

LOUISIANA STATE EMPLOYEES'
RETIREMENT SYSTEM
JUNE 30, 1990
ACTUARIAL VALUATION

HALL ACTUARIAL ASSOCIATES

Charles G. Hall
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Enrolled Actuary

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October 19, 1990

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

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, 1990.

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 Coopers and Lybrand, 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, 1990</u>	<u>-----Prior Years-----</u>	
		<u>June 30, 1989</u>	<u>June 30, 1988</u>
I. Membership Census			
1) Retirees	24,920	24,901	24,578
2) Actives	66,711	62,566	62,144
II. Annual Benefits	\$ 235,696,106	\$ 231,668,250	\$ 229,497,911
III. Total Payroll	1,226,065,067	1,141,080,541	1,111,015,208
IV. Assets	2,321,259,028	2,173,401,501	2,019,831,530
V. Investment Yield			
Realized Income	9.85%	9.21%	8.66%
Actuarial Value	10.27%	10.06%	9.79%
VI. Cost to Fund Annual Pension Accruals (Normal Costs)	156,222,504 (12.74%)	153,546,508 (13.46%)	142,219,777 (12.80%)
VII. Unfunded Actuarial Accrued Liability	1,888,847,501	1,848,531,476	1,825,421,035
VIII. Funded Percentage	55.14%	54.03%	52.68%
IX. Funding Requirements to Pay (Mid-year Payment)			
1) Employee Contribution Rate	94,982,406 (7.5%)	88,526,682 (7.5%)	
2) Employer Contribution Rate - Current Year	163,177,125 (12.9%)	86,357,368 (7.3%)	
3) Projected Employer Contribution - Next Year	186,259,770 (13.8%)	159,424,146 (12.7%)	

The above funding requirements measure the cost of benefits that were in effect on June 30, 1990, plus Acts of the 1990 Legislative Session which have prospective effects on current active members.

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Current Funding

The Actuarial Valuation for the plan year ending June 30, 1990 discloses a general increase 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 6/30/89		\$ 1,848,531,476
INCREASES		
Interest on Unfunded Liability	\$ 152,503,847	
Benefits from Acts	0	
Experience Loss	<u>153,223,122</u>	
Incurred Increases	305,726,969	
DECREASES		
Investment Gains	43,098,322	
Actuarial Assumptions	186,167,639	
Employer Credit	<u>36,144,983</u>	
Incurred Decreases	265,410,944	
Unfunded Liability 6/30/90		\$ 1,888,847,501

Board of Trustees
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The employer contribution rate established by the Actuarial Forecast Committee for the 1990-1991 plan year was 10.7%. The actual employer contribution rates determined by this valuation for the current plan year is 13.5%, and 12.9% when adjusted for the prior year's employer credit. The current adjusted rate represents a significant change in the required employer's contributions when compared to the projected rates. Since the increase in required contributions is attributable to 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>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>	<u>1990</u>	<u>5 Yr. Aver.</u>
12.0%	10.8%	9.8%	10.1%	10.3%	10.6%

The net actuarial rate of return assumed in the valuation was 8.25%. For the plan year ending June 30, 1990 the net realized actuarial rate of return was more than the long term investment assumption used to project benefits. The result was a net investment experience gain of \$43,098,322 above projected investment income.

Act 81 of 1988 requires this investment gain to be amortized over a fifteen year period as a level dollar amount. Therefore, the employer's contribution will be reduced by \$4,913,609 during the next 15 years. This amortization credit represents a .39% reduction 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 experience a gain or loss occurs. This gain or loss is then amortized over a fifteen year period to make a mid-course adjustment in future funding requirements. During the 1989-1990 plan year, the system suffered a \$153,223,122 experience loss. This loss will increase the employer's contribution by \$17,468,861 during the next fifteen years and represents a 1.38% increase in the rate projected by the Actuarial Forecast Committee.

The losses incurred this year are beyond the control of the Board of Trustees, but the Trustees should understand the source of the experience to effectively communicate with the legislature. Experience losses due to greater than expected salary growth accounted for \$112,307,673 of the aggregate losses.

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Change in Actuarial Assumptions

During the 1989-90 plan year the Board of Trustees authorized an interim actuarial valuation to reflect the revised contribution resulting from a change in actuarial assumptions. A revaluation report for the plan year ending June 30, 1989 was issued in May of 1990 with the change in employer contributions.

To preserve annual reporting continuity, the June 30, 1989 revaluation has been treated as an interim report, except employer contribution requirements are reported in accordance with the results of the revaluation.

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. 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% during the next four (4) years. To determine whether this is a reasonable expectation, aggregate salary growth during the past six (6) years is illustrated as follows:

<u>June 30</u>	<u>Payroll/\$1000</u>	<u>Percent Increase</u>
1984	1,125,545	.6%
1985	1,146,507	1.9%
1986	1,136,203	(.9%)
1987	1,093,997	(3.7%)
1988	1,111,015	1.6%
1989	1,141,080	2.7%
1990	1,226,065	7.4%

During the last five (5) years the aggregate salaries have increased at an annualized rate of 1.35%. If this trend continues during the next five (5) years the percentage of pay required to amortize the unfunded liability can be expected to increase in the absence of other experience gains or losses.

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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 to retirees and survivors by Act 256 of the 1986 regular legislative session unless the system has met the Funding Target.

For the plan year ending June 30, 1990 the funding target is .63857, which is greater than the current .55135 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

Charles G. Hall, A.S.A., M.A.A.A.
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 Individual Entry Age Normal Actuarial 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, 1990</u>		<u>---Prior Year---</u> <u>June 30, 1989</u>	
	<u>Dollar</u> <u>Amount</u>	<u>% of</u> <u>Salary</u>	<u>Dollar</u> <u>Amount</u>	<u>% of</u> <u>Salary</u>
I. Normal Costs				
(to fund annual pension accruals)				
Active Members with Complete Data				
a) Retirement Benefits	\$ 119,019,965	9.71%	\$ 108,237,949	9.49%
b) Disability Benefits	6,395,438	.52%	6,133,246	.54%
c) Survivor Benefits	6,926,817	.57%	8,304,143	.73%
d) Voluntary Termination	21,780,284	1.78%	29,071,170	2.54%
e) Expenses	2,100,000	.17%	1,800,000	.16%
TOTAL	<u>156,222,504</u>	<u>12.74%</u>	<u>153,546,508</u>	<u>13.46%</u>
			- 1,800,000 Expense	
			<u>151,746,508</u>	
II. Actuarial Accrued Liability				
a) Active Members				
1) Retirement Benefits	1,724,103,313		1,461,070,872	
2) Disability Benefits	79,117,909		70,602,433	
3) Survivor Benefits	75,736,947		84,130,959	
4) Voluntary Termination	<u>131,002,827</u>		<u>136,157,283</u>	
	2,009,960,996		1,751,961,547	
b) Retired and Inactive Members				
1) Regular Retirees	1,751,308,667		1,827,567,350	
2) Disabled Retirees	101,548,474		105,590,508	
3) Survivors	235,182,025		231,580,420	
4) Vested Deferred	12,830,490		16,401,698	
5) Contributions Refunded	<u>7,359,798</u>		<u>7,402,247</u>	
	2,108,229,454		2,188,542,223	
c) SUB TOTAL	4,118,190,450		3,940,503,770	

Exhibit 1 (Continued)
Costs, Liabilities & Contributions

	<u>June 30, 1990</u>	<u>---Prior Year---</u> <u>June 30, 1989</u>
II. Actuarial Accrued Liability		
c) SUB TOTAL (Preceding page)	\$ 4,118,190,450	\$ 3,940,503,770
d) Adjustments to Regular Plan		
1) Active Judges	81,233,913	74,041,987
2) Active Legislators	10,682,166	7,387,220
Adjusted TOTAL	<u>4,210,106,529</u>	<u>4,021,932,977</u>
III. Assets	2,321,259,028	2,173,401,501
IV. Unfunded Actuarial Accrued Liabilities - Projected Unit Credit*		
a) Change over prior year	40,316,025	23,110,441
b) Funded Percentage	55.14%	54.03%
V. Employer Contributions To Fund Current Plan Year*		
a) Employer Portion of Normal Cost	64,681,223	62,013,097
b) Amortization Payments	105,829,286	88,881,478
c) Previous Years Deficit (Credit)	(7,333,384)	<u>(64,537,207)</u>
TOTAL Required Contribution	163,177,125 12.9%	86,357,368 (7.3%)
Plus State Appropriation	3,766,444	3,621,581
Actuarial Forecast Rate	10.7%	7.8%
VI. Projected Employer Contributions To Fund Next Plan Year*		
a) Employer Portion of Normal Cost	71,085,241	66,150,112
b) Amortization Payments	112,706,156	93,274,034
c) Previous Years Deficit (Credit)	<u>2,468,373</u>	<u>N/A</u>
TOTAL Projected Contribution	186,259,770 13.8%	159,424,146 12.7%
Plus State Appropriation	3,917,102	3,766,444
VII. Current Payroll		
Projected Payroll - Mid Year	1,226,065,067	1,141,080,541
Projected Payroll - Next Year	1,266,432,075	1,180,355,758
	1,347,459,790	1,259,090,787

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

EXHIBIT 2

FINANCIAL SUMMARY
STATEMENT OF REVENUES AND EXPENSES
FOR FISCAL YEAR ENDING

	<u>June 30, 1990</u>	-----Prior Years-----	
		<u>June 30, 1989</u>	<u>June 30, 1988</u>
<u>OPERATING REVENUES:</u>			
1. Contribution Income			
Member	\$ 91,552,972	\$ 81,925,366	\$ 81,197,631
Employer	93,724,467	134,142,798	125,430,030
2. Other Income			
Legislative Appropriations	3,336,498	0	7,526,473
Miscellaneous	3,262,174	171,562	0
TOTAL CONTRIBUTIONS	<u>191,876,111</u>	<u>216,239,726</u>	<u>214,154,134</u>
3. Investment Income			
Realized Income	207,570,969	181,952,253	161,556,687
Less, investment expenses	-937,750	-773,083	-645,000
TOTAL INVESTMENT INCOME	<u>206,633,219</u>	<u>181,179,170</u>	<u>160,911,687</u>
4. Total Revenues	398,509,330	397,418,896	375,065,821
<u>OPERATING EXPENSES:</u>			
1. General Administration	2,098,180	1,777,230	1,422,283
Other Expenses	479,490	490,618	481,976
2. Benefits Paid			
a) Pension Benefits	234,066,890	228,603,084	223,013,862
b) Return of Contrib.	<u>26,880,996</u>	<u>32,548,038</u>	<u>24,792,168</u>
3. Total Operating Expenses	263,525,556	263,418,970	249,710,289
<u>NET INCOME:</u>	134,983,774	133,999,926	125,355,532

EXHIBIT 2 (Continued)
Financial Summary

FINANCIAL SUMMARY
STATEMENT OF ASSETS
FOR FISCAL YEAR ENDING

	<u>June 30, 1990</u>	<u>Prior Years</u>	
		<u>June 30, 1989</u>	<u>June 30, 1988</u>
ASSETS:			
1. Short Term Assets			
Cash in Banks	\$ 737,635	\$ 299,716	\$ 78,168
Certificates of Deposit	30,455,734	21,740,000	39,440,000
Securities	119,993,709	313,492,095	177,786,516
2. Bonds (at amortized cost)			
U.S. Government Agency	426,710,507	446,929,887	165,532,602
United States Issues	664,016,754	516,653,038	310,130,152
Corporate Issues	174,836,669	225,484,710	550,511,957
Long Term/Financial	219,619,388	60,826,443	104,559,705
3. Equities			
Common Stock	534,201,809	408,469,824	530,361,407
Preferred Stock	5,965,627	4,812,585	719,425
Fixed Assets	5,648,222	5,913,518	5,972,036
Mortgages - Real Estate	66,001,640	78,411,722	35,822,171
4. Receivables - Payables	<u>20,409,316</u>	<u>50,579,758</u>	<u>78,699,231</u>
TOTAL ASSETS			
Equities at Cost	2,268,597,070	2,133,613,296	1,999,613,370
Equities at Market	2,359,880,281	2,212,541,595	2,040,049,690
Market Value	2,353,328,804	2,214,488,938	
RATIO: ASSETS/EXPENSES:	8.61	8.10	8.0
INVESTMENT YIELD:			
Realized Income	9.85%	9.21%	8.66%
Yield to Actuarial Value	10.27%	10.06%	9.79%
Five Year Actuarial Value	10.58%	10.63%	10.49%
Yield to Market Value	9.66%		
ACTUARIAL VALUE OF ASSETS:			
TOTAL ASSETS	2,359,880,281	2,212,541,593	2,040,049,690
Change in Unrealized (G/L)			
Plan Year - 2 (wt. 1/4)	40,436,320	N/A	N/A
Plan Year - 1 (wt. 2/4)	38,491,979	40,436,320	N/A
Plan Year (wt. 3/4)	<u>12,354,912</u>	<u>38,491,979</u>	<u>40,436,320</u>
Actuarial Value of Assets	2,321,259,028	2,173,401,501	2,019,831,530

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, 1990</u>		<u>June 30, 1989</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	\$2,088,039,166	170%	\$2,164,738,278	190%
2) Terminated vested members	20,190,288	2%	23,803,945	2%
TOTAL	<u>2,108,229,454</u>	<u>172%</u>	<u>2,188,542,223</u>	<u>192%</u>
Actuarial Present Value of Credited Projected Benefits for active members:				
1) Member Contributions	615,420,307	50%	574,252,201	50%
2) Employer Contributions				
Vested Portion	1,150,144,840	94%	879,693,828	77%
Non-vested Portion	<u>336,311,928</u>	<u>27%</u>	<u>379,444,725</u>	<u>27%</u>
TOTAL	2,101,877,075	171%	1,833,390,754	160%
Total Actuarial Present Value of Credited Projected Benefits	4,210,106,529	343%	4,021,932,977	352%

The total actuarial present value of credited projected benefits decreased by \$188,173,552 from June 30, 1989 to June 30, 1990. There were no changes in benefit provisions during the year. The decrease in total Actuarial Present Value of Credited Projected Benefits due to Board approved changes in Actuarial Assumptions was \$186,167,639. There was a net experience loss of \$110,124,801.

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

Fiscal Year	Net Assets Available for Benefits	Total Actuarial Present Value of Credited Projected Benefits*	Percentage Funded
1981	901,410,355	2,333,111,477	38.6
1982	1,054,705,338	2,614,568,703	40.3
1983	1,202,159,339	2,800,646,912	42.9
1984	1,362,152,461	2,783,530,447	48.9
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

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 & Financial Disclosure

STATISTICAL DATA

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

Fiscal Year	Unfunded Actuarial Present Value of Credited Projected Benefits*	Annual Active Member Payroll	Percentage Payroll
1981	1,431,701,122	937,510,731	152.7
1982	1,559,863,365	1,080,372,007	144.4
1983	1,598,487,573	1,118,060,866	143.0
1984	1,421,377,986	1,125,544,718	126.3
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	159.0 164.3
1989	1,848,531,476	1,141,080,541	162.0
1990	1,888,847,501	1,226,065,067	154.1

*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

Fiscal Year	Retirees and Survivors	Terminated Vested Members	Current Actives		Net Assets Available for Benefits	Percentage Covered by Net Assets			
			Member. Contr.	Emplr. Contr.		(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.

*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>
1981	65,025,848	83,317,425	61,486,907	209,830,180
1982	73,668,846	98,544,098	103,770,854	275,983,798
1983	78,280,970	106,583,169	109,111,393	293,975,532
1984	81,484,685	107,174,862	115,686,648	304,346,195
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

Expenses by Type

<u>Fiscal Year</u>	<u>Benefits</u>	<u>Refunds</u>	<u>Administrative Expenses**</u>	<u>Total</u>
1981	98,241,614	13,275,983	976,520	112,494,117
1982	106,182,317	15,476,069	1,237,916	122,896,302
1983	114,083,975	14,330,594	3,603,662	132,018,231
1984	131,705,715	17,514,050	1,488,420	150,708,185
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

*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 cellar 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 14,044 records for terminated non-vested members due a refund in excess of \$50. Finally, 422 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:

	---1990---	---1989---
	<u>Census</u>	<u>Census</u>
Active Members	66711	62,566
Regular Retirees	18,740	18,796
Disability Retirees	1,895	1,791
Survivors	3,863	3,694
Vested & Reciprocal	422	620
Due Refunds	<u>14,044</u>	<u>14,427</u>
TOTAL	105,675	101,894

MEMBERSHIP PROFILE
CATEGORIZED BY AGE AND YEARS EMPLOYED

STATE EMPLOYEES' SYSTEM
ACTIVE REGULAR MEMBERS

CELLS DEPICT - MEMBER COUNT
TOTAL SALARY

VALUATION DATE 6/30/90

Age/Years :	(0-1)	[1-5)	[5-10)	[10-15)	[15-20)	[20-25)	[25-30)	[30-35)	[35-)	Total :
[0 - 19) :	629	146	0	0	0	0	0	0	0	775 :
:	9855026	1711021	0	0	0	0	0	0	0	10596047 :
[20 - 24) :	1819	1210	201	0	0	0	0	0	0	3230 :
:	29756629	16045159	2704062	0	0	0	0	0	0	46505849 :
[25 - 29) :	2729	2436	2787	374	0	0	0	0	0	8326 :
:	50024547	37775150	44517010	6579188	0	0	0	0	0	139195895 :
[30 - 34) :	2338	2058	3862	2726	199	0	0	0	0	11173 :
:	46501328	32594309	71159121	53973245	3969629	0	0	0	0	205496632 :
[35 - 39) :	2072	1665	3052	3141	1931	88	0	0	0	11552 :
:	40252673	27933385	57873950	70630465	42711134	1591474	0	0	0	241323051 :
[40 - 44) :	1390	1389	2261	2233	2277	909	59	0	0	10518 :
:	29076709	24246108	43707694	48734965	57455731	22330516	1505245	0	0	227056971 :
[45 - 49) :	960	857	1471	1436	1250	1132	559	26	0	7693 :
:	24607376	14436526	26929717	29794681	28581101	29343005	14097664	651975	0	165471946 :
[50 - 54) :	449	606	1071	1150	962	719	589	181	7	5764 :
:	8510614	10278903	20266583	23504144	20403926	16079945	15940519	5142731	187042	120334607 :
[55 - 59) :	267	389	809	946	747	492	238	143	43	4074 :
:	5729091	6704394	15236646	18825579	15734389	10258573	5976608	4255562	1280019	94005353 :
[60 - 64) :	90	153	451	559	484	256	121	59	37	2210 :
:	2400851	2665618	5766029	10691234	10177355	5696369	2930432	1703304	1186822	46422015 :
[65 - 69) :	16	2	115	150	120	56	33	19	19	532 :
:	492413	52402	2251458	3027333	2766157	1290503	835670	521524	615443	11552903 :
[70 - 74) :	9	10	3	15	44	19	16	8	11	135 :
:	274053	164453	64829	331704	926098	474799	363566	180200	198608	2975310 :
Total :	12768	10924	16063	12760	7904	3673	1615	439	117	66282 :
Total :	10774320	48592577	139252037	209828336	241724398	227355190	165600810	120438403	64041465	1309239639 :

MEMBERSHIP PROFILE
CATEGORIZED BY AGE AND YEARS EMPLOYED

STATE EMPLOYEES' SYSTEM
ACTIVE LEGISLATORS

CELLS DEPICT - MEMBER COUNT
TOTAL SALARY

VALUATION DATE 6/30/90

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	0	0	0	0	1 :
:	0	27000	0	0	0	0	0	0	0	27000 :
:										:
[25 - 29) :	0	2	0	0	0	0	0	0	0	2 :
:	0	49075	0	0	0	0	0	0	0	49075 :
:										:
[30 - 34) :	0	2	1	2	0	0	0	0	0	5 :
:	0	47325	26400	51300	0	0	0	0	0	125025 :
:										:
[35 - 39) :	0	3	4	4	0	0	0	0	0	11 :
:	0	73125	98775	99300	0	0	0	0	0	271200 :
:										:
[40 - 44) :	1	5	4	7	3	1	0	0	0	21 :
:	17195	123150	95550	171900	73275	24750	0	0	0	506120 :
:										:
[45 - 49) :	2	6	6	10	4	3	1	0	0	34 :
:	400000	145200	206263	248925	100350	71325	24675	0	0	1199735 :
:										:
[50 - 54) :	0	1	1	1	3	4	0	0	0	10 :
:	0	23250	25950	40104	92912	96825	0	0	0	279041 :
:										:
[55 - 59) :	0	0	1	2	2	5	2	0	0	12 :
:	0	0	25200	46875	47275	124800	51750	0	0	295900 :
:										:
[60 - 64) :	0	1	0	0	4	1	3	1	0	10 :
:	0	24075	0	0	113191	28575	76725	26550	0	269416 :
:										:
[65 - 69) :	0	0	0	0	1	0	4	0	0	5 :
:	0	0	0	0	22350	0	111152	0	0	133502 :
:										:
[70 - 74) :	0	0	0	0	0	1	0	0	0	1 :
:	0	0	0	0	0	45919	0	0	0	45919 :
:										:
Total :	3	21	19	26	17	15	10	1	0	112 :
Total :	100000	50250	75000	151800	266625	457445	1198613	26850	0	3203936 :

MEMBERSHIP PROFILE
CATEGORIZED BY AGE AND YEARS EMPLOYEDSTATE EMPLOYEES' SYSTEM
ACTIVE JUDGESCELLS DEPICT - MEMBER COUNT
TOTAL SALARY

VALUATION DATE 6/30/90

Age/Years :	(0-1)	[1-5)	[5-10)	[10-15)	[15-20)	[20-25)	[25-30)	[30-35)	[35-)	Total :
[0 - 19) :	1	0	0	0	0	0	0	0	0	1 :
:	71553	0	0	0	0	0	0	0	0	71553 :
[20 - 24) :	0	0	0	0	0	0	0	0	0	0 :
:	0	0	0	0	0	0	0	0	0	0 :
[25 - 29) :	1	0	0	0	0	0	0	0	0	1 :
:	15625	0	0	0	0	0	0	0	0	15625 :
[30 - 34) :	0	2	3	0	0	0	0	0	0	5 :
:	0	56352	70656	0	0	0	0	0	0	157006 :
[35 - 39) :	3	9	8	3	1	0	0	0	0	24 :
:	124669	557608	393556	174240	69568	0	0	0	0	1319641 :
[40 - 44) :	3	9	20	14	6	1	0	0	0	53 :
:	163416	467008	1244412	931760	417408	69568	0	0	0	3313572 :
[45 - 49) :	0	6	20	22	7	0	0	0	0	55 :
:	0	399350	1273438	1290214	460102	0	0	0	0	3423104 :
[50 - 54) :	0	5	8	13	11	7	6	0	0	50 :
:	0	330969	476433	856636	756516	506188	448442	0	0	3375386 :
[55 - 59) :	0	1	13	8	12	10	7	1	0	52 :
:	0	69568	644643	531000	781871	668629	503963	67797	0	3467671 :
[60 - 64) :	0	0	3	9	9	4	9	8	0	42 :
:	0	0	208704	635315	625789	255932	630606	433431	0	2769777 :
[65 - 69) :	0	0	2	4	3	7	6	4	3	29 :
:	0	0	62964	278272	211908	472195	356616	234935	175623	1514513 :
[70 - 74) :	0	0	0	0	0	0	2	1	2	5 :
:	0	0	0	0	0	0	140775	69568	136827	347170 :
Total :	8	32	77	73	49	29	30	14	5	317 :
Total :	148792	69568	85193	226576	1369209	3366344	3324822	3305601	3365021	20095020 :

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 6/30/90

Age/Years :	(0-1)	(1-2)	(2-3)	(3-4)	(4-5)	(5-10)	(10-15)	(15-20)	(20-)	Total :
[0 - 39) :	0	0	1	1	0	1	0	0	1	4 :
:	0	0	5120	17115	0	14565	0	0	2945	40044 :
:										:
[40 - 44) :	5	5	2	1	0	2	0	0	0	15 :
:	66455	65527	21078	17220	0	22007	0	0	0	197287 :
:										:
[45 - 49) :	13	6	3	82	5	4	2	0	0	115 :
:	213618	91008	40039	1204426	50413	50965	11650	0	0	1662148 :
:										:
[50 - 54) :	46	64	34	652	68	85	2	0	0	951 :
:	953556	1165575	637138	9999528	1153154	1297457	20877	0	0	15227286 :
:										:
[55 - 59) :	103	119	67	862	192	517	27	1	0	1588 :
:	1595675	1714924	1152673	11644503	2615395	7675107	309158	3622	0	26917057 :
:										:
[60 - 64) :	306	386	212	548	258	1142	241	13	1	3407 :
:	2503579	3696641	2275333	9644654	2678851	16470965	3259476	141674	4365	40975568 :
:										:
[65 - 69) :	155	234	157	545	262	2153	686	80	2	4274 :
:	1487411	2104478	1572258	5509823	2474193	22965893	8580103	937446	12357	45642992 :
:										:
[70 - 74) :	21	37	39	126	78	1496	1419	250	5	3471 :
:	167995	459732	611426	1479686	991801	13936640	12307684	2749359	20366	32744656 :
:										:
[75 - 79) :	1	0	2	2	7	286	1302	805	42	2447 :
:	5547	0	24683	22045	85337	2893016	9589654	5957765	329393	15907470 :
:										:
[80 - 84) :	0	1	0	0	1	9	127	1082	240	1460 :
:	0	20604	0	0	34975	90911	1070774	6957740	1303034	9478039 :
:										:
[85 - 89) :	0	0	0	1	0	0	4	151	373	529 :
:	0	0	0	18425	0	0	41130	1109439	1655237	3024231 :
:										:
[90 - 99) :	1	0	0	0	0	0	0	10	168	179 :
:	7878	0	0	0	0	0	0	80816	792841	581535 :
:										:
Total :	651	852	517	3120	871	5695	3810	2392	832	16740 :
Total :	7323714	9321490	6339776	39556455	10287120	65420825	35190567	17937861	4320557	195695364 :

MEMBERSHIP PROFILE
CATEGORIZED BY AGE AND YEARS RETIREDSTATE EMPLOYEES' SYSTEM
ALL DISABILITY BENEFITSCELLS DEPICT - MEMBER COUNT
TOTAL BENEFIT

VALUATION DATE 6/30/90

Age/Years :	(0-1)	[1-2)	[2-3)	[3-4)	[4-5)	[5-10)	[10-15)	[15-20)	[20-)	Total :
[0 - 39) :	10	12	8	9	2	9	0	0	0	50 :
:	37915	39211	44719	40478	0	35230	0	0	0	197553 :
[40 - 44) :	13	21	8	6	5	21	1	0	0	75 :
:	45645	140397	55120	50503	43395	133376	3634	0	0	472370 :
[45 - 49) :	21	21	20	19	22	51	13	0	0	167 :
:	162257	144985	141986	150957	170596	354747	70965	0	0	1196514 :
[50 - 54) :	32	48	25	27	14	70	22	4	1	243 :
:	146094	333871	171049	202467	104454	455523	108051	11045	1304	1563856 :
[55 - 59) :	21	29	30	35	35	139	41	13	2	348 :
:	105561	152751	204664	263471	318128	1119714	229885	61116	10609	2495901 :
[60 - 64) :	2	11	11	22	29	176	117	36	7	411 :
:	3545	55039	64606	117872	220620	1231476	767379	169554	24938	2655259 :
[65 - 69) :	1	1	1	3	7	102	155	53	15	336 :
:	0	0	6400	13690	35023	691594	969391	265411	57550	2059061 :
[70 - 74) :	1	0	0	0	0	9	56	56	15	169 :
:	0	0	0	0	0	73556	436734	276313	62316	848922 :
[75 - 79) :	0	0	0	0	0	1	5	35	33	74 :
:	0	0	0	0	0	4386	40565	141512	99720	256462 :
[80 - 84) :	0	0	0	0	0	0	0	2	9	11 :
:	0	0	0	0	0	0	0	6097	37651	43749 :
[85 - 89) :	0	0	0	0	0	0	1	0	6	7 :
:	0	0	0	0	0	0	0	0	17936	17936 :
[90 - 99) :	1	0	0	0	0	0	0	0	1	2 :
:	0	0	0	0	0	0	0	0	2662	2662 :
Total :	102	143	103	121	117	578	441	201	89	1695 :
Total :	501347	896255	668544	639736	892206	4129602	2646906	931079	314589	11540266 :

MEMBERSHIP PROFILE
CATEGORIZED BY AGE AND YEARS RETIRED

STATE EMPLOYEES' SYSTEM
ALL SURVIVOR BENEFITS

CELLS DEPICT - MEMBER COUNT
TOTAL BENEFIT

VALUATION DATE 6/30/90

Age/Years :	(0-1)	[1-2)	[2-3)	[3-4)	[4-5)	[5-10)	[10-15)	[15-20)	[20-)	Total :
[0 - 39) :	8	13	19	16	14	40	15	6	6	139 :
:	136578	158373	156690	173184	175273	384537	82186	45111	19529	1342060 :
[40 - 44) :	5	5	13	8	4	29	9	1	1	75 :
:	61712	70176	177762	85266	51299	346478	50706	2108	1581	850088 :
[45 - 49) :	3	16	7	14	10	43	16	8	1	115 :
:	76159	194241	86097	169091	121376	437342	123742	44406	1332	1255815 :
[50 - 54) :	20	13	10	19	17	59	47	6	5	196 :
:	353463	254220	207495	199943	596566	490933	307253	35243	9965	2455440 :
[55 - 59) :	7	11	11	14	21	117	70	30	4	265 :
:	63432	143574	163679	146263	154431	2098438	466321	139502	11341	3417250 :
[60 - 64) :	6	13	16	23	19	159	151	66	17	500 :
:	77107	128422	131630	231520	151255	1345052	1494137	352460	54105	3969015 :
[65 - 69) :	1	3	9	23	19	181	226	132	20	614 :
:	8504	31059	106661	220919	213136	1532897	1454708	912687	72954	4555556 :
[70 - 74) :	1	2	2	5	9	105	291	193	72	660 :
:	6150	13940	20488	50144	109045	546647	1773408	1024861	362003	4206658 :
[75 - 79) :	0	0	0	0	0	26	186	299	109	620 :
:	0	0	0	0	0	204509	1154160	1525958	435575	3320535 :
[80 - 84) :	0	1	0	1	0	5	47	160	192	406 :
:	0	5475	0	12008	0	23957	220139	536443	741485	1539505 :
[85 - 89) :	0	0	0	0	0	0	7	30	141	178 :
:	0	0	0	0	0	0	50756	149128	552900	752784 :
[90 - 99) :	0	0	0	0	0	0	6	6	40	52 :
:	0	0	0	0	0	0	19237	34827	135640	189704 :
Total :	51	77	87	123	113	764	1101	939	605	3663 :
Total :	783155	999481	1056501	1296636	1602702	7714420	7196752	5109065	2398764	26157476 :

MEMBERSHIP PROFILE
CATEGORIZED BY AGE AND YEARS EMPLOYED

STATE EMPLOYEES' SYSTEM
TERMINATED VESTED

CELLS DEPICT - MEMBER COUNT
TOTAL BENEFIT

VALUATION DATE 6/30/90

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	1	0	0	0	0	1 :
:	0	0	0	0	2995	0	0	0	0	2995 :
:										:
[25 - 29) :	0	0	1	0	0	0	0	0	0	1 :
:	0	0	667	0	0	0	0	0	0	667 :
:										:
[30 - 34) :	0	0	0	5	2	0	0	0	0	7 :
:	0	0	0	27319	14948	0	0	0	0	42267 :
:										:
[35 - 39) :	0	0	0	24	23	2	0	0	0	49 :
:	0	0	0	137961	130678	9594	0	0	0	275533 :
:										:
[40 - 44) :	0	1	0	12	47	20	0	0	0	80 :
:	0	410	0	74550	344098	126644	0	0	0	545733 :
:										:
[45 - 49) :	0	0	0	14	30	25	7	2	0	76 :
:	0	0	0	100194	264160	215523	40264	13361	0	633503 :
:										:
[50 - 54) :	0	0	0	20	19	22	16	7	0	84 :
:	0	0	0	135197	177927	202526	141236	40716	0	700603 :
:										:
[55 - 59) :	0	1	0	14	24	13	12	6	4	74 :
:	0	404	0	76350	134429	87567	98243	29496	15493	443982 :
:										:
[60 - 64) :	0	0	0	3	4	3	3	3	3	19 :
:	0	0	0	19664	12767	30285	16424	13350	15998	109487 :
:										:
[65 - 69) :	0	0	0	2	1	5	2	2	1	13 :
:	0	0	0	9200	3223	26587	5269	5511	2410	55201 :
:										:
[70 - 74) :	0	0	0	1	0	4	3	4	4	16 :
:	0	0	0	320	0	10619	10476	16194	17493	55092 :
:										:
Total :	0	2	1	95	151	94	43	24	12	422 :
Total :	0	3306	1334	47655	283390	525603	634348	654278	374409	2566962 :

EXHIBIT 5

PRINCIPLE PROVISIONS OF THE PLAN
(Including Acts of 1990 Regular Session)

EFFECTIVE DATE:

July 1, 1947; last amendment date - July 1, 1990

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 board from which any employee receives his compensation.

ELIGIBILITY FOR PARTICIPATION:

Conditions 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.

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 fiscal 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 regular interest.
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 Employer and Employee contributions plus compound interest on compensation member would have received for such period.
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

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, 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 ProvisionsACCUMULATED 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 1969.

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.

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, regardless 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 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. 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: (July 1, 1987)

<u>AGE</u>	<u>MAXIMUM</u>	<u>AGE</u>	<u>MAXIMUM</u>	<u>AGE</u>	<u>MAXIMUM</u>
48	\$43,951	56	\$75,000	64	\$102,582
49	47,614	57	75,000	65	102,582
50	51,623	58	75,000	66	112,364
51	56,019	59	75,000	67	123,418
52	60,846	60	84,074	68	135,963
53	66,153	61	93,132	69	150,266
54	72,001	62	102,582	70	166,652
55	75,000	63	102,582		

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.

EXHIBIT 5 (Continued)
Principle Provisions

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 two years prior to date of death of a 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.
2. Surviving 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.
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 (2) 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.

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. 5 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:

1st year	1.3x
2nd year	1.0x
3rd year	1.0x
4th year	1.0x
5th year	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

REMARRIAGE:

Annuities payable to the spouse which cease upon death or remarriage were taken from "A Technical Note for the Construction of Widow's Annuities." The Remarriage and Mortality rates used to develop these annuities were based on the graduated rates from "Mortality and Remarriage Experience for Widow's Beneficiaries under OASDI."

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 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 \$2,100,000 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	Female	Remarriage Rates	Disability Rates	Retirement Rates	Dur	Termination Rates	Salary Scale
20	.00041	.00022	.09350	.00000	.00000	1	.27500	1.11750
21	.00043	.00023	.09151	.00000	.00000	2	.32400	1.10750
22	.00045	.00024	.08954	.00000	.00000	3	.16400	1.09750
23	.00047	.00026	.08756	.00000	.00000	4	.13700	1.08250
24	.00049	.00028	.08568	.00000	.00000	5	.11800	1.07750
25	.00051	.00029	.08402	.00000	.00000	6	.11000	1.07250
26	.00054	.00031	.08225	.00000	.00000	7	.10100	1.07050
27	.00056	.00033	.08027	.00000	.00000	8	.08500	1.06850
28	.00060	.00035	.07802	.00000	.00000	9	.07100	1.06650
29	.00063	.00038	.07555	.00000	.00000	10	.05800	1.06350
30	.00067	.00040	.07281	.00020	.00000	11	.03200	1.06050
31	.00071	.00043	.06976	.00020	.00000	12	.02400	1.05750
32	.00076	.00046	.06651	.00030	.00000	13	.02000	1.05450
33	.00081	.00049	.06308	.00030	.00000	14	.02000	1.05150
34	.00087	.00052	.05945	.00040	.00000	15	.01700	1.04850
35	.00095	.00055	.05581	.00050	.00000	16	.01700	1.04550
36	.00100	.00059	.05230	.00060	.00000	17	.01300	1.04250
37	.00107	.00063	.04890	.00080	.00000	18	.01300	1.04250
38	.00115	.00068	.04569	.00100	.00000	19	.01300	1.04250
39	.00125	.00073	.04271	.00120	.00000	20	.01300	1.04250
40	.00137	.00079	.03992	.00130	.50000	21	.01200	1.04250
41	.00152	.00086	.03769	.00140	.50000	22	.01200	1.04250
42	.00169	.00093	.03479	.00150	.50000	23	.01200	1.04250
43	.00190	.00102	.03255	.00170	.50000	24	.01200	1.04250
44	.00214	.00112	.03037	.00200	.65000	25	.01100	1.04250
45	.00242	.00124	.02821	.00240	.65000	26	.01100	1.04250
46	.00274	.00137	.02631	.00280	.32000	27	.00800	1.04250
47	.00310	.00151	.02455	.00320	.32000	28	.00700	1.04250
48	.00348	.00167	.02302	.00360	.42000	29	.00600	1.04250
49	.00390	.00183	.02154	.00450	.43000	30	.01400	1.04250
50	.00434	.00199	.02018	.00540	.43000	31	.01300	1.04250
51	.00480	.00216	.01888	.00670	.42000	32	.01300	1.04250
52	.00528	.00235	.01807	.00800	.42000	33	.02000	1.04250
53	.00577	.00257	.01733	.00670	.42000	34	.01500	1.04250
54	.00628	.00282	.01670	.00540	.42000	35	.01500	1.04250
55	.00681	.00311	.01622	.00670	.47000	36	.01500	1.04250
56	.00735	.00344	.01595	.00920	.34000	37	.01500	1.04250
57	.00793	.00382	.01584	.01040	.32000	38	.01500	1.04250
58	.00857	.00424	.01588	.01140	.32000	39	.00000	1.04350
59	.00931	.00471	.01621	.01040	.32000	40	.00000	1.04550
60	.01017	.00522	.01682	.00400	.32000	41	.00000	1.04850
61	.01118	.00578	.01764	.00330	.27000	42	.00000	1.05150
62	.01236	.00640	.01905	.00250	.27000	43	.00000	1.05450
63	.01376	.00709	.02061	.00250	.27000	44	.00000	1.05750
64	.01540	.00784	.02238	.00300	.27000	45	.00000	1.05750
65	.01732	.00868	.02446	.00400	.44000	46	.00000	1.05750
66	.01953	.00964	.02683	.00000	.32000	47	.00000	1.05750
67	.02200	.01077	.02951	.00000	.32000	48	.00000	1.05750
68	.02469	.01213	.03208	.00000	.32000	49	.00000	1.05750
69	.02757	.01376	.03504	.00000	.42000	50	.00000	1.05750
70	.03058	.01569	.03851	.00000	.50000	51	.00000	1.05750

ACTUARIAL TABLES AND RATES
(JUDGES & LEGISLATORS ASSUMPTIONS)

Age	- Death Rates - Male	- Rates - Female	Remarriage Rates	Disability Rates	Retirement Rates	Dur	Termination Rates	Salary Scale
20	.00041	.00022	.09350	.00000	.00000	1	.27500	1.04750
21	.00043	.00023	.09151	.00000	.00000	2	.32400	1.04750
22	.00045	.00024	.08954	.00000	.00000	3	.16400	1.04750
23	.00047	.00026	.08756	.00000	.00000	4	.13700	1.04750
24	.00049	.00028	.08568	.00000	.00000	5	.11800	1.04750
25	.00051	.00029	.08402	.00000	.00000	6	.11000	1.04750
26	.00054	.00031	.08225	.00000	.00000	7	.10100	1.04750
27	.00056	.00033	.08027	.00000	.00000	8	.08500	1.04750
28	.00060	.00035	.07802	.00000	.00000	9	.07100	1.04750
29	.00063	.00038	.07555	.00000	.00000	10	.05800	1.04750
30	.00067	.00040	.07281	.00020	.00000	11	.03200	1.04750
31	.00071	.00043	.06976	.00020	.00000	12	.02400	1.04750
32	.00076	.00046	.06651	.00030	.00000	13	.02000	1.04750
33	.00081	.00049	.06308	.00030	.00000	14	.02000	1.04750
34	.00087	.00052	.05945	.00040	.00000	15	.01700	1.04750
35	.00095	.00055	.05581	.00050	.00000	16	.01700	1.04750
36	.00100	.00059	.05230	.00060	.00000	17	.01300	1.04750
37	.00107	.00063	.04890	.00080	.00000	18	.01300	1.04750
38	.00115	.00068	.04569	.00100	.00000	19	.01300	1.04750
39	.00125	.00073	.04271	.00120	.00000	20	.01300	1.04750
40	.00137	.00079	.03992	.00130	.50000	21	.01200	1.04750
41	.00152	.00086	.03769	.00140	.50000	22	.01200	1.04750
42	.00169	.00093	.03479	.00150	.50000	23	.01200	1.04750
43	.00190	.00102	.03255	.00170	.50000	24	.01200	1.04750
44	.00214	.00112	.03037	.00200	.65000	25	.01100	1.04750
45	.00242	.00124	.02821	.00240	.65000	26	.01100	1.04750
46	.00274	.00137	.02631	.00280	.32000	27	.00800	1.04750
47	.00310	.00151	.02455	.00320	.32000	28	.00700	1.04750
48	.00348	.00167	.02302	.00360	.42000	29	.00600	1.04750
49	.00390	.00183	.02154	.00450	.43000	30	.01400	1.04750
50	.00434	.00199	.02018	.00540	.43000	31	.01300	1.04750
51	.00480	.00216	.01888	.00670	.42000	32	.01300	1.04750
52	.00528	.00235	.01807	.00800	.42000	33	.02000	1.04750
53	.00577	.00257	.01733	.00670	.42000	34	.01500	1.04750
54	.00628	.00282	.01670	.00540	.42000	35	.01500	1.04750
55	.00681	.00311	.01622	.00670	.47000	36	.01500	1.04750
56	.00735	.00344	.01595	.00920	.34000	37	.01500	1.04750
57	.00793	.00382	.01584	.01040	.32000	38	.01500	1.04750
58	.00857	.00424	.01588	.01140	.32000	39	.00000	1.04750
59	.00931	.00471	.01621	.01040	.32000	40	.00000	1.04750
60	.01017	.00522	.01682	.00400	.32000	41	.00000	1.04750
61	.01118	.00578	.01764	.00330	.27000	42	.00000	1.04750
62	.01236	.00640	.01905	.00250	.27000	43	.00000	1.04750
63	.01376	.00709	.02061	.00250	.27000	44	.00000	1.04750
64	.01540	.00784	.02238	.00300	.27000	45	.00000	1.04750
65	.01732	.00868	.02446	.00400	.44000	46	.00000	1.04750
66	.01953	.00964	.02683	.00000	.32000	47	.00000	1.04750
67	.02200	.01077	.02951	.00000	.32000	48	.00000	1.04750
68	.02469	.01213	.03208	.00000	.32000	49	.00000	1.04750
69	.02757	.01376	.03504	.00000	.42000	50	.00000	1.04750
70	.03058	.01569	.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, 1990.(b) This valuation sets forth information concerning contributions applicable to the plan fiscal year beginning July 1, 1990, and ending June 30, 1991.

(c) Data used in this valuation

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

Active members	66,711
Regular retirees	18,740
Disability retirees	1,895
Survivors receiving benefits	3,863
Terminated employees due benefits upon attaining retirement age	422
Terminated employees due refunds	14,044

(ii) Payroll of active members on the valuation date 1,226,065,067(iii) Annual benefits in payment on the valuation date 235,696,106(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 . . 2,006,197,663Current Unfunded Accrued Liability under this method 1,888,847,501

Actuarially required employer contribution: (at Mid-year)

(i) Employer Normal Cost 64,681,223

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

(ii) Previous year's unpaid underpayment or (overpayment) (7,333,384)(iii) Initial Unfunded Liability (Excludes \$3,766,444 appropriation) 114,206,461(iv) Gains and Losses 6,653,340(v) Changes in Assumption or Asset Valuation Method (15,030,515)(vi) Changes in funding method 0(vii) Changes in plan provisions 0(viii) Total employer contribution required (Sum of 6(d)(i) - (vii)). 163,177,125(ix) Estimated projected payroll for the coming fiscal year 1,266,432,075(x) Required Employer Contribution Rate (6(d)(viii)/6(d)(ix)). 12.9%+ Appropriation 3,766,444(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 10.27%

(g) Actuarial information for accounting purposes (GASB) 5 results)

Pension Benefit Obligation:

(i) Present retirees and beneficiaries 2,088,039,166(ii) Terminated participants due benefits at retirement age 12,830,490(iii) Terminated participants due a refund of their contributions 7,359,798

(iv) Active Members:

(1) Accumulated employee contributions 615,420,307(2) Employer-financed vested portion 1,150,144,840(3) Employer-financed nonvested portion 336,311,928(v) Total PBO (sum of 6(g)(i) through 6(g)(iv)) 4,210,106,529Actuarial value of assets 2,321,259,028Unfunded (Assets in Excess of) Pension Benefit Obligation 1,888,847,501

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.

	Males	Females
Mortality rates (healthy)		
Mortality rates (disabled)	<u>See copies of pages 19-22 of the 6/30/90</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 end53464
- (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)06205
- (iii) Changes in Funded Ratio due to mergers or changes in methods or assumptions after the 1986 fiscal year end;

<u>Date of Change</u>	<u>Change in funded Ratio</u>
<u>6/30/87</u>	<u>(.03148)</u>
<u>6/30/88</u>	<u>.02822</u>
<u>6/30/89</u>	<u>.02420</u>

Total Change in Funded Ratio02094

- (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;

<u>Date of Change</u>	<u>Amortization of Change</u>
<u>6/30/87</u>	<u>.00315</u>
<u>6/30/88</u>	<u>(.00188)</u>
<u>6/30/89</u>	<u>(.00081)</u>

Total Amortization of Changes00046

- (v) Target Ratio as of the end of the just completed fiscal year.63857
(Sum of (6)(h) (i) through (iv))

(vi) Actual Funded Ratio of the system as of the just completed fiscal year .55135

(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 19, 1990 Signature of Actuary Charles G. Nuen

EXHIBIT A

AMORTIZATION OF UNFUNDED
ACTUARIAL ACCRUED LIABILITY
JUNE 30, 1990

<u>DATE</u> <u>6/30</u>	<u>DESCRIPTION</u>	<u>AMTZ.</u> <u>METHOD</u>	<u>AMTZ.</u> <u>PERIOD</u>	<u>INITIAL</u> <u>LIABILITY</u>	<u>YEARS</u> <u>REMAIN</u>	<u>REMAINING</u> <u>BALANCE</u>	<u>MID-YEAR</u> <u>PAYMENT</u>
1) 1988	Initial Liability	I	40	1,825,421,035	39	2,006,197,663	117,972,905*
2) 1989	Experience Gain	L	15	(51,766,931)	14	(49,897,161)	(5,901,912)
3) 1989	Actuarial Assumption	L	30	(171,979,344)	29	(170,529,402)	(15,030,515)
4) 1990	Experience Loss	L	15	110,124,801	15	110,124,801	12,555,252
TOTAL OUTSTANDING BALANCE						1,895,895,901	
EMPLOYER'S CREDIT BALANCE							7,048,400
TOTAL UNFUNDED ACTUARIAL ACCRUED LIABILITY						1,888,847,501	

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