

## *Hall Actuarial Associates*

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Charles G. Hall  
F.C.A., M.A.A.A., A.S.A.  
Enrolled Actuary

1624 LaSalle Parc Drive  
Baton Rouge, La. 70806  
(225) 928-7866

October 7, 2005

Board of Trustees  
**LOUISIANA SCHOOL EMPLOYEES'**  
**RETIREMENT SYSTEM**

Post Office Box 44516  
Baton Rouge, Louisiana 70804-4516

Ladies and Gentlemen:

This report presents the results of the actuarial valuation of assets and liabilities, as well as funding requirements, for the Louisiana School Employees' Retirement System as of June 30, 2005.

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 School 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 provided by Duplantier, Hrapmann, Hogan & Maher; Certified Public Accountants.

The present values shown herein have been estimated on the basis of actuarial cost method specified in Louisiana Revised Statutes Title 11 Section 22(5). 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.

Board of Trustees  
October 7, 2005

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

	<u>June 30, 2005</u>	<u>-----Prior Years-----</u>	
		<u>June 30, 2004</u>	<u>June 30, 2003</u>
I. Membership Census			
1) Retirees	10,953	10,355	10,068
2) Actives	13,837	14,212	14,486
3) DROP	856	784	792
4) Terminated Vested	356	418	61
II. Annual Benefits	\$ 99,374,136	\$ 92,592,384	\$ 87,990,540
III. Total Payroll	259,232,455	259,698,299	268,656,243
IV. Valuation Assets	1,423,206,908	1,381,153,880	1,369,601,530
V. Investment Yield			
Market Value	8.19%	12.05%	3.76%
Actuarial Value	7.51%	5.44%	-.83%
VI. Cost to Fund Annual Pension Accruals (Normal Costs)	49,380,873 19.05%	48,477,913 18.67%	49,881,086 18.56%
VII. Unfunded Actuarial Accrued Liability	466,237,714	439,804,797	361,195,218
VIII. Funded Percentage	75.3%	75.9%	79.1%
IX. Funding Requirements to Pay (Mid-year Payment)			
1) Employee Contribution Rate	19,442,434 7.50%	19,689,004 7.50%	20,373,583 7.50%
2) Employer Contribution Rate - Current Year	49,942,339 19.1%	45,553,547 17.4%	47,222,922 17.4%
3) Projected Employer Contribution - Next Year	52,694,591 19.6%	49,472,656 18.4%	52,424,018 18.8%

The above funding requirements measure the cost of benefits that were in effect on June 30, 2005, plus Act's of the 2005 Legislative Session which have prospective effects on the current active members.

Board of Trustees  
October 7, 2005

Current Funding

The Actuarial Valuation for the plan year ending June 30, 2005 discloses an increase in the plan's unfunded actuarial accrued liability. The system's current unfunded accrued liability increased from a prior year balance of \$439.8 million to the current deficit of \$466.2 million. It is generally appropriate for the current valuation process to disclose the source and cause of any significant 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 are 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 6/30/2004		\$ 439,804,797
INCREASES		
Interest on Unfunded Liability	\$ 32,985,359	
Experience Loss	4,709,777	
Employer Shortfall Charge	<u>8,433,787</u>	
Incurring Increases	46,128,923	
DECREASES		
Amortization Payment	\$ 19,560,842	
Investment Gain	<u>135,164</u>	
Incurring Decreases	19,696,006	
Unfunded Liability 6/30/2005 (Surplus)		\$ 466,237,714

Board of Trustees  
October 7, 2005

**Funding**

The Constitution requires a minimum 6.00% employer contribution. Prior to 1992, the actuarially required employer contribution rate has been less than the 6.00% required minimum. Act 278 of the 1999 regular session provided for the establishment of an Employer Credit Account consisting of the accumulated excess employer contributions, which exceed the actuarially required employer rate. The account has been depleted and is now obsolete.

The projected employer contribution rate for the 2005-2006 plan year was set by PERSAC at 18.4%. The actual employer contribution rate determined by this valuation for the current plan year is 19.1%. Therefore, the current plan year should generate a contribution shortfall since the current rate exceeds the PERSAC approved rate by .7%. This shortfall combined with the ACT 588 amortization changes, which keep the losses sustained during 2001-2003 as increasing annuities, and a slight reduction in aggregate salary growth are the major contributing factors to the increase in the recommended rate of 19.6% for the 2006-2007 fiscal year.

**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.

Finally, the actuarial disclosure form required by the Legislative Auditor's office makes specific provisions for the determination of whether or not a System is systematically approaching a 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 session unless the system has met the Funding Target.

For the plan year ending June 30, 2005 the funding target is .98262, which is greater than the current .75324 funding ratio. Therefore, the Board is prohibited from entertaining a cost-of-living increase to retirees as required 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, FCA,MAAA,ASA  
Consulting Actuary

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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, 2005</u>		---Prior Year--- <u>June 30, 2004</u>	
	<u>Dollar Amount</u>	<u>% of Salary</u>	<u>Dollar Amount</u>	<u>% of Salary</u>
I. Normal Costs				
(to fund annual pension accruals)				
Active Members with Complete Data				
a) Retirement Benefits	\$ 36,475,283	14.07%	\$ 36,107,918	13.90%
b) Disability Benefits	2,726,253	1.05%	2,750,949	1.06%
c) Survivor Benefits	2,475,929	.96%	2,407,397	.93%
d) Voluntary Termination	4,603,408	1.77%	4,611,649	1.78%
e) Expenses	<u>3,100,000</u>	<u>1.20%</u>	<u>2,600,000</u>	<u>1.00%</u>
TOTAL	49,380,873	19.05%	48,477,913	18.67%
II. Actuarial Accrued Liability				
a) Active Members				
1) Retirement Benefits	\$ 663,724,671		\$ 677,210,490	
2) Disability Benefits	24,104,813		24,402,384	
3) Survivor Benefits	17,892,468		17,713,779	
4) Voluntary Termination	<u>26,967,474</u>		<u>27,188,654</u>	
	732,689,426		746,515,307	
b) Retired and Inactive Members				
1) Regular Retirees	725,952,538		668,991,404	
2) Disabled Retirees	30,666,049		25,700,221	
3) Survivors	103,311,265		98,073,175	
4) Vested Deferred & Reciprocals	29,754,034		43,793,946	
5) Contributions Refunded	5,371,702		6,158,356	
6) DROP Deferred Benefits	202,527,342		179,802,043	
7) DROP Account Balances	<u>59,172,266</u>		<u>51,924,225</u>	
	1,156,755,196		1,074,443,370	
c) TOTAL	1,889,444,622		1,820,958,677	

Exhibit 1 (Continued)**Costs, Liabilities & Contributions**

	<u>June 30, 2005</u>	<u>June 30, 2004</u>
II. Actuarial Accrued Liability		
TOTAL (Preceding page)	\$ 1,889,444,622	\$ 1,820,958,677
III. Assets	1,423,206,908	1,381,153,880
IV. Unfunded Actuarial Accrued Liabilities - (Surplus)	466,237,714	439,804,797
a) Change over prior year	26,432,917	78,609,579
b) Funded Percentage	75.32%	75.85%
V. Employer Contributions To Fund Current Plan Year <sup>1</sup>		
a) Employer Portion of Normal Cost	27,131,201	26,687,396
b) Amortization Payments	16,076,482	14,141,999
c) Previous Year (Short-fall)	<u>6,734,656</u>	<u>4,724,152</u>
TOTAL Required Contribution	49,942,339 19.1%	45,553,547 17.4%
PERSAC approved Rate	18.4%	14.8%
VI. Projected Employer Contributions To Fund Next Plan Year <sup>1</sup>		
a) Employer Portion of Normal Cost	27,802,721	27,362,224
b) Amortization Payments	17,703,810	15,699,252
c) Short-fall Charge	<u>7,188,060</u>	<u>6,411,180</u>
TOTAL Projected Contribution	52,694,591 19.6%	49,472,656 18.4%
VII. Current Payroll	259,232,455	259,698,299
Projected Payroll - Mid Year	262,060,241	262,520,056
Projected Payroll - Next Year	268,546,453	269,158,236

<sup>1</sup>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, 2005</u>	-----Prior Years----- <u>June 30, 2004</u>	<u>June 30, 2003</u>
<b><u>OPERATING REVENUES:</u></b>			
1. Contribution Income			
Member	\$ 18,946,671	\$ 19,676,052	\$ 19,820,210
Employer	37,753,893	28,954,044	29,312,635
2. Other Income			
Legislative Appropriations	0	0	0
Transfers	0	204,178	0
Miscellaneous	0	0	0
TOTAL CONTRIBUTIONS	<u>56,700,564</u>	<u>48,834,274</u>	<u>49,132,845</u>
3. Investment Income			
Investments	118,212,004	160,803,612	52,488,183
Less, Manager Fees	<u>-3,119,925</u>	<u>-2,906,037</u>	<u>-2,362,111</u>
TOTAL INVESTMENT INCOME	115,092,079	157,897,575	50,126,072
4. Total Revenues	171,792,643	206,731,849	99,258,917
<b><u>OPERATING EXPENSES:</u></b>			
1. General Administration	3,119,617	2,632,840	2,404,706
Other Expenses	140,379	149,796	163,662
Employer Credit Expense	0	7,013,573	29,253,899
2. Benefits Paid			
a) Pension Benefits	109,842,001	102,474,273	97,598,053
b) Return of Contrib.	2,979,098	3,866,339	2,420,242
c) Transfers Out	<u>98,023</u>	<u>0</u>	<u>225,192</u>
TOTAL BENEFITS PAID	112,919,122	106,340,612	100,243,487
3. Total Operating Expenses	116,179,118	116,136,821	132,065,754
<b><u>NET INCREASE:</u></b>	55,613,525	90,595,028	-32,806,837

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

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

	<u>June 30, 2005</u>	-----Prior Years----- <u>June 30, 2004</u>	<u>June 30, 2003</u>
<b>ASSETS:</b>			
1. Short Term Assets			
Cash in Banks	\$ 12,045,346	\$ 6,533,638	\$ 13,294,279
Securities	75,608,717	94,889,434	134,008,164
2. Bonds (at amortized cost)			
Foreign Issues	0	647,245	0
Bonds - General	295,922,978	272,921,693	257,124,959
Corporate Issues	209,976,307	203,207,964	174,491,869
U.S. Government Obligations	80,853,169	87,526,266	97,611,243
3. Equities,			
Common Stock - Domestic	719,855,456	681,964,644	584,637,174
- Foreign	108,039,974	101,319,844	81,548,422
4. Real Estate	2,368,916	1,700,000	1,700,000
5. Property and Equipment	3,925,350	3,857,021	3,982,246
6. Receivables - Payables	<u>-18,196,891</u>	<u>-19,781,952</u>	<u>-4,207,587</u>
 TOTAL ASSETS			
Market Value	1,490,399,322	1,434,785,797	1,344,190,769
Valued at Cost	1,344,015,402	1,319,499,757	1,303,077,674
 <b>INVESTMENT YIELD:</b>			
Yield to Actuarial Value	7.51%	5.44%	-.83%
DROP Account Yield	7.01%	4.94%	0.00%
Yield to Market Value	8.19%	12.05%	3.76%
 <b>EMPLOYER CREDIT ACCOUNT:</b>			
Prior Year End Balance	0	5,906,266	36,384,255
+ Excess Added	0	0	0
- Contribution Credited	0	6,064,685	30,302,842
+ Accumulated Interest	0	158,419	-175,147
Fund Balance - Year End	0	0	5,906,266
 <b>Actuarial Value of Assets:</b>			
TOTAL ASSETS	1,490,399,322	1,434,785,797	1,344,190,769
Change in Unrealized (G/L)			
Plan Year - 2 (wt. 1/4)	27,130,127	-62,251,421	-82,155,646
Plan Year - 1 (wt. 2/4)	74,172,945	27,130,127	-62,251,421
Plan Year (wt. 3/4)	<u>31,097,880</u>	<u>74,172,945</u>	<u>27,130,127</u>
Actuarial Value of Assets	1,423,206,908	1,381,153,880	1,375,507,796
Less, Employer Credit Account	0	0	-5,906,266
Valuation Assets	1,423,206,908	1,381,153,880	1,369,601,530

## 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. 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 Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability(AAL) (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a Percentage of Payroll ((b-a)/c)
1996	1,066,498	970,569	- 95,929	109.9	211,178	- 45.4
1997	1,173,453	1,067,252	-106,201	110.0	219,265	- 48.4
1998	1,344,551	1,142,253	-202,298	117.7	225,734	- 89.6
1999	1,464,041	1,213,230	-250,811	120.7	236,001	-106.3
2000	1,556,270	1,291,823	-264,447	120.5	241,128	-109.7
2001	1,516,236	1,472,423	- 43,814	103.0	249,674	- 17.5
2002	1,433,859	1,582,071	148,212	90.6	258,876	57.3
2003	1,369,601	1,730,796	361,195	79.1	268,656	134.4
2004	1,381,154	1,820,959	439,805	75.8	259,698	169.4
2005	1,423,207	1,889,445	466,238	75.3	259,232	179.9

The total actuarial accrued liability determined using the Individual Entry Age Normal cost method increased by \$68,485,945 from June 30, 2005 to June 30, 2006. From all sources there was a net experience loss of \$4,619,288.

**EXHIBIT 3 (Continued)****Pension Accounting & Financial Disclosure****SUPPLEMENTARY INFORMATION****SCHEDULE OF EMPLOYER CONTRIBUTIONS**

<u>Fiscal Year</u>	<u>Actuarial Required Contribution</u>	<u>Percent Contributed</u>	<u>Annual Pension Cost (APC)</u>	<u>Actual Contribution</u>	<u>Percentage of APC Contributed</u>	<u>Net Pension Obligation</u> <sup>1</sup>
1996	12,918,080	99.2	11,015,178	12,816,141	116.4	-376,327
1997	13,591,133	98.0	10,439,624	13,686,530	131.1	-395,566
1998	14,061,639	99.8	10,423,229	14,031,797	134.6	-271,657
1999	14,722,610	100.4	6,053,772	14,783,009	244.2	-127,822
2000	14,841,241	100.0	606,683	14,841,242	2446.3	-48,216
2001	15,257,791	100.0	543,354	15,257,791	2808.1	-46,733
2002	15,616,982	100.0	581,417	15,616,983	2686.0	-19,944
2003	16,440,025	100.0	13,856,760	16,440,025	118.6	-13,887
2004	47,980,745	58.7	41,929,947	28,163,575	67.2	19,817,170
2005	46,187,680	61.0	42,775,863	37,753,893	88.3	24,839,140

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 School 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), plus a constitutional mandated amount for plan years prior to 2003 to bring the total employer contribution up to 6% of covered payroll.

**DEVELOPMENT OF NET PENSION OBLIGATION:**

(1) Actuarial Required Contribution	46,187,680
(2) Interest on Net Pension Obligation	1,486,288
(3) Amortization of Net Pension Obligation	4,898,105
(4) Annual Pension Cost (1)+(2)-(3)	42,775,863
(5) Employer Contribution	37,753,893
(6) Increase (decrease) in Net Pension Obligation	5,021,970
(7) Net Pension Obligation Beginning of Year	19,817,170
(8) Net Pension Obligation End of Year (6)+(7)	24,839,104

<sup>1</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**

<u>Fiscal Year</u>	<u>Members Contribution</u>	<u>Employer Contribution</u>	<u>Investment Income</u>	<u>Total</u>
1996	13,671,635	12,816,141	83,679,068	110,166,844
1997	13,873,112	13,200,462	108,558,771	135,632,345
1998	14,353,380	13,533,467	157,957,573	185,844,420
1999	15,028,064	14,258,000	128,912,738 <sup>1</sup>	158,198,802
2000	15,149,157	81,777 <sup>2</sup>	119,308,696	134,539,630
2001	15,574,349	74,856 <sup>2</sup>	-28,746,088	-13,096,883
2002	18,827,944	105,899 <sup>2</sup>	-34,986,556	-16,052,713
2003	19,820,210	58,736 <sup>2</sup>	50,126,072	70,005,018
2004	19,676,052	21,940,471 <sup>2</sup>	157,897,575	199,514,098
2005	18,946,671	37,753,893	115,092,079	171,792,643

**Expenses by Type**

<u>Fiscal Year</u>	<u>Benefits</u>	<u>Refunds</u>	<u>Administrative Expenses</u>	<u>Total</u>
1996	51,659,703	2,301,807	1,741,965	55,703,475
1997	55,816,364	2,112,016	1,737,126	59,665,506
1998	60,675,915	2,328,958	1,820,670	64,825,543
1999	67,402,758	2,369,474	2,236,188	72,008,420
2000	75,855,391	2,243,027	2,285,482	80,383,900
2001	81,885,206	2,389,111	2,588,233	86,862,550
2002	89,516,977	1,992,256	2,366,271	93,875,504
2003	97,598,053	2,420,242	2,793,560	105,811,855
2004	102,474,273	3,866,339	2,782,636	109,123,248
2005	109,842,001	3,077,121	3,259,996	116,179,118

<sup>1</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)

<sup>2</sup> Employer Contributions exclude the Employer Contribution Credit.

## EXHIBIT 4

## CENSUS DATA

## GENERAL COMMENTS

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

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

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

This year there were four records purged from the database containing errors or categorized as suspicious data, which is a significant improvement in the quality of data reported when compared to previous years. Suspicious data are not necessarily errors, but data, which falls outside the parameters of the editing process for further checking.

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

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

	<u>2005 Census</u>	<u>2004 Census</u>
Active Members	13,837	14,212
Regular Retirees	8,803	8,325
Disability Retirees	586	554
Survivors	1,564	1,476
Terminated Vested	356	418
DROP Participants	<u>856</u>	<u>784</u>
TOTAL	26,002	25,769

# Hall Actuarial Associates

MEMBERSHIP PROFILE  
CATEGORIZED BY AGE AND YEARS EMPLOYED

LSER RETIREMENT SYSTEM  
REGULAR ACTIVE MEMBERS

CELLS DEPICT - MEMBER COUNT  
TOTAL SALARY

VALUATION DATE 6/30/2005

Age	YEARS EMPLOYED									Total
	(0-1)	[1-5)	[5-10)	[10-15)	[15-20)	[20-25)	[25-30)	[30-35)	[35- )	
[ 0-19)	6	2	0	0	0	0	0	0	0	8
count	86974	38359	0	0	0	0	0	0	0	125333
[20-24)	42	69	2	0	0	0	0	0	0	113
count	657243	1189340	51986	0	0	0	0	0	0	1898569
[25-29)	59	207	57	2	0	0	0	0	0	325
count	983940	3508890	1175932	39210	0	0	0	0	0	5707972
[30-34)	76	323	205	49	2	0	0	0	0	655
count	1534476	5577535	3855385	972013	55071	0	0	0	0	11994480
[35-39)	115	511	422	178	71	4	0	0	0	1301
count	2043996	8740880	7652843	3652798	1550725	124056	0	0	0	23765298
[40-44)	163	649	662	400	189	115	22	0	0	2200
count	2725025	10880263	11758897	7417919	4012559	3684390	664517	0	0	41143570
[45-49)	126	607	728	517	328	240	180	8	0	2734
count	2053797	10426891	13066636	9974512	6822310	5735969	4776051	254774	0	53110940
[50-54)	95	480	551	541	401	301	265	36	0	2670
count	1572514	8377283	10003942	10291601	8101162	6816337	6441448	904310	0	52508597
[55-59)	82	364	429	407	359	327	79	16	1	2064
count	1564292	6104697	7538046	7576234	6918256	6369083	1682670	362183	35090	38150551
[60-64)	30	158	222	115	62	41	41	16	1	686
count	462580	2580745	3880927	2075682	1155975	757920	877106	332500	16993	12140428
[65-69)	13	55	90	53	21	16	19	17	1	285
count	185267	878672	1560096	868130	382489	328948	343578	306783	52549	4906512
[70-74)	7	35	35	10	4	6	3	10	0	110
count	91371	522541	577894	137360	72266	79333	42525	133010	0	1656300
<b>TOTALS</b>										
count	814	3460	3403	2272	1437	1050	609	103	3	13151
salary	13961475	58826096	61122584	43005459	29070813	23896036	14827895	2293560	104632	247108550

AVERAGES --- Attained Age 48.21  
Service Years 10.10  
Active Salary 18,790

Hall Actuarial Associates

MEMBERSHIP PROFILE  
CATEGORIZED BY AGE AND YEARS EMPLOYED

LSEER RETIREMENT SYSTEM  
ACTIVE AFTER DROP

CELLS DEPICT - MEMBER COUNT  
TOTAL SALARY  
DROP BENEFITS

VALUATION DATE 6/30/2005

Age	YEARS EMPLOYED									Total
	(0-1)	[1-2)	[2-3)	[3-4)	[4-5)	[5-10)	[10-15)	[15-20)	[20- )	
[ 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
[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
[40-44)	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
[45-49)	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
[50-54)	5	3	0	1	0	0	0	0	0	9
	79968	71640	0	36540	0	0	0	0	0	188148
	79860	55260	0	22464	0	0	0	0	0	157584
[55-59)	40	25	9	3	0	2	0	0	0	79
	757045	435384	193500	47220	0	94140	0	0	0	1527289
	656388	336588	137652	34644	0	37944	0	0	0	1203216
[60-64)	70	98	44	26	18	7	0	0	0	263
	1129253	1593975	847022	489399	339470	123271	0	0	0	4522390
	669072	825036	488316	257832	181752	60912	0	0	0	2482920
[65-69)	24	21	61	62	34	47	0	0	0	249
	387792	317484	954116	1122082	688104	949524	0	0	0	4419102
	157032	114600	384876	444180	229680	354444	0	0	0	1684812
[70-74)	7	7	12	10	11	38	1	0	0	86
	98184	108936	183960	177756	167784	717300	13056	0	0	1466976
	60576	40680	78624	55080	52752	244392	8544	0	0	540648
TOTALS										
count	146	154	126	102	63	94	1	0	0	686
salary	2452242	2527419	2178598	1872997	1195358	1884235	13056	0	0	12123905
benefit	1622928	1372164	1089468	814200	464184	697692	8544	0	0	6069180

AVERAGES --- Attained Age 64.88  
Post Drop Years 2.70  
Active Salary 17,673  
Annual Benefit 8,847

Hall Actuarial Associates

MEMBERSHIP PROFILE  
CATEGORIZED BY AGE AND YEARS RETIRED

LSER RETIREMENT SYSTEM  
REGULAR RETIREES

CELLS DEPICT - MEMBER COUNT  
TOTAL BENEFITS

VALUATION DATE 6/30/2005

Age	YEARS RETIRED									Total	
	(0-1)	[1-2)	[2-3)	[3-4)	[4-5)	[5-10)	[10-15)	[15-20)	[20- )		
[ 0-39)	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0
[40-44)	5	11	2	1	1	1	0	0	0	0	21
	47196	142440	11700	17328	6816	5064	0	0	0	0	230544
[45-49)	10	34	13	4	4	12	0	0	0	0	77
	105804	553548	143568	43800	20376	67488	0	0	0	0	934584
[50-54)	19	66	29	30	19	36	4	0	0	0	203
	257844	1269792	355176	381336	186408	292788	42456	0	0	0	2785800
[55-59)	40	100	75	119	90	127	26	15	1	1	593
	598944	1652016	1122660	2023392	1121844	1439820	214260	120768	10188	10188	8303892
[60-64)	62	91	117	215	215	639	116	38	3	3	1496
	557844	981624	1245756	2325264	1924032	6455604	960348	244032	16632	16632	14711136
[65-69)	15	34	43	63	77	1336	298	69	21	21	1956
	141744	359208	423888	573360	555468	10338408	3157560	579672	132960	132960	16262268
[70-74)	3	11	13	17	25	603	978	211	47	47	1908
	32772	112524	119808	117972	169932	4282344	8393784	1970304	414324	414324	15613764
[75-79)	1	2	2	4	4	123	615	512	115	115	1378
	16356	31872	25428	50340	26004	907512	5311416	5008908	1347900	1347900	12725736
[80-84)	1	0	2	4	3	18	103	322	314	314	767
	12564	0	20268	30144	15276	146928	930852	3298440	3082488	3082488	7536960
[85-89)	0	0	0	1	0	0	1	38	234	234	274
	0	0	0	4500	0	0	3528	439896	2326704	2326704	2774628
[90-99)	0	0	0	0	0	0	0	1	129	129	130
	0	0	0	0	0	0	0	18732	1155960	1155960	1174692
TOTALS	156	349	296	458	438	2895	2141	1206	864	864	8803
benefit	1771068	5103024	3468252	5567436	4026156	23935956	19014204	11680752	8487156	8487156	83054004

AVERAGES --- Attained Age 70.37  
Years Retired 10.75  
Annual Benefit 9,435

# Hall Actuarial Associates

MEMBERSHIP PROFILE  
CATEGORIZED BY AGE AND YEARS RETIRED

LSER RETIREMENT SYSTEM  
DISABILITY RETIREES

CELLS DEPICT - MEMBER COUNT  
TOTAL BENEFITS

VALUATION DATE 6/30/2005

Age	YEARS RETIRED									Total
	(0-1)	[1-2)	[2-3)	[3-4)	[4-5)	[5-10)	[10-15)	[15-20)	[20- )	
[ 0-39)	0	1	1	0	0	2	1	0	0	5
	0	4656	5496	0	0	6564	5388	0	0	22104
[40-44)	4	3	4	6	3	8	1	1	0	30
	26640	16440	23676	43200	32724	42540	4608	6480	0	196308
[45-49)	18	7	12	13	4	24	14	2	2	96
	163584	41784	87888	108264	17976	156384	71772	17172	13872	678696
[50-54)	18	29	16	13	24	33	27	9	1	170
	241416	170880	118464	105528	147888	196776	142272	45180	4764	1173168
[55-59)	37	19	18	15	14	58	37	18	2	218
	375276	112872	128076	95052	78204	300720	193848	93348	10716	1388112
[60-64)	19	3	2	2	0	6	4	2	1	39
	176388	17916	16200	8256	0	29292	21060	9720	4836	283668
[65-69)	12	3	0	1	0	0	0	1	0	17
	92364	17376	0	3324	0	0	0	4884	0	117948
[70-74)	3	0	1	0	0	0	0	1	1	6
	14880	0	4596	0	0	0	0	264	7356	27096
[75-79)	0	0	0	1	0	0	0	0	1	2
	0	0	0	3912	0	0	0	0	4068	7980
[80-84)	0	0	0	0	0	0	0	0	1	1
	0	0	0	0	0	0	0	0	5004	5004
[85-89)	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
[90-99)	0	0	0	0	0	0	0	0	2	2
	0	0	0	0	0	0	0	0	4968	4968
TOTALS	111	65	54	51	45	131	84	34	11	586
benefit	1090548	381924	384396	367536	276792	732276	438948	177048	55584	3905052

AVERAGES --- Attained Age 54.59  
Years Retired 5.97  
Annual Benefit 6,664

# Hall Actuarial Associates

MEMBERSHIP PROFILE  
CATEGORIZED BY AGE AND YEARS RETIRED

LSER RETIREMENT SYSTEM  
SURVIVOR BENEFITS

CELLS DEPICT - MEMBER COUNT  
TOTAL BENEFITS

VALUATION DATE 6/30/2005

Age	YEARS RETIRED									Total
	(0-1)	[1-2)	[2-3)	[3-4)	[4-5)	[5-10)	[10-15)	[15-20)	[20- )	
[ 0-39)	0	2	0	6	6	34	21	7	1	77
	0	22860	0	57636	61512	304992	154452	81660	3312	686424
[40-44)	1	3	1	5	1	18	1	0	1	31
	15780	21984	22452	37392	11268	128364	8640	0	3036	248916
[45-49)	6	2	5	2	4	18	9	1	2	49
	73356	17364	41184	21456	30168	119880	74568	11892	10068	399936
[50-54)	5	11	5	7	9	34	7	5	1	84
	29904	115884	29532	54888	92004	289680	56592	55488	3780	727752
[55-59)	8	8	9	8	6	40	15	7	5	106
	57492	52092	75396	90012	48852	347568	118680	75708	24852	890652
[60-64)	1	14	10	14	13	57	29	13	6	157
	8088	117396	85008	84288	106080	445704	215028	126468	30144	1218204
[65-69)	5	14	7	10	11	89	53	26	5	220
	30864	81576	48696	59184	85032	616776	444492	204612	33420	1604652
[70-74)	14	11	13	12	15	67	71	25	15	243
	97752	93240	94464	96528	113952	508536	579780	198528	119736	1902516
[75-79)	9	12	8	9	14	68	76	31	21	248
	67764	109452	48000	93276	122268	568032	612528	223116	171852	2016288
[80-84)	9	6	9	11	9	44	38	30	35	191
	62412	48444	61488	96192	55152	331152	303216	263112	281628	1502796
[85-89)	2	2	2	5	2	12	27	11	39	102
	14076	8100	18732	29880	14952	97764	219048	97176	298788	798516
[90-99)	2	2	0	2	2	5	8	4	31	56
	9480	19836	0	11220	11268	44988	63612	29376	228648	418428
TOTALS	62	87	69	91	92	486	355	160	162	1564
benefit	466968	708228	524952	731952	752508	3803436	2850636	1367136	1209264	12415080

AVERAGES --- Attained Age 68.82  
Years Retired 10.24  
Annual Benefit 7,938

# Hall Actuarial Associates

MEMBERSHIP PROFILE  
CATEGORIZED BY AGE AND YEARS RETIRED

LSEER RETIREMENT SYSTEM  
DROP PARTICIPANTS

CELLS DEPICT - MEMBER COUNT  
TOTAL BENEFITS

VALUATION DATE 6/30/2005

Age	YEARS PARTICIPATED									Total
	(0-1)	[1-2)	[2-3)	[3-4)	[4-5)	[5-10)	[10-15)	[15-20)	[20- )	
[ 0-39)	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
[40-44)	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
[45-49)	2	2	0	0	0	0	0	0	0	4
	75756	34044	0	0	0	0	0	0	0	109800
[50-54)	32	33	18	0	0	0	0	0	0	83
	625140	828864	450240	0	0	0	0	0	0	1904244
[55-59)	63	133	89	0	0	0	0	0	0	285
	1071444	2362488	1552068	0	0	0	0	0	0	4986000
[60-64)	136	172	141	0	0	0	0	0	0	449
	1528776	1852320	1624740	0	0	0	0	0	0	5005836
[65-69)	8	14	8	0	1	0	0	0	0	31
	45492	107868	42912	0	5172	0	0	0	0	201444
[70-74)	1	1	2	0	0	0	0	0	0	4
	3660	4920	17532	0	0	0	0	0	0	26112
[75-79)	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
[80-84)	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
[85-89)	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
[90-99)	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
<b>TOTALS</b>										
count	242	355	258	0	1	0	0	0	0	856
benefit	3350268	5190504	3687492	0	5172	0	0	0	0	12233436

AVERAGES --- Attained Age 59.53  
Years Retired 1.54  
Annual Benefit 14,291

# Hall Actuarial Associates

MEMBERSHIP PROFILE  
CATEGORIZED BY AGE AND YEARS EMPLOYED

LSER RETIREMENT SYSTEM  
TERM-VESTED/RECIPROCAL

CELLS DEPICT - MEMBER COUNT  
TOTAL BENEFITS

VALUATION DATE 6/30/2005

Age	YEARS EMPLOYED									Total
	(0-1)	[1-5)	[5-10)	[10-15)	[15-20)	[20-25)	[25-30)	[30-35)	[35- )	
[ 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	0	0	2	0	0	0	0	0	2
:	0	0	0	21396	0	0	0	0	0	21396
:	:	:	:	:	:	:	:	:	:	:
[35-39)	0	2	0	6	0	0	0	0	0	8
:	0	2640	0	54192	0	0	0	0	0	56832
:	:	:	:	:	:	:	:	:	:	:
[40-44)	0	0	1	14	9	2	0	0	0	26
:	0	0	2400	73440	91476	49164	0	0	0	216480
:	:	:	:	:	:	:	:	:	:	:
[45-49)	0	0	1	26	10	4	1	2	0	44
:	0	0	3144	148380	103920	65424	15804	44340	0	381012
:	:	:	:	:	:	:	:	:	:	:
[50-54)	0	1	0	23	18	8	32	8	0	90
:	0	408	0	166452	135480	84876	668328	242184	0	1297728
:	:	:	:	:	:	:	:	:	:	:
[55-59)	0	1	0	31	22	38	13	6	0	111
:	0	4080	0	155604	154644	660636	281424	137820	0	1394208
:	:	:	:	:	:	:	:	:	:	:
[60-64)	0	1	1	16	16	19	2	1	0	56
:	0	264	10920	108084	202752	293376	39156	17844	0	672396
:	:	:	:	:	:	:	:	:	:	:
[65-69)	0	0	0	4	1	1	1	1	1	9
:	0	0	0	13536	1884	6924	15660	20580	26664	85248
:	:	:	:	:	:	:	:	:	:	:
[70-74)	0	0	0	5	2	1	2	0	0	10
:	0	0	0	8472	8940	4404	21528	0	0	43344
:	:	:	:	:	:	:	:	:	:	:
TOTALS	:	:	:	:	:	:	:	:	:	:
count	0	5	3	127	78	73	51	18	1	356
benefit	0	7392	16464	749556	699096	1164804	1041900	462768	26664	4168644

AVERAGES --- Attained Age 54.69  
Service Years 18.51  
Annual Benefit 11,710

EXHIBIT 5

PRINCIPLE PROVISIONS OF THE PLAN  
(Including Acts of 2005 Regular Session)

**EFFECTIVE DATE:**

July 1, 1947; last amendment date - July 1, 2004.

**EMPLOYEE:**

Any school bus driver, janitor, custodian, maintenance employee, bus aide, monitor or attendant or other regular school employee helping with the transportation of school children, and who is a legal employee of a parish or city school board of the State of Louisiana.

**EMPLOYER:**

The State of Louisiana, or any parish or city school board from which any employee receives his compensation.

**ELIGIBILITY FOR  
PARTICIPATION:**

Contingent upon approval of application filed with the Board of Trustees within 90-days of the date of Employment. However, no employee who is a member of any other retirement system supported in whole or in part by public funds shall be entitled to membership in this retirement system.

**SERVICE:**

Service as an "Employee", defined above.

**CREDITABLE SERVICE:**

Prior Service plus Membership Service, for which credit is allowed.

**PRIOR SERVICE:**

Service prior to July 1, 1947 for which prior service certificates are issued; granted without cost if certified.

**MEMBERSHIP SERVICE:**

Service as an "Employee" while a member of the system.

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

**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 regular interest from date withdrawn until paid.
2. Maximum of 4 years of credit for military service may purchased.
3. Conversion of Sick Leave and Annual Leave at retirement, or death may be converted to membership credit.
4. Part-time employees shall accrue a full year of creditable service for each full year of part-time service for benefit eligibility purposes.
5. Out of State service with other school systems may be purchased.

**EARNABLE COMPENSATION:**

The compensation earned by a member for any given period. Where compensation includes maintenance, the employing agency shall fix the value of that part of compensation not paid directly.

**AVERAGE FINALCOMPENSATION:**

The average annual earnable compensation of a member for the 36 highest successive months of employment or the highest 36 successive joined months of employment where interruption of service occurred (Effective 7/6/84); the average compensation of a member for purposes of computing benefits cannot increase more than 25% per year (Effective 1/1/87).

**ACCUMULATED CONTRIBUTIONS:**

Sum of all amounts deducted from compensation of a member plus any interest credited to his individual account in annuity savings fund plus any other amounts credited to the member's account.

**EMPLOYEE CONTRIBUTIONS:**

- 7% of earnable compensation.
- 6.65% effective Sept.1, 1990 (Act 340 of 1990).
- 7.00% effective Jan. 1, 1992 (Act 375 of 1991).
- 6.35% effective July 1, 1992 (Act 248 of 1992).
- 7.50% effective July 1, 2001 (Act 897 of 2001).

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

**EMPLOYER CONTRIBUTIONS:**

"Normal contribution" rate plus "accrued liability contribution" rate, as determined by the actuary and Board of Trustees. Eff. July 1, 1985, 10.18%. Act 81 of 1988 requires employer rate to be actuarially determined annually.

**RETIREMENT BENEFIT:**

**NORMAL RETIREMENT:**

Eligibility:

Written application to the Board of Trustees and the 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.

Benefit:

An annuity, which shall be the actuarial equivalent of accumulated employee contributions at retirement date, plus

A pension, which together with the above annuity provides a total allowance equal to 2 1/2% of average final compensation times the years of creditable service (including creditable unused sick and annual leave), plus an additional 1/2% of average final compensation times the years of creditable service in excess of 20 years, plus a two dollars per month for each year of credited service supplemental benefit, not to exceed average final compensation.

Act 278 of the 1999 regular legislative session provides a 3% accrual rate for each year of service earned after July 1, 1999, regardless of prior service earned.

Act 897 of the 2001 regular legislative session increases the accrual rate to 3 1/3% for active members after July 1, 2001 for all years of service.

**EARLY-REDUCED 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 earliest normal retirement date.

**COST OF LIVING BENEFITS:**

1. Prior to July 1, 1970 The Board may grant supplemental COLA not in excess of 2% from investment income, minimum \$20 per month.

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

After July 29, 1970 Board may grant supplemental COLA not in excess of 3% from investment income, minimum \$30 per month.

2. Under Act 798 of 1980:

A. COLA adjustments for retirees based on their date of retirement.

<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 COLA of 10% for those who retired on or before 7/1/80 .

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 for Retirees or survivors

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.

No increase can be more than \$100/month.

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

Act 278 of the 1999 regular legislative session permits the granting of COLA's in the form of \$1 for each year of service, \$1 for each year retired, plus \$1 for each year of service in excess of 30 years. Those 65 and older may receive an additional benefit equal to 2% of their current benefit.

**DISABILITY RETIREMENT:**

Eligibility:

5 years of creditable service; certification of disability by medical board (medical examination required once in every year for the first 5 years of disability retirement, and once in every 3 years thereafter, until age 60).

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

Benefit:

An annuity, which shall be the actuarial equivalent of accumulated employee contributions at retirement date, plus

A pension, which together with the above annuity provides a total allowance equal to 2 1/2% of average final compensation times the years of creditable service (including creditable unused sick and annual leave), plus a two dollars per month for each year of credited service supplemental benefit, not to exceed final average compensation. Act 500 of 1989 provides a minimum disability benefit of 33 1/3% of average final compensation.

**NOTE:** The supplemental benefit is discontinued to persons who become members of the retirement system after 6/30/86 (Act 608 of 1986).

**SURVIVOR'S BENEFITS:**

Eligibility:

1. Surviving Spouse with minor children of;  
-an active member with 5 years of creditable service with at least 2 years earned immediately prior to death or,  
-a member with 20 years of service at the time of death.
2. Surviving Spouse without minor children of;  
-an active member with 10 years of creditable service with at least 2 years earned immediately prior to death or,  
-a member with 20 years of service at the time of death.
3. Minor children with no spouse or spouse without legal custody of;  
-an active member with 5 years of creditable service with at least 2 years earned immediately prior to death or,  
-a member with 20 years of service at the time of death.
4. Beneficiary not eligible for (1), (2) or (3)

Benefits:

1. Greater of 75% of member's final average compensation or \$300 per month. Benefit ceases upon remarriage if less than 20 years of service and less than attained age 55.
2. Greater of 50% of member's final average compensation or \$200 per month. Benefit ceases upon remarriage if less than 20 years of service and less than attained age 55.
3. Greater of 75% of member's final average compensation or \$300 per month.
4. Return of member's accumulated contributions.

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

**NOTE:** Handicapped or mentally retarded children of a deceased member, regardless of age, who are dependent upon a surviving spouse or legal guardian shall be payable in accordance with minor children benefits of this section. The benefit payable shall be reduced by state assistance received.

**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.

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

**NOTE:** Revisionary annuities are available for Option 2 and Option 3, which provides a return to the maximum benefit if the spouse pre-deceases the retiree.

**REFUND OF CONTRIBUTIONS:**

If a member ceases to be eligible, 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.

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

**DEFERRED RETIREMENT OPTION PLAN:**  
**(Act 56 of 1991)**

Instead of terminating employees and accepting a service retirement allowance, any member who has met the following eligibility requirements may elect to participate in the Deferred Retirement Option Plan (DROP) and defer receipt of benefits.

**Eligibility:**

Ten (10) years at age sixty (60), twenty-five (25) years at age fifty-five (55), or thirty (30) years of creditable service including reciprocal service, but excluding conversion of sick and annual leave, and eligible to receive a service retirement allowance. However, all unused sick and annual leave is convertible after plan participation when member has terminated employment.

**Benefit:**

Duration of participation is specified and cannot exceed the period terminating on the third anniversary at the earliest date the member qualified for regular retirement.

Upon termination of employment at the end of or prior to the end of the specified period of participation, a participant will receive, at his option:

- (1) lump sum payment (equal to the payments to the account);
- (2) a true annuity based upon his account; or
- (3) any other method of payment if approved by the board of trustees. Monthly benefits being paid into the fund during participation will begin being paid to the retiree.

If a participant dies during the period of participation in the program, a lump sum payment equal to his account balance shall be paid to the beneficiary, or if none, to his estate; in addition, normal survivor benefits payable to survivors of retirees shall be payable.

If employment is not terminated at the end of the specified period of participation, then:

- (1) payment into account shall cease;
- (2) payment from account shall not be made until employment is terminated; and
- (3) the participant shall resume active contributing membership in the system.

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

Then, upon termination of employment, the benefit payments indicated above shall be paid. The participant shall receive an additional retirement benefit based on additional service rendered since termination of participation in the fund, usually the normal method of computation of benefit subject to the following:

- (1) If additional service was less than 36 months, average compensation figure used to calculate additional benefit shall be that used to calculate original benefit.
- (2) If additional service was 36 or more months, the average compensation figure used to calculate the additional benefit shall be based on compensation during the period of additional service.

**NOTE:**

DROP Accounts shall earn interest subsequent to the termination of DROP participation at a rate of half of one percentage point below the percentage rate of return of the System's investment portfolio as certified by the actuary on an annual basis.

Effective 1/1/2004 new DROP accounts are credited with Money Market rates or self directed accounts approved by the Board of Trustees.

**EXHIBIT 6**

**ACTUARIAL COST METHODS AND ASSUMPTIONS**

**COST METHOD:**

The individual "Entry Age Normal" 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 allocated on a level basis as percentage of payroll for each participant between entry age and assumed retirement age(s). 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 excess of the actuarial present value of future normal costs is called the actuarial accrued liability.

**ASSET VALUATION:**

For the Plan Year ending prior to June 30, 1999 equities are valued at a four year weighted average. The computation of the actuarial value of assets is the sum of the bonds at amortized cost, less a weighted average of unrealized losses or (gains) in the market value of equities, plus the market value of Equities

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

**ACCOUNTING DISCLOSURE:**

The Governmental Accounting Standards Board Statement No. 25 requires disclosure of certain actuarial liabilities for Public Employee Retirement Systems. The disclosures illustrated in Exhibit 3 were developed using the Entry Age Normal cost method. The statement of assets provided by the independent auditors was a copy of 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 to the extent that any difference in reporting affects the employer's contribution rate or the yield to the Actuarial Value of Assets.

**ACTUARIAL ASSUMPTIONS:**

The Retirement System is required to conduct an experience study every five years, but the scope of such a study is not necessarily limited to a five year period. The current five year observation period (1997-2001) was chosen to coincide with the most recent period of data reporting following the restructuring of the Deferred Retirement Option Program.

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

**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 most recent Experience Study. For mortality after disability, rates were on the Eleventh Actuarial Valuation of the Railroad Retirement System for permanent disabilities.

**RETIREMENT/DROP ASSUMPTION:**

Retirement rates are based on age and service eligibility requirements for normal benefits. Age and service requirements vary by plan. DROP is viewed as an alternative form of benefit accrual since mandatory termination is not required following participation. Therefore, at eligibility, the probability of DROP accrual is determined in conjunction with regular benefit accrual. Retirement rates and DROP probabilities are based on the most recent Experience Study and are illustrated in the rate tables at the end of this exhibit.

**TERMINATION ASSUMPTIONS:**

Voluntary termination or withdrawal rates are based on the most recent Experience Study. During the first five years of employment, the probability of voluntarily terminating is a multiple of the attained age rate in prior reports and a multiple of service duration in the current valuation as follows:

1st year	1.10x
2nd year	1.00x
3rd year	1.00x
4th year	1.00x
5th year	1.00x

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 rates of annual salary growth are based upon the member's years of service and are illustrated in the rate tables at the end of this exhibit.

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

**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 7.5%, net expenses.

**ADMINISTRATIVE EXPENSES:**

Operating expenses are included in Aggregate Normal Cost and are assumed to be \$2,600,000 per year. Investment Manager Fees are not included in Operating Expenses, but are treated as a direct offset to investment income. The Employer portion of the Normal Cost excludes an allocation for administrative expenses.

As a result of the change in 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.

**COST-OF-LIVING:**

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

ACTUARIAL TABLES AND RATES  
EFFECTIVE 6/30/2003

Age	- Death Rates - Male	- Death Rates - Female	Disability Rates	Termination Rates	Retirement Rates	DROP Rates	Dur	Salary Scale
18	.00039	.00020	.0000	.0000	.0000	.000	1	1.0800
19	.00041	.00021	.0000	.0400	.0000	.000	2	1.0600
20	.00042	.00022	.0000	.1600	.0000	.000	3	1.0400
21	.00044	.00024	.0000	.1500	.0000	.000	4	1.0400
22	.00045	.00025	.0000	.1300	.0000	.000	5	1.0400
23	.00047	.00027	.0000	.1300	.0000	.000	6	1.0400
24	.00049	.00028	.0000	.1300	.0000	.000	7	1.0400
25	.00052	.00030	.0001	.0750	.0000	.000	8	1.0400
26	.00054	.00032	.0001	.0650	.0000	.000	9	1.0400
27	.00057	.00034	.0001	.0650	.0000	.000	10	1.0400
28	.00060	.00036	.0001	.0650	.0000	.000	11	1.0400
29	.00064	.00038	.0001	.0650	.0000	.000	12	1.0400
30	.00067	.00040	.0001	.0650	.0000	.000	13	1.0400
31	.00072	.00043	.0001	.0650	.0000	.000	14	1.0400
32	.00076	.00046	.0001	.0650	.0000	.000	15	1.0400
33	.00082	.00049	.0010	.0500	.0000	.000	16	1.0400
34	.00087	.00053	.0010	.0550	.0000	.000	17	1.0400
35	.00096	.00056	.0015	.0550	.0000	.000	18	1.0400
36	.00101	.00060	.0015	.0500	.0000	.000	19	1.0400
37	.00107	.00064	.0015	.0500	.0000	.000	20	1.0400
38	.00115	.00069	.0015	.0400	.0000	.000	21	1.0400
39	.00125	.00074	.0025	.0400	.0000	.000	22	1.0400
40	.00138	.00080	.0025	.0350	.0000	.000	23	1.0400
41	.00152	.00086	.0025	.0350	.0000	.000	24	1.0400
42	.00170	.00094	.0025	.0350	.0000	.000	25	1.0400
43	.00191	.00102	.0030	.0300	.0000	.000	26	1.0400
44	.00215	.00112	.0030	.0300	.0000	.000	27	1.0400
45	.00243	.00124	.0030	.0300	.0000	.000	28	1.0400
46	.00275	.00137	.0040	.0250	.0000	.000	29	1.0400
47	.00310	.00152	.0050	.0250	.6000	.500	30	1.0400
48	.00349	.00167	.0070	.0250	.6000	.500	31	1.0450
49	.00390	.00183	.0070	.0200	.6000	.500	32	1.0450
50	.00434	.00199	.0070	.0200	.6000	.500	33	1.0450
51	.00480	.00217	.0070	.0200	.6000	.500	34	1.0450
52	.00528	.00236	.0085	.0200	.6000	.300	35	1.0450
53	.00578	.00257	.0095	.0160	.6000	.300	36	1.0450
54	.00629	.00282	.0060	.0160	.4500	.300	37	1.0450
55	.00681	.00311	.0060	.0160	.4000	.400	38	1.0450
56	.00735	.00345	.0075	.0160	.4000	.400	39	1.0450
57	.00793	.00383	.0060	.0160	.4000	.300	40	1.0450
58	.00858	.00425	.0045	.0160	.4000	.300	41	1.0450
59	.00932	.00471	.0045	.0160	.4500	.300	42	1.0450
60	.01018	.00523	.0035	.0160	.3500	.300	43	1.0450
61	.01118	.00579	.0020	.0200	.2200	.250	44	1.0450
62	.01237	.00641	.0020	.0200	.2200	.250	45	1.0450
63	.01377	.00710	.0020	.0200	.2200	.250	46	1.0450
64	.01541	.00785	.0020	.0200	.2500	.250	47	1.0450
65	.01732	.00869	.0010	.0200	.3000	.250	48	1.0450
66	.01953	.00965	.0010	.0200	.2000	.250	49	1.0450
67	.02200	.01078	.0010	.0200	.2000	.250	50	1.0450
68	.02470	.01214	.0010	.0200	.2000	.150	51	1.0450
69	.02757	.01376	.0010	.0200	.2000	.100	52	1.0450
70	.03059	.01570	.0000	.0200	.2000	.100	53	1.0450
71	.03373	.01796	.0000	.0200	.2000	.000	54	1.0450
72	.03708	.02053	.0000	.0200	.5000	.000	55	1.0450
73	.04076	.02344	.0000	.0200	.5000	.000	56	1.0450
74	.04488	.02666	.0000	.0200	.9900	.000	57	1.0450

## EXHIBIT 7

## DEVELOPMENT OF TARGET RATIO

Funded Ratio of the System as of the 1986 fiscal year end . . . . . .71000

Number of fiscal years elapsed since the 1986 fiscal year end  
multiplied by one-thirtieth of the difference between one hundred  
percent and the initial Funded Ratio. . . . . .18367

Changes in Funded Ratio after the 1986 fiscal year end;

<u>Date of Change</u>	<u>Change in funded Ratio</u>
<u>6/30/87</u>	<u>.17100</u>
<u>6/30/90</u>	<u>.06690</u>
<u>6/30/96</u>	<u>.03694</u>
<u>6/30/99</u>	<u>.00388</u>
<u>6/30/03</u>	<u>-.04485</u>

Total Change in Funded Ratio . . . . . .23387

Number of fiscal years elapsed since the date of each change  
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>-.10260</u>
<u>6/30/90</u>	<u>-.03345</u>
<u>6/30/96</u>	<u>-.01108</u>
<u>6/30/99</u>	<u>-.00078</u>
<u>6/30/03</u>	<u>.00299</u>

Total Amortization of Changes . . . . . -.14492

Target Ratio as of the end of the just completed fiscal year. . . . . .98262

Actual Funded Ratio of the system as of the just completed fiscal year. .75324

This system has not met the target ratio required to grant a cost of living  
increase to current benefit recipients.

## EXHIBIT A

AMORTIZATION of UNFUNDED  
ACTUARIAL ACCRUED LIABILITY  
JUNE 30, 2005

<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>
1993	Change in Liability	L	25	-65,622,628	24	-64,657,275	-5,677,975
1994	Change in Liability	L	25	-30,846,941	24	-30,393,162	-2,669,021
1995	Change in Liability	L	25	2,558,051	24	2,520,420	221,334
1996	Change in Liability	L	25	-19,620,386	24	-19,331,757	-1,697,647
1997	Change in Liability	L	25	-9,046,638	24	-8,913,556	-782,757
1998	Change in Liability	L	25	-105,844,372	24	-104,287,330	-9,158,148
1999	Change in Liability	L	25	-48,468,045	24	-47,755,048	-4,193,681
2000	Change in Liability	L	25	-8,704,034	24	-8,575,992	-753,114
2001	Change in Liability	I	27	239,310,198	26	243,821,482	13,542,965
2002	Change in Liability	I	28	199,940,651	27	203,976,364	11,046,282
2003	Change in Liability	I	29	214,321,070	28	218,912,121	11,573,602
2004	Change in Liability	L	30	52,010,701	29	51,507,693	4,247,412
2005	Change in Liability	L	30	4,619,288	30	<u>4,619,288</u>	<u>377,230</u>
TOTAL OUTSTANDING BALANCE						441,443,248	16,076,482
<b>EMPLOYERS' CREDIT BALANCE</b>							
2001	Contribution Variance	L	5	0	1	0	0
2002	Contribution Variance	L	5	0	2	0	0
2003	Contribution Variance	L	5	0	3	0	0
2004	Contribution Variance	L	5	19,817,170	4	16,405,353	4,724,152
2005	Contribution Variance	L	5	8,433,787	5	<u>8,433,787</u>	<u>2,010,504</u>
TOTAL CREDIT BALANCE						24,839,140	6,734,656
<b>TOTAL UNFUNDED ACTUARIAL ACCRUED LIABILITY</b>						466,282,388	

**NOTE:** Effective July 1, 1990, Actuarial Valuation Rate changed from 7% to 7 1/2%.  
Effective July 1, 1992, Amortization Period changed in accordance with Act 257.  
Effective July 1, 2004, Amortization Period changed in accordance with Act 588.