LOUISIANA STATE EMPLOYEES'
RETIREMENT SYSTEM
JUNE 30, 1999
ACTUARIAL VALUATION

Charles G. Hall F.C.A., M.A.A.A., A.S.A. Enrolled Actuary 1433 Hideaway Court Baton Rouge, La. 70806 (225) 924-6209

September 11, 1999

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, 1999.

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 audited by Postlethwaite & Netterville, Certified Public Accountants.

The present values shown herein have been calculated on the basis of the actuarial cost methods as specified in Louisiana Revised Statutes Title 11 Section 22(6). The Actuarial Assumptions, which have been approved by the Board of Trustees, 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.

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

	Prior Years				
		June 30, 1999	June 30, 1998	<u>June 30, 1997</u>	
I.	Membership Census				
	<ol> <li>Retirees</li> <li>Actives</li> <li>DROP</li> </ol>	30,310 67,680 2,316	29,420 69,949 2,766	28,796 69,444 2,562	
II.	Annual Benefits	\$ 380,451,933	\$ 351,847,577		
III.	Total Payroll	1,736,963,422	1,653,863,410	1,607,371,721	
IV.	Valuation Assets	5,466,705,865	4,972,079,610	4,453,189,233	
v.	Experience Account	365,143,591	255,079,268	212,947,917	
VI.	Investment Yield Market Value Actuarial Value	8.44% 13.10%	12.06% 12.97%	16.92% 14.03%	
VII.	Cost to Fund Annual Pension Accruals (Normal Costs)	248,945,409 14.33%	232,806,045 14.08%	220,968,688 13.75%	
VIII.	Unfunded Actuarial Accrued Liability	2,116,151,098	1,981,016,859	2,036,171,904	
IX.	Funded Percentage	72.1%	71.5%	68.6%	
х.	Funding Requirements to Pay (Mid-year payment)				
	1) Employee Contribution Rate	137,614,795 7.674%	129,012,943 7.677%	125,292,071 7.670%	
	<pre>2) Employer Contribution   Rate - Current Year</pre>	228,583,900 12.7%	208,203,728 12.4%	205,934,238 12.6%	
	3) Projected Employer Contribution - Next Year	240,620,254 13.0%	216,917,918 12.3%	212,705,471 12.4%	

The above funding requirements measure the cost of benefits that were in effect on June 30, 1999, plus Acts of the 1999 Legislative Session which have prospective effects on current active members.

### Current Funding

The Actuarial Valuation for the plan year ending June 30, 1999 discloses an expected 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 6/30/98		\$ 1,981,016,859
INCREASES		
Interest on Unfunded Liability	\$ 163,433,890	
Experience Account Allocation	119,571,018	
Experience Loss	212,212,304	
Incurred Increases	495,217,212	
DECREASES		
Investment Gains	239,142,036	
Employer Amtz. Payment	116,285,080	
Employer Credit	4,655,857	
Incurred Decreases	360,082,973	
Unfunded Liability 6/30/99		\$ 2,116,151,098

The employer contribution rate established by the Public Retirement Systems' Actuarial Committee for the 1999-2000 plan year was 12.3%. The actual employer contribution rates determined by this valuation for the current plan year is 12.7%. The current adjusted rate is greater than the required employer's contributions when compared to the projected rates. Since the contribution rate is attributable to many factors, the following sections address the source and respective impact to the required employer contribution rate.

#### Actuarial Assets/Valuation Assets

The Actuarial Value of assets represents the gross actuarial assets determined in accordance with the methodology set forth in Exhibit 6 to fund all liabilities of the pension plan as well as side-fund accounts dedicated for other programs. This year, the Asset Valuation Method has been changed to a four year weight average of the unrealized gain/loss in the value of all assets at market. The Valuation Assets exclude the side-fund accounts for purposes of determining the employer contribution rate as illustrated on page 12 of Exhibit 2.

The side-fund accounts excluded are as follows:

- Texaco Settlement Fund: The purpose of this fund is to accumulate Texaco settlement contributions as a separate account invested at LASERS' actuarial rate of return. Once the accumulated value of the account equals the outstanding balance of the initial unfunded actuarial liability, the account and initial liability will be liquidated. The current account balance is \$108,252,044.
- Experience Account Fund: The purpose of this fund is to accumulate 50% of the excess investment gain or loss relative to the actuarial valuation rate of 8.25%. The account can be used to fund retiree COLA's. The benefit granted must be funded at 100% of actuarial cost. The current balance is \$365,143,591.

# 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>1995</u>	<u>1996</u>	1997	<u>1998</u>	1999	5 Yr. Aver.
9.49%	12.34%	14.03%	12.97%	13.10%	12.37%

The net actuarial rate of return assumed in the valuation was 8.25%. For the plan year ending June 30, 1999, the net realized actuarial rate of return was greater than the long-term investment assumption used to project benefits. The result was a net investment experience gain of \$239,142,036 above projected investment income.

## 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 1998-1999 plan year, the system incurred a \$212,212,304 experience loss from sources other than investments.

### 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-one (31) years. To determine whether this is a reasonable expectation, aggregate salary growth during the past nine (9) years is illustrated as follows:

June 30	Payrol1/\$1000	Percent Increase
1991	1,368,480	11.6%
1992	1,454,370	6.3%
1993	1,504,147	6.2%
1994	1,546,465	5.7%
1995	1,547,977	0.1%
1996	1,584,357	2.4%
1997	1,607,371	1.5%
1998	1,653,863	2.9%
1999	1,736,963	5.0%

During the last eight (8) years the aggregate salaries have increased at an annualized rate of 3.0%. If this trend continues, the percentage of pay required to amortize the unfunded liability can be expected to slightly increase in the absence of other experience gains or losses.

# Comments and Disclosures

Exhibit 3, "Pension Accounting and Financial Disclosure", contains disclosure of the accrued liabilities under the Entry Age Normal Actuarial Cost Method required by the Governmental Accounting Standards Board Statement No. 25. Pension Benefit Obligation financial disclosure continues to be reported in Exhibit 7, Legislative Auditor's Report.

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. Dave

Charles G. Hall, FCA, MAAA, ASA

Actuary

CGH/tt

Enclosure

# TABLE OF CONTENTS

			Pages
EXHIBIT	1	DEVELOPMENT OF COSTS, LIABILITIES & CONTRIBUTIONS  Provides a detail by benefit type of the cost to accrue annual pension benefits, liabilities accrued to date, and funding requirements	8 - 9
EXHIBIT	2	FINANCIAL SUMMARY  Contains the statement of revenues and expenses as well as assets available to pay pension benefits	10 - 12
EXHIBIT	3	PENSION ACCOUNTING AND FINANCIAL DISCLOSURE  NCGA STMT 6 changes in credited projected benefits	13 - 15
EXHIBIT	4	CENSUS DATA  Describes the employee data, data processing for valuation purposes and depicts employee profiles by classification, age and service	16 - 16
EXHIBIT	5	PRINCIPLE PROVISIONS OF THE RETIREMENT SYSTEM  Restates in summary outline form the basic plan provisions which were incorporated in the projected retirement pension benefit	17 - 23
EXHIBIT	6	ACTUARIAL COST METHODS AND ASSUMPTIONS  Discloses rates of mortality, disability, retirement termination and other assumptions which are presumed to reflect the experience of the retirement system in aggregate	24 - 28
EXHIBIT	7	LEGISLATIVE AUDITOR'S REPORT  Actuarial disclosures to the Legislative Auditor's Office	29
EXHIBIT	A	AMORTIZATION SCHEDULE	30

# 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, 1999</u>			Prior Year June 30, 1998		
			Dollar	% of	Dollar	% of
			Amount	<u>Salary</u>	<u>Amount</u>	Salary
I.	Nor	mal Costs				
	Act	ive Members with Complete Data				
	a)	Retirement Benefits	\$ 194,539,177	11.20%	\$ 178,588,791	10.80%
	b)	Disability Benefits	8,665,965	.50%	8,512,778	.51%
	c)	Survivor Benefits	10,128,969		9,877,943	.60%
	d)	Voluntary Termination	29,611,298		29,126,533	1.76%
	e)	Expenses	6,000,000		6,700,000	.418
		TOTAL	248,945,409	14.33%	232,806,045	14.08%
II.	Act	uarial Accrued Liability				
	a)	Active Members				
		1) Retirement Benefits	3,061,010,437		2,778,473,813	
		<ol><li>Disability Benefits</li></ol>	118,147,071		114,682,942	
		<ol><li>Survivor Benefits</li></ol>	112,866,037		109,220,773	
		<ol> <li>Voluntary Termination</li> </ol>	190,285,233		188,297,459	
			3,482,308,778		3,190,674,987	
	b)	Retired and Inactive Members				
	,	1) Regular Retirees	2,745,098,445		2,512,698,275	
		2) Disabled Retirees	92,219,099		85,442,531	
		3) Survivors	354,626,382		331,175,383	
		4) Vested Deferred	45,394,332		45,400,235	
		5) Contributions Refunded	19,514,992		17,780,958	
		6) DROP Deferral	648,349,658		575,046,101	
		7) DROP Deposits	115,018,920		110,873,566	
		-	4,020,221,828		3,678,417,049	
	c)	SUB TOTAL	7,502,530,606		6,869,092,036	

# Exhibit 1 (Continued) Costs, Liabilities & Contributions

			June 30, 1999	Prior Year June 30, 1998
II.	Actua	rial Accrued Liability		
		OUB TOTAL (Preceding page)	\$ 7,502,530,606	\$ 6,869,092,036
		.) Active Judges	72,920,378	77,246,820
		Active Legislators	7,405,979	6,757,613
		djusted TOTAL	7,582,856,963	6,953,096,469
III.	Valua	tion Assets	5,466,705,865	4,972,079,610
IV.	Unfun	ded Actuarial Accrued		
	Liabi	lities - Projected Unit Credit <sup>1</sup>	2,116,151,098	1,981,016,859
	a) C	hange over prior year	135,134,238	-55,155,045
	b) F	unded Percentage	72.1%	71.5%
v.	Emplo	yer Contributions		
	To Fu	nd Current Plan Year <sup>1</sup>		
		mployer Portion of Normal Cost	113,198,469	100,736,399
		mortization Payments	119,686,525	110,007,832
		rior Contribution Variance	-4,301,094	2,540,503
	. ,	TOTAL Required Contribution	228,583,900	208,203,728
		•	12.7%	12.4%
	P	lus State Appropriation	4,492,201	4,298,757
	A	ctuarial Forecast Rate <sup>2</sup>	12.3%	12.4%
	E	mployer Normal Cost Rate	6.3126%	5.9938%
VI.	Proje	cted Employer Contributions		
	To Fu	nd Next Plan Year <sup>1</sup>		
	a) E	mployer Portion of Normal Cost	116,702,679	105,519,723
		mortization Payments	124,685,355	114,571,121
		rior Contribution Variance	<u>-767,780</u>	
		TOTAL Projected Contribution	240,620,254	216,917,918
		,	13.0%	12.3%
		Plus State Appropriation	4,694,350	4,492,201
VII.	Curre	nt Payroll	1,736,963,422	1,653,863,410
		cted Payroll - Mid Year	1,793,217,786	1,680,512,484
	_	cted Payroll - Next Year	1,848,729,248	1,760,309,224
		#	4	

 $<sup>^{</sup>f 1}$ Dollar Amounts reflect estimated payments due mid-year on January 1st per Act 81.  $^{f 2}$ Constitutional Minimum is 12% without regards to Employer Credits.

# EXHIBIT 2

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

			Prior	Years
		June 30, 1999	<u>June 30, 1998</u>	June 30, 1997
OP	ERATING REVENUES:			
1.	Contribution Income			
	Member	\$ 135,479,230	\$ 129,724,456	\$ 126,793,791
	Employer	218,929,941	219,680,934	204,985,747
2.	Other Income			
	Legislative Appropriations	4,298,757	4,113,643	3,936,500
	Miscellaneous	4,876,291	6,039,951	4,963,350
	TOTAL CONTRIBUTIONS	363,584,219	359,558,984	340,679,388
3.	Investment Income			
	Investments <sup>1</sup>	486,276,546	481,932,100	500,838,741
	Less, investment expenses	-16,071,796	-17.162.772	-15,143,892
	TOTAL INVESTMENT INCOME	470,204,750	464,769,328	485,694,849
4.	Total Revenues	833,788,969	824,328,312	826,374,237
OPE	ERATING EXPENSES:			
1.	General Administration	6,011,305	6,703,504	4,531,466
	Other Expenses	2,778,584	2,501,942	2,242,442
2.	Benefits Paid			
	a) Pension Benefits	397,966,405	359,625,826	340,052,578
	b) Return of Contrib.	31,851,567	32,156,373	28,945,409
	TOTAL BENEFITS PAID	429,817,972	391,782,199	368,997,987
3.	Total Operating Expenses	438,607,861	400,987,645	375,771,895
NET	INCOME:	395,181,108	423,340,667	450,602,342

<sup>&</sup>lt;sup>1</sup>Prior to June 30, 1999, reported realized investment income. A change in Asset Valuation Method now reports realized and unrealized investment income at market (see Exhibit 6, page 26).

# EXHIBIT 2 (Continued) Financial Summary

# FINANCIAL SUMMARY STATEMENT OF ASSETS FOR FISCAL YEAR ENDING

ASS	SETS <sup>1</sup> :	June 30, 1999	Prior June 30, 1998	Years June 30, 1997
1.	Short Term Assets Cash/Cash Equivalencies Short-term Investments	\$ 33,613,748 81,532,677	\$ 25,337,788 50,976,160	\$ 23,396,887 88,958,503
2.	Bonds (at amortized cost) 1 Bonds - Government/Agency Bonds - Municipal/Other U.S. Government Obligations Corporate Foreign Issues	538,763,961 59,374,136 184,723,362 1,221,122,416	512,637,512 53,328,971 239,462,226 1,120,923,483	515,580,316 45,695,727 376,428,049 1,166,956,965
3.	Equities Common Stock Foreign Stock Preferred Stock	2,700,148,424 972,218,352 5,413,851	1,895,864,116 731,583,847 3,891,446	1,197,413,638 632,526,281 0
4.	Other Assets Fixed Assets Mortgages - Real Estate	7,073,482 184,430,016	9,807,478 131,464,339	8,120,205 134,573,851
5.	Receivables - Payables TOTAL ASSETS	15,300,570	51,950,308	214,236,585
	Equities at Cost Equities at Market	5,313,803,853 N/A	4,827,227,674 5,568,262,649	4,403,887,007 5,041,143,224
	Market Value	6,003,714,995	5,608,533,887	5,044,261,699
INV	ESTMENT YIELD:			
	Yield to Actuarial Value	13.10%	12.97%	14.03%
	Five Year Actuarial Value	12.37%	11.52%	10.85%
	Yield to Market Value	8.44%	12.06%	16.92%
	DROP Account Yield	12.60%	12.47%	13.53%

<sup>1</sup>Effective June 30, 1999, Assets reported at Market Value. Prior years reported at Cost Value.

# EXHIBIT 2 (Continued) Financial Summary

# FINANCIAL SUMMARY STATEMENT OF ASSETS FOR FISCAL YEAR ENDING

ACT	TUARIAL VALUE OF ASSETS:	June 30, 1999	Prio: June 30, 1998	years June 30, 1997		
	TOTAL ASSETS Change in Unrealized (G/L)	\$ 6,003,714,995	\$ 5,568,262,649	\$ 5,041,143,224		
	Plan Year - 2 (wt. 1/4)	246,776,152	190,182,775	60,698,290		
	Plan Year - 1 (wt. 2/4)	140,931,521	240,016,660	190,182,775		
	Plan Year (wt. 3/4) Actuarial Value of Assets	-91,395,071 5,940,101,500	103,778,758 5,322,874,557	240,016,660 4,750,864,769		
TEX	ACO SETTLEMENT FUND:					
+ + EXE + - +	Prior Year Ending Balance Current Year Allocation Accumulated Interest Fund Balance - Year End  PERIENCE ACCOUNT FUND:  Prior Year Ending Balance Experience Account Allocation Benefit Disbursements Accumulated Interest Fund Balance - Year End	95,715,679 0 12,536,365 108,252,044 255,079,268 119,571,018 42,915,713 33,409,018 365,143,591	84,727,619 0 10,988,060 95,715,679 212,947,917 104,560,398 90,045,598 27,079,268 255,079,268	73,620,589 682,619 10,424,411 84,727,619 84,818,098 116,230,215 0 11,899,604 212,947,917		
	DEVELOPMENT OF ACTUARIAL  VALUATION ASSETS:					
	Total Actuarial Value of Assets Adjusted for:	5,940,101,500	5,322,874,557	4,750,864,769		
	Texaco Settlement Fund Experience Account Fund Valuation Assets	-108,252,044 -365,143,591 5,466,705,865	-95,715,679 -255,079,268 4,972,079,610	-84,727,619 -212,947,917 4,453,189,233		

<sup>&</sup>lt;sup>1</sup>The June 30, 1994 initial allocation was under-reported by \$555,012. The current allocation for June 30, 1997 is the under-reported amount plus interest accumulated to June 30, 1996.

### 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. The following disclosures and statistical tables are in accordance with the GASB's Statement No. 25.

# SCHEDULE OF FUNDING PROGRESS (Dollar amounts in thousands)

Actuarial Valuation 	Actuarial Value of Assets <sup>1</sup> (a)	Actuarial Accrued Liability(AAL)(b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll	UAAL as a Percentage of Payroll ((b-a)/c)
1990	2,321,259	4,210,107	1,888,848	55.1	1,226,065	154.1
1991	2,516,742	4,499,312	1,982,570	55.9	1,368,480	144.9
1992	2,802,667	4,884,509	2,081,842	57.4	1,454,371	143.1
1993	3,044,727	5,123,410	2,078,683	59.4	1,504,147	138.2
1994	3,347,602	5,403,394	2,055,792	61.9	1,546,465	132.9
1995	3,665,863	5,696,909	2,031,046	64.3	1,547,977	131.2
1996	4,114,461	6,254,405	2,139,944	65.8	1,584,357	135.1
1997	4,537,917	6,489,361	1,951,444	69.9	1,607,371	121.5
1998	5,067,795	6,953,096	1,885,301	72.9	1,653,863	114.0
1999	5,574,958	7,582,856	2,007,898	73.5	1,736,963	115.6

The total actuarial accrued liability determined using the Projected Unit Credit cost method increased by \$629,760,494 from June 30, 1998 to June 30, 1999. There were deminimus changes in benefit provisions during the year. There was a net experience loss of \$92,641,287 after allocating \$119,571,018 of excess investment income to the Experience Account in accordance with Act 1031. A COLA was granted to retirees on July 1, 1999 which reduced the Experience Account \$42,915,713.

<sup>&</sup>lt;sup>1</sup>UAAL differs from the UFAL for funding purposes. UFAL for funding purposes excludes Texaco Settlement Fund Assets which appears on page 5.

# EXHIBIT 3 (Continued) Pension Accounting & Financial Disclosure

#### SUPPLEMENTARY INFORMATION

### SCHEDULE OF EMPLOYER CONTRIBUTIONS

Fiscal Year	Actuarial Required Contribution	Percent Contributed	Annual Pension Cost (APC)	Actual Contribution	Percentage of APC Contributed	Net Pension Obligation*
1991	106,397,079	101.2	102,478,348	107,700,340	105.1	1,303,263
1992	198,167,515	105.5	199,470,778	208,989,801	104.8	-11,259,859
1993	183,507,210	98.5	186,235,605	180,708,603	97.0	- 6,438,324
1994	189,566,536	98.7	191,589,377	187,058,006	97.6	- 2,254,901
1995	196,931,081	103.5	198,321,499	203,773,245	102.7	- 8,113,103
1996	203,762,677	99.3	206,878,066	202,316,644	97.8	- 4,036,582
1997	212,221,189	98.4	214,971,990	208,924,646	97.3	1,922,284
1998	221,933,246	104.9	221,250,489	232,843,174	105.2	- 9,670,401
1999	226,387,848	102.1	228,233,262	231,043,705	101.2	-12,480,844

Analysis of the percentage contributed over a period of years will give a relative indication of the funding progress for the liabilities of the Louisiana State Employees' Retirement System.

The difference between the Actuarial Required Contribution and the APC is the amortization payment for the Net pension Obligation (see Exhibit A page 24).

# DEVELOPMENT OF NET PENSION OBLIGATION

(1) (2) (3) (4)	Actuarial Required Contribution Interest on Net Pension Obligation Amortization of Net Pension Obligation Annual Pension Cost $(1)+(2)-(3)$	226,387,848 -797,808 <u>-2,643,222</u> 228,233,262
(5) (6) (7)	Employer Contribution Increase (decrease) in Net Pension Obligation Net Pension Obligation Beginning of Year	231,043,705 -2,810,443 -9,670,401
(8)	3 3	-12,480,844

<sup>\*</sup>Actuarial Contributions, the Annual Pension Cost (APC), and the actual employer contribution made have been adjusted with interest at the valuation rate to the end of the fiscal year in accordance with GASB's Statement No. 27, paragraph 21.

# EXHIBIT 3 (Continued) Pension Accounting & Financial Disclosure

### STATISTICAL DATA

# COMPARATIVE SUMMARY OF REVENUES BY SOURCE AND EXPENSES BY TYPE

# Revenues by Source

Fiscal	Members	Employer	Investment	
Year	Contribution	Contribution <sup>1</sup>	Income	<u>Total</u>
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
1995	123,370,058	217,590,817	317,004,128	657,965,003
1996	126,073,816	236,967,776	328,419,628	691,461,220
1997	126,793,791	213,885,597	485,694,849	826,374,237
1998	129,724,456	229,834,528	464,769,328	824,328,312
1999	135,479,230	228,104,989	470,204,750 <sup>2</sup>	833,788,969

# Expenses by Type

Fiscal			Administrative	
<u>Year</u>	<u>Benefits</u>	Refunds	Expenses 3	<u>Total</u>
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
1995	288,641,870	25,072,191	6,465,576	320,179,637
1996	317,340,115	27,222,153	6,668,955	351,231,223
1997	340,052,578	28,945,409	6,773,908	375,771,895
1998	359,625,826	32,156,373	9,205,446	400,987,645
1999	397,966,405	31,851,567	8,789,889	438,607,861

 $<sup>{</sup>f 1}$  Includes transfers and purchases and the annual employer contribution.

 $<sup>^{2}</sup>$ Prior to 6/30/99, reported realized investment income. A change in Asset Valuation Method now reports realized and unrealized investment income at market (see Exhibit 6, page 26).

 $<sup>{</sup>f ^3}$ Includes other expenses, not related to the administration of daily operation.

### EXHIBIT 4

### CENSUS DATA

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 24,397 records for terminated non-vested members due a refund.

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:

	1999 <u>Census</u>	1998 <u>Census</u>
Active Members	67,680	69,949
Regular Retirees	23,124	22,314
Disability Retirees	1,146	1,110
Survivors	5,013	4,902
Vested & Reciprocals	1,027	1,094
Due Refunds	24,397	23,451
DROP Participants	2,316	2,766
TOTAL	124,703	125,586

STATE EMPLOYEES' SYSTEM ACTIVE REGULAR MEMBERS

CELLS DEPICT - MEMBER COUNT TOTAL SALARY

VALUATION DATE 6/30/1999

Age/Years :	(0-1)	(1-5)	[5-10)	[10-15)	(15-20)	(20-25)	[25-30)	[30-35)	(35- )	: Total :
[ 0 - 19) :	 325	108	0	0	0	0	0	 0	0	: 433 :
		1416005	0				0	0	0	: 3015500 :
:										: :
[20 - 24):	1051	1049	2	0	0	0	0	0	0	: 2102 :
:	7,040638	16372393	37106	0	0	0	0	0	0	: 23450137 :
:										: :
[25 - 29) :	1431	3273	514	17	0	0	0	0	•	: 5235 :
:	12659451	68604633	11304921	357770	0	0	0	0	0	: 92926775 :
:										: :
[30 - 34):	1071	2789	2024	651	71	0	0	0	-	: 6606 :
:	9600769	61014423	52920435	16562911	1805984	0	0	0	0	:141904522 :
:										:
[35 - 39) :			2449				=	0	-	: 9226 :
:	9073366	51196279	62557110	43139888	49125128	6069524	0	0	0	:221161294 :
:										: :
[40 - 44) :			2040			1863		0		: 11132 :
:	7370796	53123353	54787933	40654484	77616416	58353967	4257398	0	0	:296164348 :
:									_	:
[45 - 49) :			2103		1753		1300			: 11236 :
:	6184884	40910477	56757425	38094795	54889200	82397166	45482834	468705	0	:325185488 :
:									_	:
[50 - 54) :					1234		1412			: 8548 :
:	3508272	31808312	39995594	29621409	39076301	51542158	52434676	4619766	62252	:252668739 :
:							_			:
[55 - 59) :			1000		806	785		177	_	: 4242 :
:	1472233	11984359	26337770	18096746	23967667	25322122	5728452	6679231	360318	:119948899 :
:										:
[60 - 64):	22		485	208			117	64		: 1425 :
:	167427	3272052	13178367	5829206	7174644	5062044	4245572	2405706	5/9246	: 41914264 :
:	_					,=		40		: :
[65 - 69) :		29				65		12	_	: 408 :
:	102250	1220835	3062066	2740093	2498013	1918730	892957	487993	402733	: 13325670 :
:	_								4-	: :
[70 - 74) :		16					21	8		: 214 :
:	81882	494696	543668	1248927	1542912	1156821	697256	238333	443971	: 6448466 :
Total :	6890	15823	12186	6845	8430	6980	3194	408	51	: 60807 :
										:1538114103:
	2 300 1 403					0		. 1077104		

AVERAGES: Attained Age 42.67 Service Years 10.45

Active Salary 25,295

STATE EMPLOYEES' SYSTEM ACTIVE LEGISLATORS

CELLS DEPICT - MEMBER COUNT TOTAL SALARY VALUATION DATE 6/30/1999

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	4	0	0	0	0	0	0	0	:	4:
:	0	134967	0	0	0	0	0	0	0	:	134967 :
:			_	_	_	_	_	_	_	:	_ :
[35 - 39) :	0	1	5	1	0	0	0	0			7:
:	0	33231	161584	31045	0	0	0	0	U	:	
:	•	3	5	•		•	•	0	•	:	: 9:
[40 - 44) :			-	0	1	0	0	0		:	9 : 331839 :
:	0	98186	167315	U	66338	U	U	U	U	:	
: [45 - 49) :	0	3	11	0	2	0	0	0	0		: 16 :
	0	101895	441018	0	8200 <b>3</b>	0	0	0			624916 :
:	U	101093	441010	U	02003	U	U	U	U	:	
[50 - 54) :	0	4	4	2	2	2	1	0	n		15 :
:	0	135320	126059		67585	66139	34039	0			495083 :
•	· ·	133320	120037	03741	01703	00137	34037	v	•	:	:
[55 - 59) :	0	1	1	3	4	1	2	0	0	:	12:
:	0	35635	34112	101422	161254	36795	66843	0	Ō		436061 :
:	•					55.75		-		:	:
[60 - 64) :	0	3	2	1	1	0	0	0	0		7:
:	0	99887	72130	35122	34435	0	0	0	0	:	241574 :
:										:	:
[65 - 69) :	0	1	5	0	0	0	0	0	0	:	6:
:	0	35583	170474	0	0	0	0	0	0	:	206057:
:										:	:
[70 - 74) :	0	0 0	1	0	0	0	1	0	0	:	2:
:	0		17703	0	0	0	36051	0	0	:	53754 :
Total :	0	20	34	7		3	4	0	0	· · · ·	78 :
Total :	0	674704	1190395	233530	411615	102934	136933	0	0	:	2750111 :

AVERAGES: Attained Age 50.64 Service Years 34.91

Active Salary 35,258

STATE EMPLOYEES' SYSTEM ACTIVE JUDGES

CELLS DEPICT - MEMBER COUNT TOTAL SALARY

VALUATION DATE 6/30/1999

Total :	:	[35- )	(30-35)	[25-30)	[20-25)	[15-20)	[10-15)	[5-10)	[1-5)	(0-1)	Age/Years :
0 :	:	0	0	0	0	0	0	0	0	0	[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	0	0	[25 - 29) :
:	:	•	Ū	U	U	U	U	U	0	0	:
0:	:	0	0	0	0	0	0	0	0	0	[30 - 34) :
0 :	:	0	0	0	0	0	0	0	0	0	:
:	:			_	_	•	· ·	•	•	· ·	:
26:	:	0	0	0	0	0	1	3	21	1	[35 - 39) :
2260959 :	:	0	0	0	0	0	139329	282968	1776236	62426	:
;	:										:
55 :			0	0	0	2	6	19	25	3	[40 - 44):
4637318 :		0	0	0	0	158256	494599	1639610	2252292	92561	:
	:			_	_	_					:
: 88			0	0	2		10	36	29		[45 - 49) :
7700948 :		U	0	0	185040	683901	889387	3248526	2558141	135953	:
73 :	:	0	0	2	7	15	15	20	12	2	: [50 - 54) :
6300663 :			0	192105	621592	1393608	1248514	1772340		92520	[50 - 54) :
:	:	•	•	172103	OLIJIL	1373000	1240314	1772540	717704	72320	•
41 :	:	0	0	1	8	7	6	8	10	1	[55 - 59) :
3682661 :	:	0	0	114129	723332	627549	546080	690763	934548	46260	:
:	:										:
25 :			0	1	5	6	3	3	7	0	[60 - 64):
2232163 :	:	0	0	100091	368446	560866	277560	277560	647640	0	:
:	:										:
8:			0	0	2	2	-	1			[65 - 69) :
708857 :		0	0	0	145625	187744	277560	97928	0	0	:
: 0:	:	•	^	^	•	^	^	^	•	•	:
0:			0	0	0 0		0	0	0 0	0	[70 - 74) :
	•					U	U	U	U	U	:
316 :	:	0	0	4	24	40	44	90	104	10	Total :
7523569 :			0	406325	2044035		3873029		9148841		Total :

AVERAGES: Attained Age 49.96 Service Years 9.13

Active Salary 87,100

STATE EMPLOYEES' SYSTEM ACTIVE WILDLIFE AGENTS

CELLS DEPICT - MEMBER COUNT TOTAL SALARY

VALUATION DATE 6/30/1999

:	Total	:	)	[35-	(30-35)	[25-30)	[20-25)	[15-20)	[10-15)	[5-10)	[1-5)	(0-1)	Age/Years :
:	0	:	0	•••••	0	0	0	0	0	0	0	0	[0-19):
:	0	:	0		0	0	0	0	0	0	0	0	:
:		:											:
:	11	:	0		0	0	0	0	0	0	3	8	[20 - 24) :
:	138853	:	0		0	0	0	0	0	0	65733	73120	:
		:											:
	47				0	0	0	0	0	10			[25 - 29) :
	1037934		0		0	0	0	0	0	289495	682472	65967	
		:	_			•	•		,	40	47	-	
	40				0	0	0	0	444504	18			[30 - 34) :
	1053065		U		0	0	0	0	116501	553890	331648	51026	:
	34	:	0		0	0	0	4	6	18	5	1	[35 - 39) :
	1093976				0	0	0	•	_	571 <b>53</b> 9		17317	
		:	Ü		v	Ū	·	103020	201370	37 1337	134074	11.511	
	30		0		0	0	3	12	8	5	2	0	[40 - 44):
	1038628				0	0	128233		255915	143398		0	:
		:			-	-							:
	28 :	:	0		0	2	7	13	1	3	1	1	[45 - 49) :
:	1031391	:	0		0	99655	281422	489521	36886	88397	26370	9140	:
:	:	:											:
:	22 :	:	0		0	0	5	12	5	0	0	0	[50 - 54) :
:	847097 :	:	0		0	0	215760	452230	179107	0	0	0	:
:	:	:											:
:	3 :	:	0		0	1	1	1	0	0	0	0	[55 - 59) :
:	135136 :	:	0		0	68024	33267	33845	0	0	0	0	:
:		:											:
	3 :				0	0		1	0	0	0	0	[60 - 64) :
	113671 :	-	0		0	0	76953	36718	0	0	0	0	:
	:	:	_			_				•		•	: **E
	1:		0		0	0	1	0 0	0	0	0	0 0	[65 - 69) :
			0		0	0	37704	U	0	0	0	U	:
	:	:	•		^	•	^	•	0	0	0	0	: [70 - 74) :
	0:	_	0		0	0	0	0	0	0	0	0	:
	0 :	:	U		0	0	U	U	U	U	U		
	219 :	:	0		0	3	19	43	24	54	53	23	Total :
	6527455 :				0	_		1632937			1294404		Total :

AVERAGES : Attained Age 37.96

> Service Years 9.73 Active Salary 29,806

STATE EMPLOYEES' SYSTEM CORRECTIONS before 1986

CELLS DEPICT - MEMBER COUNT

TOTAL SALARY

VALUATION DATE 6/30/1999

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:
•	U	U	U	U	U	U	U	U	U	: :
[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	1	0	0	0	0	0	: 1:
:	0	0	0	17932	0	0	0	0	0	: 17932 :
:	•		Ť	,	-	•	•	•	•	: ::
[30 - 34) :	0	0	0	27	8	0	0	0	0	: 35 :
:	0	0	0	790308	236290	0	0	0		: 1026598 :
:										: :
[35 - 39) :	0	0	0	54	135	1	0	0	0	: 190 :
:	0	0	0	1625762	4142223	29383	0	0	0	: 5797367 :
:										: :
[40 - 44) :	0	0	0	47	152	30	3	0	0	: 232 :
:	0	0	0	1385601	4736445	978498	95552	0	0	: 7196096 :
										: :
[45 - 49) :	0	0	0	29	143	43	26	0	0	: 241 :
:	0	0	0	839932	4500093	1683830	1166840	0	0	: 8190695 :
:										: :
(50 - 54) :	0	0	0	43	109	21	23	2	0	: 198 :
:	0	0	0	1247477	3402558	645324	1068076	99713	0	: 6463148 :
:										: :
(55 - 59) :	0	0	0	22	66	10	8	7	1	: 114 :
:	0	0	0	621261	2001472	312027	297485	348079	35304	: 3615627 :
:										: :
[60 - 64):	0	0	0	1	23	7	1	1	2	: 35 :
:	0	0	0	43087	700659	224586	47253	34315	114 <del>99</del> 5	: 1164895 :
:										: :
[65 - 69) :	0	0	0	1	3	4	0	0		: 9:
:	0	0	0	24042	82437	127838	0	0	72108	: 306424 :
:										: :
[70 - 74) :	0	0	0		1			0	1	
:	0	0	0	0	27826	0	0	0	76763	: 104589 :
Total :	0	0	0	225	640	116	61	10	5	: 1057 :
Total :	0	0	0	6595401	19830002	4001485			299170	: 33883371 :
								102,01		

AVERAGES : Attained Age

46.85

Service Years

18.15

Active Salary

32,056

STATE EMPLOYEES' SYSTEM CORRECTIONS after 1986

CELLS DEPICT - MEMBER COUNT TOTAL SALARY

VALUATION DATE 6/30/1999

Age/Years	: (0-	1) [1-5)	[5-10)	[10-15)	[15-20)	[20-25)	[25-30)	[30-35)	[35-	· · · · )	: Total :
Γ 0 - 19)	:		0 0	0			0	0	•••••	 O	: 188 :
-	: 868			0			0	0			: 868727 :
	:										: :
[20 - 24)	: 2	278 27	4 1	0	0	0	0	0		0	: 553 :
	: 17310	004 465021	8 20569	0	0	0	0	0		0	: 6401791 :
	:										: :
[25 - 29)	: :	257 47	2 129	2	0	0	0	0		0	: 860 :
	: 16647	<sup>7</sup> 69 891862	9 2879925	49970	0	0	0	0			: 13513293 :
	:										: :
		84 29			0	0	0	0			: 867 :
	: 13023	344 <b>5</b> 65084	6 6901855	2517034	0	0	0	0		0	: 16372079 :
	:				_	_	_	_			:
		57 20			0	0	0	0			: 641 :
	: 11413	53 377833	3 4769511	2194333	0	0	0	0			: 11883530 :
r40 = 445	:	92 15:	2 153	79	0	0	0	0			: : : 476 :
-	: 6783				0	0	0	0			: 470 : : 9326269 :
	. 0/0.	272071	3073770	2020091	U	U	U	U			. 7J20207 . : :
[45 - 49)	•	68 11!	5 139	67	0	0	0	0			
•		23 217244			0	0	0	0			· 7824365 :
	:			,	•	•	•	•			:
[50 - 54)	:	31 94	99	55	0	0	0	0			279 :
,					0	0	0	0			: 5818820 :
	:									:	: :
[55 - 59)	:	9 38	54	24	0	0	0	0		0 :	: 125 :
	: 560	64 740542	1292937	599091	0	0	0	0		0 :	2688634 :
	:									:	:
[60 - 64)			24	9	0	0	0	0		0 :	49 :
	: 380	44 212980	574438	232204	0	0	0	0		0 :	1057666 :
	:									:	
[65 - 69)		1 1			0	0	0	0		0 :	8:
	: 72	06 33280	121076	24062	0	0	0	0		0 :	185624 :
	:									:	:
[70 - 74)	:	0 1	0	0	0	0	0	0			1:
	:	0 17392	0	0	0	0	0	0		0 :	17392 :
Total	. 12		1በԶፉ	421		 0	0	0		 n -	4436 :
		20 30932774			0	-	0	0			75958191 :
				**********						• • •	

AVERAGES: Attained Age 35.18 Service Years 4.11

Active Salary 17,123

STATE EMPLOYEES' SYSTEM REGULAR RETIREES

CELLS DEPICT - MEMBER COUNT TOTAL BENEFITS VALUATION DATE 6/30/1999

Age/Years	· · · ·	(0-1)	[1-2)	[2-3)	[3-4)	[4-5)	[5-10)	[10-15)	[15-20)	[20- )	: Total	 l :
[ 0 - 39)	:	13	1	 0	0	 0	0	 0		0	:	14 :
		161394				0			0	0	: 17358	32 :
	:										:	:
[40 - 44)	:	45				_	-	0	0		: 12	
	:	479026	343169	206408	181907	49596	79153	0	0	0	: 133925	
	:									_		<b>:</b>
[45 - 49)			63					0	0		: 26	
	:	911233	799981	522612	689077	153822	339894	0	0	0	: 341661	
*E0 E()	:	407	470	420	470	20	40	42	^	^	:	
[50 - 54)			139		138	28			0	_	: 69 : 1301163	
	:	3921003	2713420	2359336	2187064	530455	1133079	164677	0	U	: 1301163	-
rss - 50\	:	357	238	229	342	171	278	170	6	1	: 175	-
	:				6274315		4840568				: 3557392	
		7070514	2132133	3121303	02/4313	3304310	4040300	2040154	10413	10170	:	., .
[60 - 64)	•	488	414	455	467	308	754	1124	90	21	: 412	
	:	6845166	6136383				13176542				: 6619156	
	:										:	
[65 - 69)	:	164	241	319	310	386	1297	1513	343	62	: 463	5 :
	:	2193128	3337216	5362843	4253625	5250816	16333899	22525499	5171679	607493	: 6503619	7 :
	:										:	:
[70 - 74)	:	32	61	86	111	123	1075	1971	799	259	: 451	7:
	:	510381	972214	1892050	1836295	2184206	13016896	23476995	12352292	3400344	: 5964167	2:
	:										:	:
[75 - 79)	:	9	11	19	22	25	311	1280	1382	550	: 360	9:
	:	109334	280294	355787	414724	439094	4069080	15010112	15646037	7193626	: 4351808	8 :
	:										:	:
[80 - 84)	:	0	2	2	5	4	28		844	883	: 202	1:
	:	0	18113	29707	85084	92173	515020	3421519	8416882	9285195	: 21863693	3:
	:										:	
[85 - 89)	:	0		0	0	0				867		-
	:	0	0	0	0	0	20523	160977	1005714	7771051	: 8958265	
	:	_	_	_	_	_					:	
[90 - 99)	:	0	0 0	0	0	0	1	1	1	397	: 400 : 3253879	U:
	:	0	0	0	0	0	7674	22561	8209	3215435	: 3253879	У:
Total	:	1366	1202	1705	1466	1059	3795		3558	3040	: 23124	٠٠٠
	-										: 23124	
	•		.,, -0, 19							5,054000		•

AVERAGES : Attained Age

70.16

Years Retired 11.17

Annual Benefit 13,924

STATE EMPLOYEES' SYSTEM DISABILITY RETIREES

CELLS DEPICT - MEMBER COUNT TOTAL BENEFITS VALUATION DATE 6/30/1999

											Age/Years :
27			0	2	 8		4	3	2	4	[0-39):
167598	:	0	0	9737	48998	21461	19181	21888	16106	30227	:
105		0	1	6	20	13	13	17	16	19	[40 - 44) :
945312	:	0	3871	31906	126191	114634	132229		162309	225078	:
249 :	:	0	5	17	66	29	23	30	32	47	: [45 - 49) :
2510662 :		0	31758	121965	563894	308411	260563	348084	333863	542124	:
358 :	:	2	14	57	105	36	34	36	30	44	[50 - 54) :
3631355 :	:	8912	114979	456159	918267	404117	409102	448272	320772	550775	:
405 :		7	35	80	124	29	36	41	24	29	[55 - 59) :
3578407 :	:	49663	271810	657251	1005363	261036	325590	406689	251363	349642	:
:	:	_									:
	:		0	0	1	0	0	0	0	0	[60 - 64) :
39774 :	:	U	0	0	39774	0	0	0	0	0	:
1:	:	0	1	0	0	0	0	0	0	0	[65 - 69) :
21977 :	:	0	21977	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	[75 - 79) :
0:	:	-	0	0	0	0	0	0	0	0	:
0:	:	n	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	[90 - 99):
0 :	:	0	0	0	0	0	0	0	0	0	:
1146 :	:	9	56	162	324	111	110	127	104	143	Total :
10895085 :	:	58575	444395	1277018	2702487	1109659	1146665	1374027	1084413	1697846	Total :

AVERAGES :

Attained Age

52.08

Years Retired 5.94

Annual Benefit 9,507

STATE EMPLOYEES' SYSTEM SURVIVOR BENEFITS

CELLS DEPICT - MEMBER COUNT TOTAL BENEFITS VALUATION DATE 6/30/1999

:	: Total	) ;	[20- )	[15-20)	[10-15)	[5-10)	[4-5)	[3-4)	[2-3)	[1-2)	·(0-1)	Age/Years :
:	: 71	1	1	7	14	14	11	4	7	8	5	[0-39):
	: 1017810 :		6483	46726	187328	190048	151934	72341	103168	139816	119966	:
· :	: 77	5 :	5	1	13	21	6	9	8	6	8	[40 - 44) :
	: 1178937 :	4 :	33594	5610	159884	306483	101601	148167	187404		129213	:
	: 160	4 :	4	10	36	49	7	16	13	8	17	[45 - 49) :
	: 2324083 :		18094	79724			98107		207589	140930	358010	:
:	: 236	0 :	10	35	51	68	12	19	14	13	14	[50 - 54) :
	: 3325642 :		55788	403781		963017		334873	217056	239045	362205	:
	: 303		24	52	71	76	15	11	19	20	15	[55 - 59) :
:	: 3972620 :				833208				283453			:
	: 480	0:	60	91	150	104	22	18	8	18	9	[60 - 64) :
_	: 5241542 :				1637390	1414157		262524	81779	256515	101602	:
		1 :	121	172	204	99	17	12	12	9	7	[65 - 69) :
	: 6388703 :		891985	1690962	2046924	1109315	223440	136591	129442	85731	74313	:
:	: 861		293	286	201	62	4	6	2	4	3	[70 - 74) :
	: 7546236 :	7 : :	2150957	2563901	1876253	672333	32846	62635	10455			:
	883	5 :	426	289	137	21	1	2	4	3	0	[75 - 79) :
	7241134			2460344	1434991	237180	11232	19413	36450	29072	0	:
:	689	2 :	512	128	41	3	1	1	1	2	0	[80 - 84) :
	5196211 :	3 : :		990808	470847	16591	10759	13003	5 <b>78</b> 62	21953	0	:
:	398	5 :	365	30	3		0	0	0	0	0	[85 - 89) :
	2838414 :	3:		259470	35711	0	0	0	0	0	0	:
			199	2	1	0	0	0	0	0	0	[90 - 99) :
:	1307133	7:	1272087	26972	1 8074	0	0	0	0	0	0	:
-					922							Total :
:	47578464	3:	14199958	9843389	9684041	6697749	1305211	1543425	1314658	1412940	1577093	Total :

AVERAGES : Attained Age

71.53

Years Retired 17.46

Annual Benefit 9,491

STATE EMPLOYEES' SYSTEM TERM-VESTED/RECIPROCAL

CELLS DEPICT - MEMBER COUNT TOTAL BENEFITS VALUATION DATE 6/30/1999

Total	:	[35- )	(30-35)	[25-30)	[20-25)	[15-20)	[10-15)	[5-10)	[1-5)	(0-1)	Age/Years :
0	:	0	0	0	0	0	0	0	0	0	[0-19):
0	:	0	0	0	0	0	0	0	0	0	:
	:										:
1	:	0	0	0	0	0	0	0	1	0	[20 - 24) :
23	:	0	0	0	0	0	0	0	23	0	:
	:										:
0	:	0	0	0	0	0	0	0	0	0	[25 - 29) :
0	:	0	0	0	0	0	0	0	0	0	:
40	:	•	•	•	•		47	4	•	•	170 7/
19	_	0	0	0	0	1	17	1	0	0	[30 - 34):
67910		0	0	0	0	7514	59880	516	0	0	:
97	:	0	0	0	3	45	45	3	1	0	[35 - 39) :
608188		0	0	0	23016	345925	222019	17177	51	0	:
000100	:	U	·	·	23010	343723	222019	11111	٠,١	Ū	•
192	_	0	0	0	45	84	61	1	1	0	[40 - 44) :
1572915		0	0	o O	414704	712513	445243	428	27	0	:
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	:		•	Ţ						-	
231		0	0	36	78	69	44	3	1	0	[45 - 49) :
		0	0	374905	900915	696726	282989	16468	66	0	:
	:										:
225	:	2	17	49	49	69	39	0	0	0	(50 - 54) :
2605075	:	40723	201981	619675	574914	794000	373782	0	0	0	:
	:										:
191	:	6	17	35	36	54	40	2	1	0	(55 - 59) :
1930385	:	35491	135908	427353	355742	583363	376759	15129	640	0	:
	:										:
26	:	4	1	3	5	8	3	2	0	0	[60 - 64) :
205283	:	22149	8569	29246	51797	67891	13805	11826	0	0	:
	:										:
15			2	2	2	3	4	1	0	0	[65 - 69) :
84482	:	2578	14342	24974	6044	11977	23985	582	0	0	:
	:				_		-				:
		11				1		0	1	0	(70 - 74) :
159213	:	32521	51222	52152	16800	5669	0	0	849	0	:
1027	:	24	47	130	220	334	253	13	6	0	Total :
9505543	•	133462	412022	1528305	2343932	3225578	1798462	62126	1656	0	Total :

AVERAGES : Attained Age

49.88

Service Years

19.62

Annual Benefit

9,256

STATE EMPLOYEES' SYSTEM DROP PARTICIPANTS

CELLS DEPICT - MEMBER COUNT TOTAL BENEFITS

VALUATION DATE 6/30/1999

Total	:	[20- )	[15-20]	[10-15]	(5-10)	[4-5)	[3-4)	[2-3)	[1-2)	(0-1)	Age/Years :
11			0	0	0	0	0				0 - 39) :
162804	; ;	0	0	0	0	0	0	27019	62550	73235	:
57		0	0	0	0	0	0	19	19	19	0 - 44) :
836742		0	0	0	0	0	0	260828	266921	308993	:
105		0	0	0	0	0	0	22	33	50	: 5 - 49) :
2226117		0	0	0	0	0	0	420971		1126370	
470		0	0	0	0	0	0	140	170	160	
11979119		0	0	0	0	0	0	3450486	4198492	4330141	:
720		0	0	0	0	0	0	220	252	248	· 5 - 59) :
16610681	:	0	0	0	0	0	0	5096639		5720507	
758	:	0	0	0	0	0	0	217	283	258	0 - 64) :
10503836		0	0	0	0	0	0	3224755		3384449	
145	:	0	0	0	0	0	0	63	58	24	5 - 69) :
2435606	:		0	0	0	0	0	1057092	997696	380818	:
45	:	0	0	0	0	0	0	26	13	6	0 - 74) :
643375	:	0	0	0	0	0	0	376077	182154	85144	:
	:	0	0	0	0	0	0	1		3	5 - 79) :
	:	0	0	0	0	0	0	12354	12092	26783	:
	:	0	0	0	0	0	0	0	0	0	0 - 84):
_	:	0	0	0	0	0	0	0	0	0	:
0	:	0	0	0	0	0	0	0	0	0	5 - 89) :
0	:	0	0	0	0	0	0	0	0	0	:
0	:	0	0	0	0	0	0	0	0	0	0 - 99) :
0	:	0	0	0	0	0	0	0	0	0	:
2316	:	0	0	0	0	0	0	710	833	773	Total :
45449508	:	0	0	0	0	0	0			15436440	

AVERAGES: Attained Age 57.88
Years Retired 1.47

Annual Benefit 19,624

STATE EMPLOYEES' SYSTEM ACTIVE AFTER DROP

CELLS DEPICT - MEMBER COUNT

TOTAL SALARY DROP BENEFITS VALUATION DATE 6/30/1999

Age/Years :       (0-1)       [1-2)       [2-3)       [3-4)       [4-5)       [5-10)       [10-15)       [15-20)       [20-1)       :         [0-34) :       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0 <td< th=""><th>0 : 0 : 0 : 0 : 0 : 13 : 20193 : 35 :</th></td<>	0 : 0 : 0 : 0 : 0 : 13 : 20193 : 35 :
:       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0	0 : 0 : 0 : 0 : 13 : 20193 : 101591 : 35 :
:       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0	0 : 0 : 0 : 0 : 13 : 20193 : 01591 : 35 :
: : : : : : : : : : : : : : : : : : :	0 : 0 : 0 : 13 : 20193 : 01591 : 35 :
[35 - 39) :       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0 <td< td=""><td>0 : 0 : 13 : 20193 : 01591 : 35 :</td></td<>	0 : 0 : 13 : 20193 : 01591 : 35 :
:     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0 <td>0 : 0 : : 13 : 20193 : :01591 : : 35 :</td>	0 : 0 : : 13 : 20193 : :01591 : : 35 :
:     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0     0 <td>0 : : 13 : 20193 : : : : : : : : :</td>	0 : : 13 : 20193 : : : : : : : : :
: [40 - 44): 13 0 0 0 0 0 0 0 0 0 :	: 13 : 20193 : 01591 : : 35 :
[40 - 44): 13 0 0 0 0 0 0 0 0:	13 : 20193 : 01591 : : 35 :
	20193 : :01591 : : : :
: 420193 0 0 0 0 0 0 0 0 1 1	01591 : : : :
	: 35 :
: 201591 0 0 0 0 0 0 0 0 : 7	35 :
:	
[45 - 49): 25 7 2 1 0 0 0 0:	86300 •
: 913671 336943 67090 68605 0 0 0 0 0 : 13	
: 430425 144718 29786 18181 0 0 0 0 0 : 6	23110 :
:	:
[50 - 54): 74 12 6 2 0 0 0 0 0:	94 :
: 2356705 465369 258760 101207 0 0 0 0 0 : 31	
: 1680836 262416 120288 42868 0 0 0 0 0 : 21	06408 :
:	:
[55 - 59): 136 37 24 8 0 1 0 0 0:	
: 4418760 1366460 933222 318620 0 26252 0 0 0 : 70	
: 3246184 847966 549576 193904 0 15408 0 0 0 : 48	53038 :
:	:
[60 - 64): 129 44 27 9 11 1 0 0 0:	
: 3914706 1807861 1231038 386169 335770 21029 0 0 0 : 7 <i>6</i>	
: 2156106 1079188 716715 226278 225192 11720 0 0 0 : 44	
· · · · · · · · · · · · · · · · · · ·	:
[65 - 69): 54 32 38 9 1 0 0 0 0:	
: 1430538 1045198 1392763 346212 19536 0 0 0 0 : 42	
: 641682 465632 650370 195975 7439 0 0 0 0 : 19	
	:
[70 - 74): 15 14 16 10 5 4 0 0 0:	
: 491385 388438 483403 443492 175841 137472 0 0 0 : 21	
: 260610 180110 193888 208320 59100 72980 0 0 0 : 9	: מטטכי
Total . //4 1/4 147 70 17 / 0 0	747
Total : 446 146 113 39 17 6 0 0 0 :	
Total : 13945959 5410269 4366276 1664305 531147 184753 0 0 0 : 261	
Total : 8617434 2980030 2260623 885526 291731 100108 0 0 0 : 151	))472 :

AVERAGES: Attained Age 60.72

Post Drop Years 1.23 Active Salary 34,032 Annual Benefit 19,733

### EXHIBIT 5

# PRINCIPLE PROVISIONS OF THE PLAN (Including Acts of 1999 Regular Session)

#### EFFECTIVE DATE:

July 1, 1947; last amendment date - July 1, 1999.

### 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.

# ADDITIONAL CREDITABLE SERVICE:

- 1. Credit for service canceled 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	8	of	a	Year
2	7	-	52	Days	20	6	of	а	Year
5	3	-	78	Days	30	3	of	a	Year
7	9	-	104	Days	409	3	of	a	Year
10	5	-	130	Days	50	5	of	a	Year
13	1	_	156	Days	609	3	of	a	Year
15	7	_	182	Days	709	5	of	а	Year
18	3	_	208	Days	809	3	of	a	Year
20	9	-	234	Days	909	5	of	a	Year
23	5	-	260	Days	1009	5	of	а	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, overtime 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.

#### 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:

				After June 30, 1989
Individual Employees	7%	of	Compensation	7.5%
Agents of DOC	8.5%	of	Compensation	9.0%, 7.5% after DROP
WildLife Agents	88	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, or 25 years of service at any age).
- 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.

- 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 annual benefit.
- 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:

AGE	MAXIMUM	AGE	MAXIMUM	AGE	MAXIMUM
48	\$24,721	56	\$51,626	64	\$116,464
49	27,027	57	56,856	65	130,000
50	29,569	58	62,694	66	139,486
51	32,375	59	69,226	67	149,835
52	35,476	60	76,551	68	161,138
53	38,907	61	84,787	69	173,498
54	42,710	62	94,070	70	187,033
55	46,931	63	104,564		

### EARLY RETIREMENT:

### Eligibility:

20 years of service credit regardless of attained age.

### Benefit:

Normal retirement benefit based upon service accrued to date, actuarially reduced from the earliest date member would be eligible if employment had continued, to the earliest normal retirement date.

#### COST-OF-LIVING BENEFITS:

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. Act 402 of 1999 establishes that once the balance of the Experience Account accumulates to a sum sufficient to grant retirees a COLA, the Board shall grant such COLA not to exceed the lesser of the CPI-U or 2%. Benefits are restricted to those retirees who have attained the age of 55 and have been retired for at least one year.

### **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 WildLife 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.
- 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).

## 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:

 $\underline{\text{Option 1}}$  - 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.

 $\underline{\text{Option 4}}$  - 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.

<u>Initial Benefit Option</u> - Maximum benefit actuarially reduced for partial lump-sum equal to not more than 36 months of maximum monthly pension.

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.

### 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. 25 requires the disclosure of certain Actuarial Liabilities for Public Employees Retirement Systems. The disclosures illustrated in Exhibit 3 were developed using the Projected Unit Credit cost method. The statement of assets provided by the audit staff was the final draft prior to publication. Should the statement of assets received differ from the final audit report, a revised actuarial statement will be issued, but only to the extent that any difference in reporting affects the employer's contribution rate or the yield to the Actuarial Value of Assets.

### 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:

Regular <u>Members</u>	Corrections & Wildlife
1.3x	1.6x
1.0x	1.2x
1.0x	1.1x
1.0x	1.1x
1.0x	1.0x
	1.3x 1.0x 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:

Age at Death	Number of Minor Chn.	Years for Youngest Child to Attain Majority
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:

For Plan Year ending prior to June 30, 1999, equities were valued on a four year weighted average. The computation of the average actuarial value of assets was 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.

Effective June 30, 1999, the Board of Trustees approved a change in the Asset Valuation Method. The Actuarial Value is the market value of assets adjusted for a four year weighted average of the unrealized gain or loss in the value of all assets. This value is 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.

As a result of the change in the Asset Valuation Method, the reporting of realized income has been changed to realized, plus unrealized income for valuations beginning on June 30, 1999 and thereafter.

#### ADMINISTRATIVE EXPENSES:

Expenses are included in Aggregate Normal Cost and are assumed to be \$6,000,000 per year. Investment Manager fees are not included in Normal Cost but are treated as a direct offset to investment income. The Employer portion of the Normal Cost excludes an allocation for administrative expenses.

## COST-OF-LIVING:

The liability for a cost-of-living raise already granted is included in the retiree reserve.

# ACTUARIAL TABLES AND RATES (STATE EMPLOYEES' 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	1.11750
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 67	.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

# 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		
37	.00107	.00064	.04890	.00080	.00000	18	.01300	1.04750
38	.00115	.00069	.04570	.00100	.00000	19	.01300	1.04750
39	.00125	.00074	.04271	.00100	.00000	20	.01300	1.04750
40	.00138	.00080	.03993	.00120	.50000		.01300	1.04750
41	.00152	.00086	.03769	.00130		21	.01200	1.04750
42	.00132	.00094	.03789	.00140	.50000	22	.01200	1.04750
43	.00170	.00102	.03256		.50000	23	.01200	1.04750
44	.00215	.00102	.03236	.00170 .00200	.50000	24	.01200	1.04750
45	.00213	.00112	.02822		.65000	25	.01100	1.04750
46	.00275	.00124	.02632	.00240	.65000	26	.01100	1.04750
47	.00273	.00157	.02455	.00280	.32000	27	.00800	1.04750
48	.00310	.00152	.02303	.00320	.32000	28	.00700	1.04750
49	.00349	.00187	.02303	.00360	.42000	29	.00600	1.04750
50	.00434	.00103	.02154	.00450	.43000	30	.01400	1.04750
51	.00434	.00199		.00540	.43000	31	.01300	1.04750
52	.00480	.00217	.01889	.00670	.42000	32	.01300	1.04750
53	.00578	.00257	.01808	.00800	.42000	33	.02000	1.04750
54	.00578	.00237	.01733	.00670	.42000	34	.01500	1.04750
55	.00681	.00282	.01671	.00540	.42000	35	.01500	1.04750
56	.00735	.00311	.01622	.00670	.47000	36	.01500	1.04750
57	.00733	.00343	.01596	.00920	.34000	37	.01500	1.04750
58	.00793		.01584	.01040	.32000	38	.01500	1.04750
59	.00030	.00425	.01589	.01140	.32000	39	.00000	1.04750
60	.01018	.00471	.01622	.01040	.32000	40	.00000	1.04750
61		.00523	.01682	.00400	.32000	41	.00000	1.04750
62	.01118 .01237	.00579	.01764	.00330	.27000	42	.00000	1.04750
		.00641	.01906	.00250	.27000	43	.00000	1.04750
63 64	.01377	.00710	.02061	.00250	.27000	44	.00000	1.04750
64 65	.01541	.00785	.02239	.00300	.27000	45	.00000	1.04750
65 66	.01732	.00869	.02446	.00400	.44000	46	.00000	1.04750
67	.01953	.00965	.02684	.00000	.32000	47	.00000	1.04750
	.02200	.01078	.02952	.00000	.32000	48	.00000	1.04750
68 69	.02470	.01214	.03209	.00000	.32000	49	.00000	1.04750
69	.02757	.01376	.03504	.00000	.42000	50	.00000	1.04750

# EXHIBIT 7

# LEGISLATIVE AUDITOR'S REPORT

6	Actuarial information for LOUISIANA STATE EMPLOYEES' RETIREMENT SYSTEM.
	(a) Most recent actuarial valuation date: <u>June 30, 1999</u> .
	(b) This valuation sets forth information concerning contributions applicable to the plan fiscal year beginning <u>July 1, 1999</u> , and ending <u>June 30, 2000</u> .
	(c) Data used in this valuation
	(i) Number of participants as of the valuation date:
	Active members
	Regular retirees + DROP
	Disability retirees
	Survivors receiving benefits
	Terminated due benefits upon attaining retirement age
	(iii) Annual benefits in payment on the valuation date
	(111) 12madi Senerres in payment on the variation date
	(d) Funding Method Projected Unit.
	Unfunded Accrued Liability as of the end of fiscal 1988 1,825,421,035
	Amortization Method Increasing Annuity.
	Remaining Unamortized Portion of the initial unfunded liability2,548,205,775
	Current Unfunded Accrued Liability under this method
	Actuarially required employer contribution: (at Mid-Year) (i) Employer Normal Cost
	Amortization Payments for Previous Years (Detail on Exhibit A):
	(ii) Previous year's unpaid underpayment or (overpayment)4,301,094
	(iii) Initial Unfunded Liability (Excludes \$4,492,201 appropriation).136,212,913
	(iv) Changes due to COLA's
	(v) Changes in plan provisions, Assumptions & Experience
	(vi) Total employer contribution required (Sum of 6(d)(i) - (v)228,583,900
	(vii) Estimated projected payroll for the coming fiscal year 1,793,217,786
	(viii) Required Employer Contribution Rate (6(d)(vi)/6(d)(vii)) 12.78
	+ Appropriation <u>4,492,201</u>
	(e) Not Applicable .
	(f) Average yield on investments last fiscal year
	(g) PBO for accounting purposes (GASB 5 results)
	(i) Present retirees and beneficiaries
	(ii) Terminated due benefits at retirement age
	(iii) Terminated due a refund of their contributions <u>19,514,992</u>
	(iv) Active Members:
	(1) Accumulated employee contributions
	(2) Employer-financed vested portion
	(3) Employer-financed nonvested portion
	(v) Total PBO (sum of $6(g)(i)$ through $6(g)(iv)$ )
	Unfunded (Assets in Excess of) Pension Benefit Obligation
	20.0110 02.13dc1011

EXHIBIT A

# AMORTIZATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITY JUNE 30, 1999

DATE 6/30	DESCRIPTION	AMTZ. METHOD	AMTZ. PERIOD	INITIAL LIABILITY	YEARS REMAIN	REMAINING BALANCE	MID-YEAR PAYMENT
1993	Initial Liability	I	36	2,155,232,774	30	2,548,205,775	136.212.913
1993	Change in Liability	, I	36	-219,552,151	30	-259,584,053	·
1993	Change in Liability	, I	36	105,002,368	30	124,147,908	
1993	Change in Liability	, I	36	47,088,257	30	55,674,064	•
1992	Legislative COLA	L	12	66,577,000	5	35,497,384	•
1993	Change in Liability	, I	36	1,651,904	30	1,953,103	107,845
1993	Change in Liability	, I	36	-67,422,552	30	-79,716,000	-4,401,705
1994	Change in Liability	· I	35	-48,680,987	30	-55,862,304	-3,084,567
1995	Change in Liability	· I	34	-57,826,272	30	-64,449,081	-3,558,706
1996	Change in Liability	· I	33	70,910,540	30	76,818,940	4,241,737
1997	Change in Liability	I	32	-239,190,250	30	-252,071,570	
1998	Change in Liability	I	31	-92,217,582	30	-94,623,511	-5,224,857
1999	Change in Liability	I	30	92,641,287	30	92,641,287	5,115,404
	TOTAL OUTSTAN	DING BAI	LANCE			2,128,631,942	119,686,525
	EMPLOYERS' CR	EDIT BAI	LANCE				
1995	Contribution Varian	ce L	5	-7,118,810	1	-1,657,936	-1,724,970
1996	Contribution Varian	ce L	5	1,504,500	2	674,077	364,558
1997	Contribution Varian	ce L	5	3,429,831	3	2,218,378	831,088
1998	Contribution Variand	ce L	5	-10,909,927	4	-9,059,506	-2,643,602
1999	Contribution Variance	ce L	5	-4,655,857	5	-4,655,857	-1,128,168
	TOTAL CREDIT	BALANCE	:			-12,480,844	-4,301,094
	TOTAL UNFUNDE	ED ACTUA	RIAL AC	CRUED LIABILIT	Y 2	2,116,151,098	

\*Note: LSU and Unfunded Judges equals 3.192635% of the Initial Liability mid-year payment. The appropriation is \$4,492,201.

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