[^0]September 26, 2007

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, 2007.

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
September 26, 2007
A brief summary of the more important figures developed in this valuation, with comparable results from previous valuations are as follows:

|  |  | June 30, 2007 | June 30, 2006 | June 30, 2005 |
| :---: | :---: | :---: | :---: | :---: |
| I. | Membership Census |  |  |  |
|  | 1) Retirees | 12,017 | 11,687 | 10,953 |
|  | 2) Actives | 12,935 | 13, 079 | 13,837 |
|  | 3) DROP | 673 | 732 | 856 |
|  | 4) Terminated Vested | 385 | 292 | 356 |
| II. | Annual Benefits | \$ 115, 079, 088 | \$ 110,434,116 | \$ 99,374,136 |
| III. | Total Payroll | 259, 044, 840 | 239,320,589 | 259, 232,455 |
| IV. | Valuation Assets | 1,558,328, 021 | 1,480,748,380 | 1,423,206,908 |
| V. | Investment Yield |  |  |  |
|  | Market Value | 14.90\% | 5.77\% | 8.19\% |
|  | 5 year avg. | 8.86\% | 5.36\% | 3.79\% |
|  | 10 year avg. | 7.26\% | 7.59\% | 8.02\% |
|  | Actuarial Value | 9.85\% | 9.19\% | 7.51\% |
|  | 5 year avg. | 6.16\% | 3.81\% | 2.36\% |
|  | 10 year avg. | 7.46\% | 7.79\% | 7.99\% |
| DROP Accounts ${ }^{1}$ |  | 9.35\% | 8.69\% | 7.01\% |
| VI. | Experience Account | 0 | n/a | n/a |
| VI. | Cost to Fund Annual |  |  |  |
|  | Pension Accruals | 49,880, 025 | 45,920, 822 | 49,380,873 |
|  | (Normal Costs) | 19.26\% | 19.19\% | 19.05\% |
| VII. | Unfunded Actuarial |  |  |  |
|  | Accrued Liability | 389,274,992 | 391,845,885 | 466,237,714 |
| VIII. | Funded Percentage | 80.0\% | 79.1\% | 75.3\% |
| IX. | Funding Requirements to Pay (Mid-year Payment) |  |  |  |
|  | 1) Employee Contribution | 19,648,151 | 18,148,302 | 19,442,434 |
|  | Rate (Current Year) | 7.50\% | 7.50\% | 7.50\% |
|  | 2) Employer Contribution | 45,808, 043 | 43,526,534 | 49, 942,339 |
|  | Rate (Current Year) | 17.5\% | 18.0\% | 19.1\% |
|  | 3) Projected Employer | 47, 867,770 | 44,890,556 | 52,694,591 |
|  | Rate (Next Fiscal Year) | 17.8\% | 18.1\% | 19.6\% |

Funding Requirements measure the cost of benefits in effect on June 30, 2007.
${ }^{1}$ Excludes Money Market DROP Accounts.

Board of Trustees
September 26, 2007

## Current Funding

The Actuarial Valuation for the plan year ending June 30, 2007 discloses a decrease in the plan's unfunded actuarial accrued liability. The system's unfunded accrued liability decreased from a prior year balance of $\$ 391.8$ million to the current deficit of $\$ 389.2$ 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 6/30/2006
\$ 391, 845,885

## INCREASES

Interest on Unfunded Liability
Experience Loss

Incurred Increases

DECREASES
Amortization Payment \$ 19,265,053

Employer Shortfall Gain 3,778,270
Investment Gain

Incurred Decreases

Unfunded Liability 6/30/2007
\$ 29,388,441
$29,715,427$

59,103,868

38,631,438
$61,674,761$

Board of Trustees
September 26, 2007

## Legislative Changes

Act 213 permits the reemployment of retired school bus drivers without suspension of benefits after one year of reemployment. Upon termination, employees receive a refund of their contributions without interest. Employer pays the actuarial cost.

Act 232 grants to retirees and survivors a one time supplemental lump sum COLA funded from excess interest equal to $3.0 \%$ or $\$ 300$, whichever is the greater. The applicability of this Act is currently pending legal review for conflicts with Act 333.

Act 333 repeals the Target Ratio Test as the benchmark for granting COLA's and creates an Experience Account. The account will be allocated half of the excess (deficit) interest earnings. A COLA may be granted when the accumulated balance is sufficient to fund the colA.

## Funding

The projected employer contribution rate for the 2007-2008 plan year was set by PERSAC at $18.1 \%$. The actual employer contribution rate determined by this valuation for the current plan year is $17.5 \%$. Therefore, the current plan year should generate a contribution shortfall credit since the PERSAC approved rate exceeds the valuation rate by $0.6 \%$. The experience gain was sufficient to offset the experience loss and the increase the amortization changes which amortize the losses sustained during 2001-2003 fiscal years as increasing annuities

## 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.

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.

I. Normal Costs
(to fund annual pension accruals)

Active Members with Complete Data
a) Retirement Benefits
b) Disability Benefits
c) Survivor Benefits
d) Voluntary Termination
e) Expenses

TOTAL

| \$ $37,066,739$ | $14.31 \%$ |
| ---: | ---: |
| $2,045,388$ | $.79 \%$ |
| $2,979,541$ | $1.15 \%$ |
| $4,188,357$ | $1.62 \%$ |
| $3,600,000$ | $1.39 \%$ |
| $49,880,025$ | $19.26 \%$ |


| \$ $33,952,687$ | $14.19 \%$ |
| ---: | ---: |
| $1,912,676$ | $.80 \%$ |
| $2,737,633$ | $1.14 \%$ |
| $4,017,826$ | $1.68 \%$ |
| $3,300,000$ | $1.38 \%$ |
| $45,920,822$ | $19.19 \%$ |

II. Actuarial Accrued Liability
a) Active Members

1) Retirement Benefits

$$
\$ 579,288,554
$$

2) Disability Benefits

$$
14,036,359
$$

3) Survivor Benefits

$$
19,224,438
$$

4) Voluntary Termination

$$
\begin{array}{r}
\$ 607,497,423 \\
14,248,609 \\
20,233,506 \\
24,611,773 \\
\hline 666591
\end{array}
$$

$$
24,001,583
$$

b) Retired and Inactive Members

1) Regular Retirees

888,399,983
847,368,605
22, 902, 125
23, 472, 780
2) Disabled Retirees

110,437,170
108,606,912
27,103,526
3,533,535
164,243,602
$64,391,761$
$1,281,011,702$
19,605, 627
4,260, 262
169,379, 813
$63,349,332$
$1,236,043,331$
c) TOTAL
$1,947,603,013$
1,872,594,265

## Exhibit 1 (Continued)

Costs, Liabilities \& Contributions

June 30, 2007
June 30, 2006
II. Actuarial Accrued Liability TOTAL (Preceding page)
\$ 1,947, 603, 013
III. Assets
$1,558,328,021$
1,480,748,380
IV. Unfunded Actuarial Accrued

Liabilities - (Surplus)
389, 274, 992
$391,845,885$
a) Change over prior year
$-2,570,893$
-74, 391, 829
b) Funded Percentage
80.01\%
79.08\%
V. Employer Contributions

To Fund Current Plan Year ${ }^{1}$

| a) Employer Portion of Normal Cost | $27,155,427$ | $24,945,667$ |
| :--- | ---: | ---: |
| b) Amortization Payments | $11,076,041$ | $10,103,602$ |
| c) Previous Year (Short-fall) | $7,576,575$ | $8,477,265$ |
|  |  | $43,526,534$ |
| TOTAL Required Contribution | $45,808,043$ | $18.0 \%$ |
|  | $17.5 \%$ | $19.6 \%$ |

VI. Projected Employer Contributions

To Fund Next Plan Year ${ }^{1}$
a) Employer Portion of Normal Cost
b) Amortization Payments
c) Short-fall Charge
TOTAL Projected Contribution

25,566,063

7,520,333

44,890,556
18.1\%

239,320,589
241, 977, 364
247,995,314

27, 826,578
12,853,123

47, 867,770
$17.8 \%$

259,044,840
261, 975, 340
268,450,107
.

27,155,427
11,076, 041
7,576,575

45, 808, 043
18.1\%

[^1]
## EXHIBIT 2

FINANCIAL SUMMARY

## STATEMENT OF REVENUES AND EXPENSES

FOR FISCAL YEAR ENDING

|  |  |
| :--- | :--- |
| June 30, 2007 | June $30,2006 \quad$ June 30,2005 |

## OPERATING REVENUES:

1. Contribution Income

Member
Employer
$\$ 19,258,618$
$50,489,918$
$\$ 17,716,761$
$43,458,220$
\$ 18,946,671
37,753, 893
2. Other Income

Transfers
Miscellaneous TOTAL CONTRIBUTIONS
$\begin{array}{r}0 \\ 0 \\ \hline 69,748,536\end{array}$

| 0 | 0 |
| ---: | ---: |
| 0 | 0 |
|  | $56,700,564$ |

3. Investment Income

Investments
Less, Manager Fees TOTAL INVESTMENT INCOME
4. Total Revenues

224,963,755
-3,183,034
221,780,721

291,529, 257

87,249,926
$\frac{-3,210,066}{84,039,860}$
118,212, 004
-3,119,925
115,092, 079

145,214, 841
$171,792,643$

## OPERATING EXPENSES:

1. General Administration

Other Expenses
Employer Credit Expense

$$
\begin{array}{r}
3,587,553 \\
127,973 \\
0
\end{array}
$$

$$
\begin{array}{r}
130,256,443 \\
4,989,215 \\
334,411 \\
\hline 135,580,069
\end{array}
$$

139,295,595

152,233, 662

$$
\begin{array}{r}
3,276,641 \\
133,430 \\
0
\end{array}
$$

3,119,617 140,379

0
2. Benefits Paid
a) Pension Benefits
b) Return of Contrib.
c) Transfers Out TOTAL BENEFITS PAID
3. Total Operating Expenses

NET INCREASE:

## EXHIBIT 2 (Continued)

## Financial Summary

# FINANCIAL SUMMARY STATEMENT OF ASSETS FOR FISCAL YEAR ENDING 

June 30, 2007
---------Prior Years---------
June 30, 2006 June 30,2005

| $\$ 16,553,344$ |
| ---: |
| $73,653,099$ |
| $10,283,473$ |
| $380,308,301$ |
| $41,230,226$ |
|  |
| $829,543,133$ |
| $126,229,365$ |
| $5,186,030$ |
| $63,851,755$ |
|  |
| $2,261,714$ |
| $104,778,358$ |
| $3,684,688$ |
| $-934,153$ |

1,656,629,333
1, 394, 185, 128
9.85\%
9.35\%
14.90\%

Prior Year End Balance

+ Excess Added
- Contribution Credited
+ Accumulated Interest
Fund Balance - Year End


## Actuarial Value of Assets:

TOTAL ASSETS
Change in Unrealized (G/L)
Plan Year - 2 (wt. 1/4)
Plan Year - 1 (wt. 2/4)
Plan Year (wt. 3/4)

Actuarial Value of Assets
Less, Experience Account Fund Valuation Assets

| $1,656,629,333$ |
| ---: |
| $31,097,880$ |
| $-13,926,514$ |
| $129,986,799$ |

$\$ 14,776,356$
$55,052,813$
$3,966,231$
$422,888,425$
$74,836,061$

| $753,696,612$ | $719,855,456$ |
| ---: | ---: |
| $121,917,501$ | $108,039,974$ |
| 0 | 0 |
| 0 | 0 |


| $2,249,936$ | $2,368,916$ |
| ---: | ---: |
| $48,148,813$ | 0 |
| $3,782,036$ | $3,925,350$ |
| $3,080,887$ | $-18,196,891$ |

$1,504,395,671$
$1,371,938,265$
9.19\%
8.69\%
5.77\%
n/a
n/a
n/a
n/a
n/a

1,504,395,671

74,172,945
31, 097, 880
$-13,926,514$

1,480,748,380
n/a
1,480,748,380

1,490,399,322

27,130,127
74,172,945
31,097, 880

1,423,206,908
n/a
1,423,206,908

## EXHIBIT 3

## PENSION ACCOUNTING <br> 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 | Actuarial | Actuarial | Unfunded |  |  | UAAL as a |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Value of | Accrued | AAL | Funded | Covered | Percentage of |
| Valuation | Assets | Liability (AAL) | (UAAL) | Ratio | Payroll | Payroll |
| Date | (a) | (b) | (b-a) | (a/b) | (c) | ( (b-a)/c) |
| 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 |
| 2006 | 1,480,748 | 1,872,594 | 391, 846 | 79.1 | 239,321 | 163.7 |
| 2007 | 1,558,328 | 1,947,603 | 389,275 | 80.0 | 259,045 | 150.3 |

The total actuarial accrued liability determined using the Individual Entry Age Normal cost method increased by $\$ 75,008,748$ from June 30,2006 to June 30,2007 . From all sources there was a net experience gain of $\$ 8,916,009$.

## EXHIBIT 3 (Continued)

Pension Accounting \& Financial Disclosure

## SUPPLEMENTARY INFORMATION

## SCHEDULE OF EMPLOYER CONTRIBUTIONS

| Fiscal Year | $\qquad$ | Percent Contributed | $\begin{gathered} \text { Annual } \\ \text { Pension } \\ \text { Cost (APC) }{ }^{1} \\ \hline \end{gathered}$ | $\qquad$ | ```Percentage of APC Contributed``` | Net Pension Obligation |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 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 |
| 2006 | 50,768, 224 | 85.6 | 45,648,519 | 43,458, 220 | 95.2 | 27,029,439 |
| 2007 | 46,711, 648 | 108.1 | 39,949,441 | 50,489,918 | 126.4 | 16,488,962 |

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
(2) Interest on Net Pension Obligation
(3) Amortization of Net Pension Obligation
(4) Annual Pension Cost (1)+(2)-(3)
(5) Employer Contribution
(6) Increase (decrease) in Net Pension Obligation
(7) Net Pension Obligation Beginning of Year
(8) Net Pension Obligation End of Year (6)+(7)

$$
\begin{array}{r}
46,711,648 \\
2,027,208 \\
8,789,415 \\
39,949,441 \\
\\
50,489,918 \\
-10,540,477 \\
27,029,439 \\
16,488,962
\end{array}
$$

## 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 End | Contribution | Contribution | Income | Total |
| 1998 | 14,353,380 | 13,533,467 | 157, 957,573 | 185, 844,420 |
| 1999 | 15, 028, 064 | 14,258,000 | 128, 912, $738^{1}$ | 158,198,802 |
| 2000 | 15,149,157 | 81, $777{ }^{2}$ | 119,308,696 | 134,539,630 |
| 2001 | 15,574,349 | 74,856 ${ }^{2}$ | -28,746, 088 | -13, 096,883 |
| 2002 | 18,827,944 | 105,899 ${ }^{2}$ | -34,986,556 | -16, 052,713 |
| 2003 | 19,820,210 | 58, $736{ }^{2}$ | 50,126, 072 | 70,005,018 |
| 2004 | 19,676, 052 | 21,940, 471 ${ }^{2}$ | 157,897,575 | 199,514, 098 |
| 2005 | 18,946, 671 | 37,753,893 | 115,092,079 | 171,792,643 |
| 2006 | 17,716,761 | 43,458, 220 | 84,039,860 | 145,214,841 |
| 2007 | 19,258,618 | 50,489,918 | 221,780, 721 | 291,529, 257 |

Expenses by Type

| Fiscal <br> Year End | Benefits | Refunds | Administrative Expenses ${ }^{2}$ | Total |
| :---: | :---: | :---: | :---: | :---: |
| 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 |
| 2006 | 119,959, 677 | 7,848,744 | 3,410,071 | 131,218,492 |
| 2007 | 130,256,443 | 5,323,626 | 3,715,526 | 139,295,595 |

[^2]
## 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 no 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:

|  | $\begin{gathered} --2007--- \\ \text { Census } \end{gathered}$ | $\begin{gathered} --2006--- \\ \text { Census } \end{gathered}$ | $\begin{array}{r} --2005-- \\ \text { Census } \end{array}$ |
| :---: | :---: | :---: | :---: |
| Active Members | 12,344 | 12,495 | 13,151 |
| After DROP | 591 | 584 | 686 |
| Regular Retirees | 9,846 | 9,557 | 8,803 |
| Disability Retirees | 487 | 509 | 586 |
| Survivors | 1,684 | 1,621 | 1,564 |
| Terminated Vested | 385 | 292 | 356 |
| DROP Participants | 673 | 732 | 856 |
| TOTAL | 26,010 | 25,790 | 26,002 |

MEMBERSHIP PROFILE
CATEGORIZED BY AGE AND YEARS EMPLOYED
$\begin{aligned} \text { CELLS DEPICT } & \text { MEMBER COUNT } \\ & \text { TOTAL SALARY }\end{aligned}$

LSER RETIREMENT SYSTEM REGULAR ACTIVE MEMBERS

VALUATION DATE 6/30/2007


| AVERAGES --- | Attained Age | 48.46 |
| :--- | :--- | :--- | ---: |
|  | Service Years | 9.34 |
|  | Active Salary | 19,604 |


$\begin{array}{ll}\text { MEMBERSHIP PROFILE } & \text { LSER RETIREMENT SYSTEM } \\ \text { CATEGORIZED BY AGE AND YEARS RETIRED }\end{array}$

CELLS DEPICT - MEMBER COUNT TOTAL BENEFITS

REGULAR RETIREES

VALUATION DATE 6/30/2007

| Age | (0-1) | [1-2) | [2-3) | $[3-4)^{\text {YE }}$ | $\begin{gathered} \text { RS RETIRE } \\ {[4-5)} \end{gathered}$ | [5-10) | [10-15) | [15-20) | [20- ) | : Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  | : |
| :[ 0-39): | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | : 0 |
| : | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | : |
| : |  |  |  |  |  |  |  |  |  | : |
| : |  |  |  |  |  |  |  |  |  |  |
| :[40-44): | 4 | 6 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | : 13 |
| : | 33468 | 64608 | 0 | 35244 | 0 | 0 | 0 | 0 | 0 | : 133320 |
| : |  |  |  |  |  |  |  |  |  | : |
| : |  |  |  |  |  |  |  |  |  | : |
| :[45-49): | 16 | 30 | 10 | 28 | 9 | 11 | 0 | 0 | 0 | : 104 |
| : | 202476 | 473064 | 106140 | 402876 | 86940 | 76764 | 0 | 0 | 0 | : 1348260 |
| : |  |  |  |  |  |  |  |  |  | : |
| : |  |  |  |  |  |  |  |  |  | : |
| :[50-54): | 25 | 85 | 43 | 62 | 31 | 38 | 6 | 0 | 0 | : 290 |
| : | 333888 | 1417896 | 644136 | 1220160 | 467928 | 308292 | 37332 | 0 | 0 | : 4429632 |
| : |  |  |  |  |  |  |  |  |  | : |
| : |  |  |  |  |  |  |  |  |  | : 78 |
| :[55-59): | 40 | 91 | 104 | 183 | 123 | 174 | 46 | 16 | 9 | : 786 |
| : | 615072 | 1588008 | 1836444 | 3548292 | 2055240 | 2512440 | 328260 | 108540 | 54108 | : 12646404 |
| : |  |  |  |  |  |  |  |  |  | : |
| :[60-64) : | 102 | 117 | 155 | 231 | 199 | 704 | 146 | 45 | 9 | 1708 |
| : | 967776 | 1257876 | 1698432 | 2741976 | 2517372 | 8313336 | 1267236 | 312660 | 41856 | 19118520 |
| : |  |  |  |  |  |  |  |  |  | : |
| : |  |  |  |  |  |  |  |  |  |  |
| :[65-69) : | 14 | 60 | 41 | 61 | 74 | 1275 | 519 | 75 | 28 | : 2147 |
| : | 107064 | 672360 | 341148 | 603060 | 683532 | 10582044 | 5145780 | 590280 | 196584 | : 18921852 |
| : |  |  |  |  |  |  |  |  |  |  |
| : : |  |  |  |  |  |  |  |  |  |  |
| :[70-74): | 14 | 18 | 13 | 17 | 18 | 310 | 1242 | 232 | 65 | : 1929 |
| : | 142260 | 173004 | 107148 | 170724 | 163332 | 2363232 | 9859368 | 2295288 | 542760 | : 15817116 |
| : |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  | : |
| :[75-79) : | 2 | 3 | 5 | 4 | 6 | 91 | 630 | 643 | 121 | : 1505 |
| :[75-79): | 22980 | 30852 | 52212 | 47028 | 64548 | 665868 | 4951932 | 5837832 | 1382940 | : 13056192 |
| : : |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| :[80-84): | 0 | 0 | 0 | 0 | 3 | 19 | 122 | 343 | 396 | 883 |
|  | 0 | 0 | 0 | 0 | 36024 | 137520 | 954192 | 3332268 | 3949812 | 8409816 |
| : |  |  |  |  |  |  |  |  |  | : |
|  |  |  |  |  |  |  |  |  |  | : |
| :[85-89) : | 0 | 0 | 1 | 0 |  |  | 10 | 45 | 299 | 357 |
| (85-89): | 0 | 0 | 12564 | 0 | 0 | 10620 | 104676 | 444924 | 3052620 | 3625404 |
| : |  |  |  |  |  |  |  |  |  | : |
|  |  |  |  |  |  |  |  |  |  | : |
| :[90-99): | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 122 | 124 |
| : | 0 | 0 | 0 | 0 | 0 | 4500 | 0 | 18732 | 1104120 | 1127352 |
| : |  |  |  |  |  |  |  |  |  | : |
| :TOTALS |  |  |  |  |  |  |  |  |  | : |
| : |  |  |  |  |  |  |  |  |  | : |
| :count : | 217 | 410 | 372 | 589 | 463 | 2625 | 2721 | 1400 | 1049 | 9846 |
| :benefit: | 2424984 | 5677668 | 4798224 | 8769360 | 6074916 | 24974616 | 22648776 | 12940524 | 10324800 | 98633868 |


| AVERAGES | --- | Attained Age | 70.07 |
| :--- | :--- | :--- | ---: |
|  |  | Years Retired | 10.92 |
|  | Annual Benefit | 10,018 |  |


| MEMBERSHIP PROFILE | LSER RETIREMENT SYSTEM |
| :--- | :--- |
| CATEGORIZED BY AGE AND YEARS RETIRED | DISABILITY RETIREES |
| CELLS DEPICT $-\quad$  <br>   <br>  MEMBER COUNT <br>  TOTAL BENEFITS | VALUATION DATE |



| AVERAGES --- | Attained Age | 54.82 |
| :--- | :--- | :--- | ---: |
|  | Years Retired | 6.67 |
|  | Annual Benefit | 6,208 |


| MEMBERSHIP PROFILE | LSER RETIREMENT SYSTEM |
| :--- | :--- |
| CATEGORIZED BY AGE AND YEARS RETIRED | SURVIVOR |
|  |  |
| CELLS DEPICT $-\quad$ MEMBER COUNT | VALUATION |
|  | TOTAL BENEFITS |



$$
\begin{array}{llll}
\text { AVERAGES }--- & \text { Attained Age } & 69.15 \\
& \text { Years Retired } & 12.72 \\
& & \text { Annual Benefit } & 7,970
\end{array}
$$

| MEMBERSHIP PROFILE | LSER RETIREMENT SYSTEM |
| :--- | :--- |
| CATEGORIZED BY AGE AND YEARS EMPLOYED | TERM-VESTED/RECIPROCAL |
|  |  |
| CELLS DEPICT $-\quad$ MEMBER COUNT | VALUATION |
|  | TOTAL BENEFITS |



| MEMBERSHIP PROFILE | LSER RETIREMENT SYSTEM |
| :--- | :--- |
| CATEGORIZED BY AGE AND YEARS RETIRED | DROP PARTICIPANTS |
|  |  |
| CELLS DEPICT $-\quad$ MEMBER COUNT | VALUATION |
|  | TOTAL BENEFITS |



| AVERAGES --- | Attained Age | 59.98 |
| :--- | :--- | :--- | ---: |
|  | Years Retired | 1.66 |
|  | Annual Benefit | 13,779 |

# EXHIBIT 5 <br> PRINCIPLE PROVISIONS OF THE PLAN (Including Acts of 2007 Regular Session) 

## EFFECTIVE DATE:

July 1, 1947

## 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 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) <br> 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 FINAL COMPENSATION:

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).

For those members hired on and after 7/1/2006, the period for determining final average compensation is extended from 36 months to 60 months.

## 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:

7.00\% 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) <br> 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 $31 / 3 \%$ 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.

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

## EXHIBIT 5 (Continued) <br> <br> Principle Provisions

 <br> <br> Principle Provisions}
## 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).

## 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 $331 / 3 \%$ 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 age 55.

## EXHIBIT 5 (Continued)

## Principle Provisions

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 age 55.
3. Greater of $75 \%$ of member's final average compensation or $\$ 300$ per month.
4. Return of member's accumulated contributions.

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 is 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 l - 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) <br> Principle Provisions

## COST OF LIVING INCREASES:

HB 658 of 2007 establishes an Experience Account which, is credited with $50 \%$ of the excess investment experience gain and debited with $50 \%$ of the net investment
experience loss. Balances in the experience account accrue interest at the average actuarial yield for the System portfolio. Once the balance of the Experience Account accumulates to a sum sufficient to grant retirees a COLA, the Board may grant such COLA not to exceed the lesser of the CPI-U or $3 \%$. Benefits are restricted to those retirees who have attained the age of 60 and have been retired for at least one year.

## 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:

## EXHIBIT 5 (Continued) <br> <br> Principle Provisions

 <br> <br> Principle Provisions}(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.

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.

For those members hired on and after 7/1/2006, the period for determining final average compensation is extended from 36 months to 60 months.

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.

## 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.

## EXHIBIT 6 (Continued

## Cost Methods \& Assumptions

## 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 | $1.10 x$ |
| :--- | :--- |
| 2nd year | $1.00 x$ |
| 3rd year | $1.00 x$ |
| 4th year | $1.00 x$ |
| 5th year | $1.00 x$ |

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.

## 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:

## EXHIBIT 6 (Continued)

## Cost Methods \& Assumptions

| Age at <br> Death | Number of <br> Minor Chn. | Years for Youngest <br> Child to Attain Majority |
| :--- | :---: | :---: |
|  | 1.3 |  |
| 25 | 1.8 | 17 |
| 30 | 2.2 | 15 |
| 35 | 2.1 | 13 |
| 40 | 1.7 | 10 |
| 45 | 1.2 | 8 |
| 50 |  | 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 $\$ 3,600,000$ 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 Male | 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 |

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## EXHIBIT A

## AMORTIZATION of UNFUNDED ACTUARIAL ACCRUED LIABILITY JUNE 30, 2007

| DATE <br> 6/30 | DESCRIPTION | AMTZ. METHOD | AMTZ. PERIOD | INITIAL <br> LIABILITY | YEARS REMAING | REMAINING BALANCE | MID-YEAR PAYMENT |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1993 | Change in Liability | L | 25 | -65,622,628 | 22 | -62,503,935 | -5,677,975 |
| 1994 | Change in Liability | L | 25 | -30,846,941 | 22 | -29,380, 951 | -2,669, 021 |
| 1995 | Change in Liability | L | 25 | 2,558,051 | 22 | 2,436,480 | 221,334 |
| 1996 | Change in Liability | L | 25 | -19,620,386 | 22 | -18,687,934 | -1,697,647 |
| 1997 | Change in Liability | L | 25 | -9,046,638 | 22 | -8,616,700 | -782,757 |
| 1998 | Change in Liability | L | 25 | -105, 844, 372 | 22 | -100, 814,154 | -9,158,148 |
| 1999 | Change in Liability | L | 25 | -48,468, 045 | 22 | -46,164,617 | -4,193,681 |
| 2000 | Change in Liability | L | 25 | -8,704, 034 | 22 | -8,290,378 | -753,114 |
| 2001 | Change in Liability | I | 27 | 239,310,198 | 24 | 251, 997,912 | 14,789, 257 |
| 2002 | Change in Liability | I | 28 | 199, 940,651 | 25 | 211, 439, 765 | 12,062,816 |
| 2003 | Change in Liability | I | 29 | 214,321,070 | 26 | 227,540,817 | 12,638,662 |
| 2004 | Change in Liability | L | 30 | 52, 010,701 | 27 | 50,385,672 | 4,247,412 |
| 2005 | Change in Liability | L | 30 | 4,619,288 | 28 | 4,526,589 | 377, 230 |
| 2006 | Change in Liability | L | 30 | -93,066,596 | 29 | -92,166,527 | -7,600,208 |
| 2007 | Change in Liability | L | 30 | -8,916,009 | 30 | -8,916,009 | -728,119 |

TOTAL OUTSTANDING BALANCE
372,786,030 11,076,041

## EMPLOYERS' CREDIT BALANCE

Contribution Variance L Contribution Variance L Contribution Variance L Contribution Variance L

TOTAL CREDIT BALANCE

| 0 | 1 | 0 | 0 |
| ---: | ---: | ---: | ---: |
| $19,817,170$ | 2 | $8,794,867$ | $4,724,152$ |
| $8,433,787$ | 3 | $5,420,886$ | $2,010,504$ |
| $7,310,004$ | 4 | $6,051,479$ | $1,742,609$ |
| $-3,778,270$ | 5 | $-3,778,270$ | $-900,690$ |

16,488,962 7,576,575

389,274,992

TOTAL UNFUNDED ACTUARIAL ACCRUED LIABILITY

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.


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    F.C.A., M.A.A.A., A.S.A.

[^1]:    ${ }^{1}$ Dollar Amounts reflect estimated payments due mid-year on January 1st per Act 81.

[^2]:    ${ }^{1}$ 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)
    ${ }^{2}$ Employer Contributions exclude the Employer Contribution Credit.

