:
[60 - 64) :	235	115	26	5	0	0	0	0	0	:	381 :
:	4219079	1895008	708724	58504	0	0	0	0	0	:	6881315 :
:										:	:
[65 - 69) :	77	50	27	3	0	0	0	0	0	:	157 :
:	1642207	909544	730070	24944	0	0	0	0	0	:	3306765 :
:										:	:
[70 - 74) :	19	12	3	3	0	0	0	0	0	:	37 :
:	289004	240528	37273	17666	0	0	0	0	0	:	584471 :
:										:	:
[75 - 79) :	3	4	1	0	0	0	0	0	0	:	8 :
:	93345	51042	39158	0	0	0	0	0	0	:	183545 :
:										:	:
[80 - 84) :	0	0	0	0	0	0	0	0	0	:	0 :
:	0	0	0	0	0	0	0	0	0	:	0 :
:										:	:
[85 - 89) :	0	0	0	0	0	0	0	0	0	:	0 :
:	0	0	0	0	0	0	0	0	0	:	0 :
:										:	:
[90 - 99) :	0	0	0	0	0	0	0	0	0	:	0 :
:	0	0	0	0	0	0	0	0	0	:	0 :
:										:	:
Total :	646	321	92	13	0	0	0	0	0	:	1072 :
Total :	13493836	6459841	2372548	149366	0	0	0	0	0	:	22475591 :

**AVERAGES :**    Attained Age    60.19  
                   Years Retired    1.02  
                   Annual Benefit 20,966

**MEMBERSHIP PROFILE  
CATEGORIZED BY AGE AND YEARS EMPLOYED**

**STATE EMPLOYEES' SYSTEM  
TERMINATED VESTED**

**CELLS DEPICT - MEMBER COUNT  
TOTAL BENEFIT**

**VALUATION DATE 6/30/94**

Age/Years :	(0-1)	[1-5)	[5-10)	[10-15)	[15-20)	[20-25)	[25-30)	[30-35)	[35- )	:	Total :
.....											
[ 0 - 19) :	0	0	0	0	0	0	0	0	0	:	0 :
:	0	0	0	0	0	0	0	0	0	:	0 :
:										:	:
[20 - 24) :	0	1	0	0	0	1	0	0	0	:	2 :
:	0	680	0	0	0	3118	0	0	0	:	3798 :
:										:	:
[25 - 29) :	0	3	0	0	0	0	0	0	0	:	3 :
:	0	2306	0	0	0	0	0	0	0	:	2306 :
:										:	:
[30 - 34) :	0	3	0	17	4	0	0	0	0	:	24 :
:	0	2105	0	91627	30389	0	0	0	0	:	124121 :
:										:	:
[35 - 39) :	0	2	1	38	32	1	0	0	0	:	74 :
:	0	1065	446	292173	247244	5590	0	0	0	:	546518 :
:										:	:
[40 - 44) :	0	0	0	26	69	31	1	0	0	:	127 :
:	0	0	0	172815	555550	288525	18697	0	0	:	1035587 :
:										:	:
[45 - 49) :	0	2	0	26	44	43	18	2	0	:	135 :
:	0	1802	0	257401	436712	439277	136281	35815	0	:	1307288 :
:										:	:
[50 - 54) :	0	0	1	29	35	43	34	10	0	:	152 :
:	0	0	7361	273040	348987	480898	385324	93504	0	:	1589114 :
:										:	:
[55 - 59) :	0	0	0	31	36	21	10	5	9	:	112 :
:	0	0	0	194916	272395	202867	87043	56589	56924	:	870734 :
:										:	:
[60 - 64) :	0	0	0	3	4	6	7	3	2	:	25 :
:	0	0	0	12119	36103	61134	67818	45474	7543	:	230191 :
:										:	:
[65 - 69) :	0	0	0	2	3	2	2	2	5	:	16 :
:	0	0	0	8724	17390	10574	7301	21345	30573	:	95907 :
:										:	:
[70 - 74) :	0	0	0	0	2	3	10	3	9	:	27 :
:	0	0	0	0	16650	41252	55825	4498	39279	:	157504 :
.....											
Total :	0	11	2	172	229	151	82	25	25	:	697 :
Total :	0	7958	7807	1302815	1961420	1533235	758289	257225	134319	:	5963068 :
.....											

**AVERAGES :**    Attained Age    49.69  
                  Service Years    19.53  
                  Annual Benefit    8,555

EXHIBIT 5

PRINCIPLE PROVISIONS OF THE PLAN  
(Including Acts of 1993 Regular Session)

EFFECTIVE DATE:

July 1, 1947; last amendment date - July 1, 1993.

EMPLOYEE:

Any person legally occupying a position in the state service.

EMPLOYER:

The State of Louisiana or any of its boards, commissions, departments, agencies and courts which are contributing members and those approved for membership by the legislature from which any employee receives his compensation.

ELIGIBILITY FOR  
PARTICIPATION:

Condition of employment in state service except the following: elected or appointed officials or employees who are contributing members of any other state system; public officials and state employees who receive a per diem in lieu of compensation; persons employed prior to 1/1/73 who work on a part-time basis and elect not to participate; patient or inmate help in state charitable, penal or correctional institutions; part-time students, interns and resident physicians; independent contractors; employees who are age 60 or older at time of employment; retirees of the retirement system who return to work under certain conditions; judges who failed to elect membership prior to 10/2/76; civilian employees who on 11/1/81 were within five years of retirement eligibility in the Federal Civil Service Retirement and Disability Fund; teachers employed after 9/10/82; nurses employed from employment pools at state charity hospitals; temporary, seasonal, part-time employees of DOCT, or as defined in federal law.

SERVICE:

Service as an "Employee", defined above.

CREDITABLE SERVICE:

For service prior to January 1, 1973: 1/4 year granted for each 89 day interval of service, not to exceed 1 credit per fiscal year. Minimum 50 days required for 1st Quarter credit.

For service on or after January 1, 1973, a member shall receive credit based on the ratio of actual pay to the annual base per calendar year. Fractional service shall be rounded to the next highest 1/10th, not to exceed 100 percent per year.

**EXHIBIT 5 (Continued)**  
**Principle Provisions**

**ADDITIONAL**  
**CREDITABLE SERVICE:**

1. Credit for service cancelled by withdrawal of accumulated contributions may be restored by member by paying into system the amount withdrawn plus interest at the Actuarial Valuation rate.
2. Maximum of 4 years of credit for military service may be obtained for each member with at least 2 years service, contingent on payment of Actuarial Cost.
3. Credit for educational leave or any period of training, up to a maximum of three years, for which a stipend was paid and the member was bound to return to the employ and does return to the employ of such agency.
4. Credit for service which was classified as a job appointment or emergency appointment not to exceed 2 years credit.
5. At retirement, all accumulated unused sick and annual leave shall be credited based on the following schedule:

1 - 26 Days	10% of a Year
27 - 52 Days	20% of a Year
53 - 78 Days	30% of a Year
79 - 104 Days	40% of a Year
105 - 130 Days	50% of a Year
131 - 156 Days	60% of a Year
157 - 182 Days	70% of a Year
183 - 208 Days	80% of a Year
209 - 234 Days	90% of a Year
235 - 260 Days	100% of a Year

Actuarial Equivalent Lump-sum is available after August 15, 1993.

**EARNABLE COMPENSATION:**

The base pay earned by an employee for a given pay period as reported by the employing agency including the full amount earned, expense allowances, over-time paid to employees of the legislative branch, per diem paid to members of the legislature, the clerk or sergeant-at-arms of the house and the president and secretary of the senate.

**AVERAGE FINAL**  
**COMPENSATION FOR**  
**BENEFIT PURPOSES:**

The average annual earned compensation for the thirty-six highest months of successive employment, or the highest thirty-six successive joined months where interruption of service occurred; part-time employees use the base pay the part-time employee would have received had employment been full-time.



**EXHIBIT 5 (Continued)**  
**Principle Provisions**

**ACCUMULATED CONTRIBUTIONS:**

The sum of all amounts deducted from the earned compensation of a member and credited to the individual account in the employee's savings account, together with regular interest credited prior to July 1971.

**EMPLOYEE CONTRIBUTIONS:**

		<u>After June 30, 1989</u>
Individual Employees	7% of Compensation	7.5%
Agents of DOC	8.5% of Compensation	9.0%
Wild Life Agents	8% of Compensation	8.5%
Legislators, Judges	11% of Compensation	11.5%

**EMPLOYER CONTRIBUTIONS:**

9% of Compensation by statute; 9.2% effective 8/1/80; 10.2% effective 7/1/84; 11.2% effective 9/11/85. Act 81 of 1988 requires employer rate to be actuarially determined and set annually.

**RETIREMENT BENEFIT:**

**NORMAL RETIREMENT:**

**Eligibility:**

Written application to the Board and,

1. Member has attained age 60 and 10 years of accredited service, or age 55 and 25 years of accredited service, or at any age and 30 years of accredited service.
2. Certain members of the Department of Public Safety and Corrections, 20 years of accredited service at any age (age 50 if employed after August 15, 1986, 20 years of service).
3. Service as a judge or court officer, 18 years of creditable service regardless of age, or age 50 and 20 years of accredited service, or age 55 and 12 years of accredited service, or age 70 without regard to accredited service.
4. Members of the legislature, governor, lieutenant governor and state treasurer, 16 years of such service without regard to age, or age 50 with 20 years of accredited service with 12 years of such service, or age 55 with 12 years of such service.

**Benefit:**

1. Annual pension equal to 2 1/2 percent of average compensation for each year of creditable service, plus \$300 supplemental benefit.
2. Annual pension equal to 2 1/2 percent of average compensation for each year of creditable service, plus \$300 supplemental benefit.

**EXHIBIT 5 (Continued)**  
**Principle Provisions**

3. Annual pension equal to 3 1/2 percent of average compensation for each year of creditable service as a judge or court officer, plus benefit described in (1) above for other state service.

4. Annual pension equal to 3 1/2 percent of average compensation for each year of creditable service as a legislator, governor, lieutenant governor, employees of the legislature or state treasurer, plus benefit described in (1) above for other state service.

**NOTE:**

A. Benefit not to exceed 100% of average earnable compensation.

B. Retiree who returns to work shall have benefits suspended while so re-employed; benefit in same amount shall resume after re-employment ceases, but shall include any Cost-of-Living benefits or increases granted during suspension (these are not retroactive). Retirees who return to work during a July 1 to June 30 year will not have his benefits reduced if his compensation does not exceed 50% of his average final compensation.

C. The \$300 annual supplemental benefit is discontinued to persons who become members of the retirement system after 6/30/86 (Act 608 of 1986).

D. For members employed after January 1, 1990, the annual pension cannot exceed the maximum benefit provided under Section 415(b)(2)(F) of the Internal Revenue Service Code as adjusted for inflation and form of benefit other than life annuity or qualified joint and survivor annuity for retirement ages as follows:

<u>AGE</u>	<u>MAXIMUM</u>	<u>AGE</u>	<u>MAXIMUM</u>	<u>AGE</u>	<u>MAXIMUM</u>
48	\$21,861	56	\$46,138	64	\$106,076
49	23,926	57	50,904	65	118,800
50	26,204	58	56,239	66	130,128
51	28,726	59	62,228	67	142,931
52	31,515	60	68,967	68	157,458
53	34,610	61	76,571	69	174,029
54	38,047	62	85,177	70	192,999
55	41,872	63	94,947		

**EXHIBIT 5 (Continued)**  
**Principle Provisions**

**COST-OF-LIVING BENEFITS:**

1. Discretionary Board approved supplemental cost-of-living adjustments based on the difference in the all-items Consumer Price Index for the two immediate preceding calendar years not to exceed 3% in any year, from excess interest earnings, provided the system is approaching full funding.

2. **Under Act 798 of 1980:**

A. Cost-of-living adjustments for retirees based on their date of retirement as follows:

<u>Retirement Date</u>	<u>Increase</u>
7/2/78 - 7/1/79	3%
7/2/77 - 7/1/78	6%
7/1/77 and earlier	9% (of 10/1/77 benefit)

B. 1979 cost-of-living raise of 10% for those who retired on or before 7/1/80 is a permanent raise.

3. **Under Act 852 of 1981:**

Cost-of-living for recipients who retired on or before July 1, 1978, payable on January 1, 1982 as follows:

Retiree, beneficiary or survivor

1. At least 62 but less than 65, 4% of benefit of October 1, 1977, or initial benefit if retired after October 1, 1977, but not greater than \$400 annually,
2. 65 or older 7% of benefit of October 1, 1977 or initial benefit if retired after October 1, 1977, but not greater than \$700 annually.
3. Disability retirees and surviving children not subject to the above age restrictions, and their COL is 7%, but not greater than \$700 per person.

4. **Under Act 443 of 1984:**

7% Cost-of-living increase to retirees, beneficiaries and survivors who are receiving a benefit by 9/1/84. It is effective 9/1/84 and must be paid by the retirement system by 11/1/84.

No increase can be more than \$100/month. If the increase is only partially funded for a given year, the increase shall be reduced in direct proportion.

**NOTE:**

In no case may the increase cause annual benefits to exceed \$24,000.

5. **Act 5 of Third Extraordinary Session:**

Effective September 1, 1991, retirees, beneficiaries and survivors who have been receiving benefits since July 1, 1990 receives \$1 per month increase for each year of service plus \$1 per month for each year retired.

**EXHIBIT 5 (Continued)**  
**Principle Provisions**

**6. Act 572 of 1992:**

Establishes an Experience Account which is credited with 50% of the excess investment experience gain and debited with 50% of the net investment experience loss. Balances in the experience account accrue interest at the average actuarial yield for the System portfolio. Once the balance of the experience account accumulates to a sum sufficient to grant retirees a COLA, the Board may grant such COLA with legislative approval.

**DISABILITY RETIREMENT:**

**Eligibility:**

10 years of creditable service; certification of disability by medical board (medical examination may be required once in every year for the first 5 years of disability retirement, and once in every 2 years thereafter, until age 60.)

**Benefit:**

- 1) The disability retirement annuity shall be equivalent to the regular retirement formula without reduction by reason of age for all classes of membership.
- 2) For judges and court officers, the benefit in (1) but not less than 50% of current salary.
- 3) For certain Wild Life agents; partial disabilities not eligible for (1) above receive 75% of the benefit in (1); total disability in-line-of-duty receive 60% of average compensation.

**SURVIVOR'S BENEFITS:**

**Eligibility:**

1. Surviving spouse with minor children, legally married 2 years prior to date of death of a member with 5 years of service credit, 2 of which were earned immediately prior to death, or 20 years of service regardless of date earned.
2. Surviving spouse, legally married 2 years prior to death, of a deceased member with 10 years of service credit, 2 of which were earned immediately prior to death, or 20 years of service regardless of date earned.
3. Surviving minor child, with no spouse of a deceased member with 5 years of service credit, 2 of which were earned immediately prior to death, or 20 years of service regardless of date earned.
4. Surviving handicapped or mentally retarded children.
5. Surviving spouse of a judge or court officer.
6. Beneficiary not eligible for (1), (2), (3), (4) or (5).

**EXHIBIT 5 (Continued)**  
**Principle Provisions**

**Benefit:**

1. Greater of 75% of member's average compensation or \$300 per month. One-third of the benefit is designated for survivor, two-thirds for minor children.
2. Greater of 50% of member's average compensation or \$200 per month.
3. Greater of 75% of member's average compensation or \$300 per month.
4. Continuation of minor child's benefit described above in (1) or (3) whichever is applicable.
5. Survivor's benefit described in (1) or (2), but not less than the greater of 1/3 the member's compensation or 50% of the retirement pay which such member was entitled or receiving prior to death.
6. Return of member's accumulated contributions.

**OPTIONAL FORMS**  
**OF BENEFIT:**

In lieu of receiving normal retirement benefit, member may elect to receive actuarial equivalent of retirement allowance in a reduced form as follows:

Option 1 - If a member dies before receiving present value of annuity in monthly payments, balance paid to designated beneficiary.

Option 2 - Reduced retirement allowance, if member dies, to be continued to designated beneficiary for his lifetime.

Option 3 - 1/2 of reduced retirement allowance, if member dies, to be continued to designated beneficiary for his lifetime.

Option 4 - Other benefits of equal actuarial value may be elected with approval of board.

A. 90% of the maximum retirement allowance to member; if member dies, 55% of the maximum retirement allowance continued to beneficiary.

B. 90% of the maximum retirement allowance to member; if member dies, 55% of the maximum retirement allowance continues to beneficiary adjusted based on the age and relationship of the beneficiary to the member.

C. Special reversionary annuities to Options 2, 3, and 4. Member's reduced benefit reverts to the maximum if the beneficiary predeceases the annuitant.

If divorced after retirement, optional benefit can revert to maximum benefit with actuarial adjustment.

**EXHIBIT 5 (Continued)**  
**Principle Provisions**

**REFUND OF CONTRIBUTIONS:**

If a member ceases to be a member, except by death or retirement, he shall be paid such part of the amount of the accumulated contributions credited to his individual account in annuity savings fund as he shall demand, plus any accumulated interest thereon as of 6/30/71; if member of legislature, no interest. No interest credited after 6/30/71. Death prior to retirement - accumulated contributions credited to individual account in annuity savings fund are returnable to designated beneficiary, if any; otherwise, to his estate.

**WITHDRAWAL AFTER 10 YEARS**  
**OF CREDITABLE SERVICE:**

Any member with credit for 10 years of service who withdraws from service may elect to leave accumulated contributions in system until age 60, when he may apply for retirement and begin receiving a retirement benefit based on the credits he had at date of withdrawal.

EXHIBIT 6

ACTUARIAL COST METHODS AND ASSUMPTIONS

COST METHOD:

The individual "Projected Unit Credit" cost method was used to calculate the funding requirements of the retirement system. Under this cost method, the actuarial present value of projected benefits of each individual included in the valuation is accumulated from the participant's attained age to the anticipated retirement dates. That portion of the actuarial present value attributable to current year benefit accruals is called the Normal Cost. The actuarial present value of future benefits in proportion to service accrued on the date of valuation is called the actuarial accrued liability.

ACCOUNTING DISCLOSURE:

The Governmental Accounting Standards Board Statement No. 6 requires the disclosure of "Credited Projected Benefits" for Public Employee Retirement Systems. The actuarial present value of credited projected benefits are the accumulated accrued benefits of each individual participant projected with salary increases for active members to anticipated retirement. The development of this disclosure utilizes the same actuarial assumptions in the development of funding requirements and actuarial accrued liabilities.

MORTALITY ASSUMPTIONS:

Pre-retirement deaths and post-retirement life expectancies were projected in accordance with the experience of the 1983 Sex Distinct Graduated Group Annuity Mortality Table, with female age set at attained age plus one.

DISABILITY ASSUMPTION:

Rates of total and permanent disability were projected by age in accordance with the 1981-86 disability experience study of the Retirement System. For mortality after disability, rates were on the Eleventh Actuarial Valuation of the Railroad Retirement Systems for permanent disabilities.

RETIREMENT ASSUMPTION:

Retirement without reduction in benefits can occur at any given age after satisfying the service eligibility requirements. Absent from the plan is a traditional "Normal Retirement Age". Since the age and service requirements are varied, the frequency of retirements will depend on the exposure plus intangibles such as health, economy, Social Security and other work patterns. The retirement rates were projected based on the 1981-86 experience study of the Retirement System.

**EXHIBIT 6 (Continued)**
**Cost Methods & Assumptions**
**TERMINATION ASSUMPTIONS:**

Voluntary termination or withdrawal rates were derived from the 1981-86 termination experience study of the Retirement System. During the first five years of employment, the probability of voluntarily terminating is a multiple of the attained age rate as follows:

	<u>Regular Members</u>	<u>Corrections &amp; Wildlife</u>
1st year	1.3x	1.6x
2nd year	1.0x	1.2x
3rd year	1.0x	1.1x
4th year	1.0x	1.1x
5th year	1.0x	1.0x

Furthermore, for members terminating with ten (10) or more years of service, it is assumed that 80% will not withdraw their accumulated employee contributions.

**SALARY GROWTH:**

The rate of annual salary growth is based on the 1981-86 salary growth experience study of the Retirement System.

**FAMILY STATISTICS:**

The composition of the Family was based on Age-Specific Fertility Rates from the 1983 Vital Statistics of the United States. 80% of the membership was assumed to be married with the wife assumed to be three (3) years younger than the husband. Sample rates are as follows:

<u>Age at Death</u>	<u>Number of Minor Chn.</u>	<u>Years for Youngest Child to Attain Majority</u>
25	1.3	17
30	1.8	15
35	2.2	13
40	2.1	10
45	1.7	8
50	1.2	4



**EXHIBIT 6 (Continued)**  
**Cost Methods & Assumptions**

**ASSUMPTION FOR INCOMPLETE DATA:**

Records identified as containing suspicious data or errors in data were assumed to possess the same characteristics of "good data" in the same cohort.

**INVESTMENT EARNINGS:**

An effective annual rate of 8 1/4%, net expenses.

**ASSET VALUATION:**

Bonds are valued at amortized cost. Fixed assets are valued at cost minus depreciation. For the Plan Year Ending June 30, 1988 equities are valued on a four year weighted average. The computation of the average actuarial value of assets is the sum of the bonds at amortized cost, plus a weighted average of the change in the unrealized losses or (gains) in the market value of equities offset against the market value of equities. This value is a modification of the average value methodology determined in accordance with Reg. 1.412(c)(2)-1-(6)&(7) of the Internal Revenue Service Code and is subject to the Corridor Limits defined therein. The four year average value will be phased in over the next three year period.

**ADMINISTRATIVE EXPENSES:**

These expenses are included in Normal Cost and are assumed to be \$4,800,000 per year. Investment Expenses are not included in Normal Cost but are treated as a direct offset to investment income.

**ACTUARIAL TABLES AND RATES  
(STATE EMPLOYEES' ASSUMPTIONS)**

Age	- Death Rates - Male	- Rates - Female	Remarriage Rates	Disability Rates	Retirement Rates	Dur	Termination Rates	Salary Scale
20	.00042	.00022	.09350	.00000	.00000	1	.27500	1.11750
21	.00044	.00024	.09152	.00000	.00000	2	.32400	1.10750
22	.00045	.00025	.08954	.00000	.00000	3	.16400	1.09750
23	.00047	.00027	.08757	.00000	.00000	4	.13700	1.08250
24	.00049	.00028	.08569	.00000	.00000	5	.11800	1.07750
25	.00052	.00030	.08402	.00000	.00000	6	.11000	1.07250
26	.00054	.00032	.08225	.00000	.00000	7	.10100	1.07050
27	.00057	.00034	.08028	.00000	.00000	8	.08500	1.06850
28	.00060	.00036	.07802	.00000	.00000	9	.07100	1.06650
29	.00064	.00038	.07556	.00000	.00000	10	.05800	1.06350
30	.00067	.00040	.07281	.00020	.00000	11	.03200	1.06050
31	.00072	.00043	.06976	.00020	.00000	12	.02400	1.05750
32	.00076	.00046	.06652	.00030	.00000	13	.02000	1.05450
33	.00082	.00049	.06308	.00030	.00000	14	.02000	1.05150
34	.00087	.00053	.05945	.00040	.00000	15	.01700	1.04850
35	.00096	.00056	.05582	.00050	.00000	16	.01700	1.04550
36	.00101	.00060	.05230	.00060	.00000	17	.01300	1.04250
37	.00107	.00064	.04890	.00080	.00000	18	.01300	1.04250
38	.00115	.00069	.04570	.00100	.00000	19	.01300	1.04250
39	.00125	.00074	.04271	.00120	.00000	20	.01300	1.04250
40	.00138	.00080	.03993	.00130	.50000	21	.01200	1.04250
41	.00152	.00086	.03769	.00140	.50000	22	.01200	1.04250
42	.00170	.00094	.03480	.00150	.50000	23	.01200	1.04250
43	.00191	.00102	.03256	.00170	.50000	24	.01200	1.04250
44	.00215	.00112	.03037	.00200	.65000	25	.01100	1.04250
45	.00243	.00124	.02822	.00240	.65000	26	.01100	1.04250
46	.00275	.00137	.02632	.00280	.32000	27	.00800	1.04250
47	.00310	.00152	.02455	.00320	.32000	28	.00700	1.04250
48	.00349	.00167	.02303	.00360	.42000	29	.00600	1.04250
49	.00390	.00183	.02154	.00450	.43000	30	.01400	1.04250
50	.00434	.00199	.02019	.00540	.43000	31	.01300	1.04250
51	.00480	.00217	.01889	.00670	.42000	32	.01300	1.04250
52	.00528	.00236	.01808	.00800	.42000	33	.02000	1.04250
53	.00578	.00257	.01733	.00670	.42000	34	.01500	1.04250
54	.00629	.00282	.01671	.00540	.42000	35	.01500	1.04250
55	.00681	.00311	.01622	.00670	.47000	36	.01500	1.04250
56	.00735	.00345	.01596	.00920	.34000	37	.01500	1.04250
57	.00793	.00383	.01584	.01040	.32000	38	.01500	1.04250
58	.00858	.00425	.01589	.01140	.32000	39	.00000	1.04350
59	.00932	.00471	.01622	.01040	.32000	40	.00000	1.04550
60	.01018	.00523	.01682	.00400	.32000	41	.00000	1.04850
61	.01118	.00579	.01764	.00330	.27000	42	.00000	1.05150
62	.01237	.00641	.01906	.00250	.27000	43	.00000	1.05450
63	.01377	.00710	.02061	.00250	.27000	44	.00000	1.05750
64	.01541	.00785	.02239	.00300	.27000	45	.00000	1.05750
65	.01732	.00869	.02446	.00400	.44000	46	.00000	1.05750
66	.01953	.00965	.02684	.00000	.32000	47	.00000	1.05750
67	.02200	.01078	.02952	.00000	.32000	48	.00000	1.05750
68	.02470	.01214	.03209	.00000	.32000	49	.00000	1.05750
69	.02757	.01376	.03504	.00000	.42000	50	.00000	1.05750
70	.03059	.01570	.03851	.00000	.50000	51	.00000	1.05750

ACTUARIAL TABLES AND RATES  
(JUDGES & LEGISLATORS ASSUMPTIONS)

Age	- Death Male	Rates - Female	Remarriage Rates	Disability Rates	Retirement Rates	Dur	Termination Rates	Salary Scale
20	.00042	.00022	.09350	.00000	.00000	1	.27500	1.04750
21	.00044	.00024	.09152	.00000	.00000	2	.32400	1.04750
22	.00045	.00025	.08954	.00000	.00000	3	.16400	1.04750
23	.00047	.00027	.08757	.00000	.00000	4	.13700	1.04750
24	.00049	.00028	.08569	.00000	.00000	5	.11800	1.04750
25	.00052	.00030	.08402	.00000	.00000	6	.11000	1.04750
26	.00054	.00032	.08225	.00000	.00000	7	.10100	1.04750
27	.00057	.00034	.08028	.00000	.00000	8	.08500	1.04750
28	.00060	.00036	.07802	.00000	.00000	9	.07100	1.04750
29	.00064	.00038	.07556	.00000	.00000	10	.05800	1.04750
30	.00067	.00040	.07281	.00020	.00000	11	.03200	1.04750
31	.00072	.00043	.06976	.00020	.00000	12	.02400	1.04750
32	.00076	.00046	.06652	.00030	.00000	13	.02000	1.04750
33	.00082	.00049	.06308	.00030	.00000	14	.02000	1.04750
34	.00087	.00053	.05945	.00040	.00000	15	.01700	1.04750
35	.00096	.00056	.05582	.00050	.00000	16	.01700	1.04750
36	.00101	.00060	.05230	.00060	.00000	17	.01300	1.04750
37	.00107	.00064	.04890	.00080	.00000	18	.01300	1.04750
38	.00115	.00069	.04570	.00100	.00000	19	.01300	1.04750
39	.00125	.00074	.04271	.00120	.00000	20	.01300	1.04750
40	.00138	.00080	.03993	.00130	.50000	21	.01200	1.04750
41	.00152	.00086	.03769	.00140	.50000	22	.01200	1.04750
42	.00170	.00094	.03480	.00150	.50000	23	.01200	1.04750
43	.00191	.00102	.03256	.00170	.50000	24	.01200	1.04750
44	.00215	.00112	.03037	.00200	.65000	25	.01100	1.04750
45	.00243	.00124	.02822	.00240	.65000	26	.01100	1.04750
46	.00275	.00137	.02632	.00280	.32000	27	.00800	1.04750
47	.00310	.00152	.02455	.00320	.32000	28	.00700	1.04750
48	.00349	.00167	.02303	.00360	.42000	29	.00600	1.04750
49	.00390	.00183	.02154	.00450	.43000	30	.01400	1.04750
50	.00434	.00199	.02019	.00540	.43000	31	.01300	1.04750
51	.00480	.00217	.01889	.00670	.42000	32	.01300	1.04750
52	.00528	.00236	.01808	.00800	.42000	33	.02000	1.04750
53	.00578	.00257	.01733	.00670	.42000	34	.01500	1.04750
54	.00629	.00282	.01671	.00540	.42000	35	.01500	1.04750
55	.00681	.00311	.01622	.00670	.47000	36	.01500	1.04750
56	.00735	.00345	.01596	.00920	.34000	37	.01500	1.04750
57	.00793	.00383	.01584	.01040	.32000	38	.01500	1.04750
58	.00858	.00425	.01589	.01140	.32000	39	.00000	1.04750
59	.00932	.00471	.01622	.01040	.32000	40	.00000	1.04750
60	.01018	.00523	.01682	.00400	.32000	41	.00000	1.04750
61	.01118	.00579	.01764	.00330	.27000	42	.00000	1.04750
62	.01237	.00641	.01906	.00250	.27000	43	.00000	1.04750
63	.01377	.00710	.02061	.00250	.27000	44	.00000	1.04750
64	.01541	.00785	.02239	.00300	.27000	45	.00000	1.04750
65	.01732	.00869	.02446	.00400	.44000	46	.00000	1.04750
66	.01953	.00965	.02684	.00000	.32000	47	.00000	1.04750
67	.02200	.01078	.02952	.00000	.32000	48	.00000	1.04750
68	.02470	.01214	.03209	.00000	.32000	49	.00000	1.04750
69	.02757	.01376	.03504	.00000	.42000	50	.00000	1.04750
70	.03059	.01570	.03851	.00000	.50000	51	.00000	1.04750

## EXHIBIT 7

## LEGISLATIVE AUDITOR'S REPORT

6 Actuarial information for STATE EMPLOYEES' RETIREMENT SYSTEM.(a) Most recent actuarial valuation date: June 30, 1994.(b) This valuation sets forth information concerning contributions applicable to the plan fiscal year beginning July 1, 1994, and ending June 30, 1995.

## (c) Data used in this valuation

(i) Number of participants as of the valuation date:

Active members. . . . .	68,966
Regular retirees. + DROP. . . . .	20,407
Disability retirees . . . . .	994
Survivors receiving benefits. . . . .	4,344
Terminated employees due benefits upon attaining retirement age	1,348
Terminated employees due refunds. . . . .	18,551

(ii) Payroll of active members on the valuation date . . . . . 1,546,464,828(iii) Annual benefits in payment on the valuation date. . . . . 265,438,765(d) Actuarially required contribution for those systems to which R.S.11:102 applies  
Funding Method Projected Unit Credit.Unfunded Accrued Liability as of the end of fiscal 1988 . . . . . 1,825,421,035Amortization Method Increasing Annuity.Remaining Unamortized Portion of the initial unfunded liability . . 2,220,624,005Current Unfunded Accrued Liability under this method. . . . . 2,055,792,209

Actuarially required employer contribution: (at Mid-year)

(i) Employer Normal Cost. . . . . 85,553,023

Amortization Payments for Previous Years (Detail on Exhibit A):

(ii) Previous year's unpaid underpayment or (overpayment). . . . . (1,390,418)(iii) Initial Unfunded Liability (Excludes \$3,604,771 appropriation). 109,304,194(iv) Gains and Losses . . . . . (5,587,114)(v) Changes in Assumption or Asset Valuation Method. . . . . (5,698,349)(vi) Changes in funding method. . . . . 0(vii) Changes in plan provisions . . . . . 8,601,429(viii) Total employer contribution required (Sum of 6(d)(i) - (vii)). 190,782,765(ix) Estimated projected payroll for the coming fiscal year . . . . 1,597,053,170(x) Required Employer Contribution Rate (6(d)(viii)/6(d)(ix)). . . 11.9%+ Appropriation. . . . . 3,604,771(e) Actuarially required contribution for those systems to which R.S. 11:103 applies  
Funding Method Not Applicable.(f) Average yield on investments last fiscal year. . . . . 8.88%

## (g) Actuarial information for accounting purposes (GASB/6 results)

Pension Benefit Obligation:

(i) Present retirees and beneficiaries. . . . . 2,536,257,960(ii) Terminated participants due benefits at retirement age. . . 27,121,259(iii) Terminated participants due a refund of their contributions 8,468,462

(iv) Active Members:

(1) Accumulated employee contributions. . . . . 839,157,422(2) Employer-financed vested portion. . . . . 1,624,134,547(3) Employer-financed nonvested portion . . . . . 368,254,902(v) Total PBO (sum of 6(g)(i) through 6(g)(iv)) . . . . . 5,403,394,552Actuarial value of assets. . . . . 3,347,602,209Unfunded (Assets in Excess of) Pension Benefit Obligation. . . . 2,055,792,343

Exhibit 7 (Continued)

Legislative Auditor's Report

(g) Actuarial assumptions used

Interest rate used . . . . . 8.25%  
 Give the name (or source reference) of the particular table used or attach a copy of the table used for the each of the following. Indicate where appropriate that no assumption is made with regard to a particular aspect of the valuation.

	<u>Males</u>	<u>Females</u>
Mortality rates (healthy)		
Mortality rates (disabled)	<u>See copies of pages 20 - 24 of the 6/30/94</u>	
Termination rates. . . . .	<u>Actuarial Valuation Report Attached</u>	
Retirement rates . . . . .		
Disability rates . . . . .		
Salary scales . . . . .		

(h) Cost of Living Target Ratio and Funded Ratio of the System: (This section must be completed by state and statewide retirement systems only).

- (i) Funded Ratio of the System as of the 1986 fiscal year end . . . . . .53464  
 (ii) Number of fiscal years elapsed since the 1986 fiscal year end multiplied by one-thirtieth of the difference between one hundred percent and the amount in (6)(h)(i) . . . . . .12475  
 (iii) Changes in Funded Ratio due to mergers or changes in methods or assumptions after the 1986 fiscal year end;

Date of Change                      Change in Funded Ratio

<u>6/30/87</u>	<u>(.03148)</u>
<u>6/30/88</u>	<u>.02822</u>
<u>6/30/89</u>	<u>.02420</u>
<u>6/30/91</u>	<u>(.00781)</u>

Total Change in Funded Ratio . . . . . .01313

- (iv) Number of fiscal years elapsed since the date of each change in (6)(h)(iii) multiplied by one-thirtieth of the amount of such change in funded ratio and of opposite arithmetic sign of such change;

Date of Change                      Amortization of Change

<u>6/30/87</u>	<u>.00735</u>
<u>6/30/88</u>	<u>(.00564)</u>
<u>6/30/89</u>	<u>(.00403)</u>
<u>6/30/91</u>	<u>.00078</u>

Total Amortization of Changes . . . . . (.00154)

- (v) Target Ratio as of the end of the just completed fiscal year. . . . . .67098

(Sum of (6)(h) (i) through (iv))

- (vi) Actual Funded Ratio of the system as of the just completed fiscal year .61954

- (vii) According to my actuarial calculations this system has \_\_\_ has not X met the target ratio required to grant a cost of living increase to current benefit recipients.

To the best of my knowledge, the information supplied in item 6 and on statements attached to item 6, if any, is complete and accurate. In my opinion the assumptions used are in the aggregate reasonably related to the experience of the system and to reasonable expectations and represent my best estimate of anticipated experience under the system.

Date October 5, 1994

Signature of Actuary Charles G. Hall

EXHIBIT A

AMORTIZATION OF UNFUNDED  
ACTUARIAL ACCRUED LIABILITY  
JUNE 30, 1994

DATE 6/30	DESCRIPTION	AMTZ. METHOD	AMTZ. PERIOD	INITIAL LIABILITY	YEARS REMAIN	REMAINING BALANCE	MID-YEAR PAYMENT
1) 1988	Initial Liability	I	40	1,825,421,035	35	2,220,624,005	109,304,194*
2) 1989	Experience Gain	I	15(L)	(51,766,931)	35	(48,529,037)	(2,467,488)
3) 1989	Actuarial Assumption	I	30(L)	(171,979,344)	35	(177,684,476)	(9,034,475)
4) 1990	Experience Loss	I	15(L)	110,124,801	35	108,188,211	5,500,895
5) 1991	Actuarial Assumption	I	30(L)	62,288,922	35	65,612,887	3,336,126
6) 1991	Experience Gain	I	15(L)	(16,696,068)	35	(17,095,940)	(869,253)
7) 1992	Legislative COLA	L	12	66,577,000	10	59,378,621	8,601,429
8) 1992	Change in Liability	I	37	6,064,124	35	1,702,024	86,540
9) 1993	Change in Liability	I	36	(67,422,552)	35	(69,468,198)	(3,532,152)
10) 1994	Change in Liability	I	35	(84,680,987)	35	(84,680,987)	(4,305,656)
TOTAL OUTSTANDING BALANCE						2,058,047,110	106,620,160
EMPLOYER'S CREDIT BALANCE							
1992	Contribution Variance	L	5	(11,259,859)	3	(7,282,758)	(2,728,395)
1993	Contribution Variance	L	5	2,911,762	4	2,417,901	705,554
1994	Contribution Variance	L	5	2,609,956	5	2,609,956	632,423
TOTAL OUTSTANDING BALANCE						(2,254,901)	(1,390,418)
TOTAL UNFUNDED ACTUARIAL ACCRUED LIABILITY						\$2,055,792,209	

\*Note: LSU and Unfunded Judges equals 3.192635% of the Initial Liability mid-year payment.

Effective July 1, 1992, Amortization Periods changed in accordance with Act 257.