

**LOUISIANA ASSESSORS'  
RETIREMENT FUND**

ACTUARIAL VALUATION AS OF  
SEPTEMBER 30, 2012

# **G. S. CURRAN & COMPANY, LTD.**

**Actuarial Services**

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January 18, 2013

Board of Trustees  
Louisiana Assessors' Retirement Fund  
P.O. Box 14699  
Baton Rouge, LA 70898-4699

Ladies and Gentlemen:

We are pleased to present our report on the actuarial valuation of the Louisiana Assessors' Retirement Fund for the fiscal year ending September 30, 2012. Our report is based on the actuarial assumptions specified and relies on the data supplied by the system's administrators and accountants. This report was prepared at the request of the Board of Trustees of the Louisiana Assessors' Retirement Fund. The primary purposes of the report are to determine the actuarially required contribution for the retirement system for the fiscal year ending September 30, 2013, to recommend the net direct employer contribution rate for fiscal 2014, and to provide information for the system's financial statements. This report was prepared exclusively for the Louisiana Assessors' Retirement Fund for specific limited purposes and may not be applicable for other purposes. It is not for the use or benefit of any third party for any purpose.

This report has been prepared in accordance with generally accepted actuarial principles and practices, and to the best of our knowledge and belief, fairly reflects the actuarial present values and costs stated herein. The undersigned actuaries are members of the American Academy of Actuaries and have met the qualification standards for the American Academy of Actuaries to render the actuarial opinions incorporated in this report, and are available to provide further information or answer any questions with respect to this valuation.

Sincerely,

G. S. CURRAN & COMPANY, LTD.

By: \_\_\_\_\_  
Gary Curran, F.C.A., M.A.A.A., A.S.A.

By: \_\_\_\_\_  
Gregory Curran, F.C.A., M.A.A.A., A.S.A.

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## SUMMARY OF VALUATION RESULTS LOUISIANA ASSESSORS' RETIREMENT FUND

Valuation Date:	September 30, 2012	September 30, 2011
Census Summary:		
Active Members	758	744
Retired Members	489	493
Terminated Due a Deferred Benefit	18	20
Terminated Due a Refund	70	68
Payroll:	\$ 39,098,798	\$ 36,976,826
Benefits in Payment:	\$ 14,191,340	\$ 13,718,479
Frozen Unfunded Actuarial Accrued Liability:	\$ 18,552,185	\$ 20,177,466
Market Value of Assets:	\$ 251,096,489	\$ 208,403,362
Actuarial Asset Value:	\$ 243,797,375	\$ 231,647,617
Actuarial Accrued Liabilities (As Defined by GASB – 25)	\$ 262,349,560	\$ 251,825,083
Ratio of Net AVA to GASB – 25 Accrued Liability:	92.93%	91.99%
*****		
	FISCAL 2013	FISCAL 2012
Employer Normal Cost (October 1):	\$ 11,982,547	\$ 11,264,694
Amortization Cost (October 1):	\$ 3,021,806	\$ 2,919,619
Interest Adjusted Gross Employer Actuarially Required Contribution Including Estimated Administrative Costs:	\$ 15,806,464	\$ 14,939,909
Projected Ad Valorem Taxes and Revenue Sharing Funds	\$ 11,609,365	\$ 11,361,586
Net Direct Employer Actuarially Required Contributions	\$ 4,197,099	\$ 3,578,323
Actuarially Required Net Direct Employer Contribution Rate	10.58%	9.49%
Actual Net Direct Employer Contribution Rate:	13.50%	13.50%
*****		
<b>Minimum Recommended Net Employer Contribution Rate:</b>	<b>For Fiscal 2014: 10.50%</b>	<b>Fiscal 2013: 9.50%</b>
Employee Contribution Rate:	8.00% of Payroll	
Actuarial Cost Method:	Frozen Attained Age Normal Actuarial Cost Method	
Valuation Interest Rate:	7.5% (Net of Investment Expense)	
Exclusions from Census:	None	
Basis of Actuarial Asset Value:	The actuarial value of assets is based on the market value of assets adjusted to phase in asset earnings above or below the assumed rate of return over a five-year period with limits set at 85% and 115% of the market value of assets. When the adjusted value falls outside of the limits, the actuarial value is set equal to the average of the limited and adjusted value.	

Changes in Valuation Methods, Assumptions, and/or Amortization Periods: None

Method of Recognizing Gains and Losses: Under the Frozen Attained Age Normal Method, actuarial gains and losses are spread over future normal costs.

## COMMENTS ON DATA

For the valuation, the administrative staff of the system furnished a census on magnetic diskette derived from the system's master data processing file indicating each active covered employee's sex, date of birth, service credit, annual salary, and accumulated contributions. Information on retirees detailing dates of birth of retirees and beneficiaries, as well as option categories and benefit amounts, was provided in a similar manner. In addition, data was supplied on former employees who are vested or who have contributions remaining on deposit. As illustrated in Exhibit X, there are 758 active members in the system of whom 327 have vested retirement benefits; 489 former system members or their beneficiaries are receiving retirement benefits. An additional 88 members have contributions remaining on deposit with the system; of this number, 18 have vested rights for future retirement benefits. All individuals submitted were included in the valuation.

Census data submitted to our office is tested for errors. Several types of census data errors are possible; to ensure that the valuation results are as accurate as possible, a significant effort is made to identify and correct these errors. In order to minimize coverage errors (i.e., missing or duplicated individual records) the records are checked for duplicates, and a comparison of the current year's records to those submitted in prior years is made. Changes in status, new records, and previous records, which have no corresponding current record are identified. This portion of the review indicates the annual flow of members from one status to another and is used to check some of the actuarial assumptions, such as retirement rates, rates of withdrawal, and mortality. In addition, the census is checked for reasonableness in several areas, such as age, service, salary, and current benefits. The records identified by this review as questionable are checked against data from prior valuations; those not recently verified are included in a detailed list of items sent to the system's administrative staff for verification and/or correction. Once the identified data has been researched and verified or corrected, it is returned to us for use in the valuation. Occasionally some requested information is either unavailable or impractical to obtain. In such cases, values may be assigned to missing data. The assigned values are based on information from similar records or based on information implied from other data in the record.

In addition to the statistical information provided on the system's participants, the system's administrative staff furnished general information related to other aspects of the system's expenses, benefits, and funding. Valuation asset values as well as income and expenses for the fiscal year are based on information furnished by the system's auditor, the firm of Hawthorn, Waymoth & Carroll, LLP. As indicated in the system's audit report, the net market value of the system's assets was \$251,096,489 as of September 30, 2012. Net investment income for fiscal 2012 measured on a market value basis amounted to a gain of \$38,789,450. Contributions to the system for the fiscal year totaled \$19,768,499; benefits and expenses amounted to \$15,864,822.

Notwithstanding our efforts to review both census and financial data for apparent errors, we must rely upon the system's administrative staff and accountants to provide accurate information. Our review of submitted information is limited to validation of reasonableness and consistency. Verification of submitted data to source information is beyond the scope of our efforts.

## COMMENTS ON ACTUARIAL METHODS AND ASSUMPTIONS

This valuation is based on the Frozen Attained Age Normal actuarial cost method with the unfunded accrued liability frozen as of September 30, 1989. Under the provisions of Louisiana R.S. 11:103 the unfunded accrued liability which was determined to be \$27,874,011 as of September 30, 1989, was amortized over forty years with payments increasing at 3.5% per year. Payroll growth in excess of 3.5% per year will reduce future amortization payments as a percent of payroll; payroll growth less than 3.5% will increase future payments as a percent of payroll. Under the Frozen Attained Age Normal Cost Method, actuarial gains and losses are spread over future normal costs. Thus, favorable plan experience will lower future normal costs; unfavorable experience will cause future normal costs to increase. In addition, changes in benefits and assumptions are also spread over future normal costs.

Prior to the passage of Act 296 in the 2009 legislative session, as outlined by R. S. 11:105, in any year in which the net direct employer contribution is scheduled to decrease, the board of trustees could freeze the net direct employer contribution rate and use the excess funds collected, if any, to reduce the frozen unfunded actuarial accrued liability. Also, in any year in which the board elected to increase contributions pursuant to R.S. 11:106 the excess funds, if any, were used to reduce the system's frozen unfunded actuarial accrued liability. Notwithstanding such a decrease, payments are made according to the regular amortization schedule, thereby reducing the amortization period. Such additional unfunded liability payments of \$791,748; \$101,831; \$538,661; \$1,020,879; \$2,890,530; and \$7,988,122 were made in fiscal 1999, fiscal 2000, fiscal 2003, fiscal 2006, fiscal 2007, and fiscal 2008 respectively. In addition, the Board of Trustees voted to maintain the net direct employer contribution rate at 13.50% for Fiscal 2009 instead of lowering the rate to the minimum recommended employer contribution rate of 4.75%. This freeze resulted in additional collections of \$2,939,108 during fiscal 2009, which under the provisions of Act 296 were credited to the Funding Deposit Account. For fiscal 2010 the contribution rate was maintained at 13.50%. The additional funds collected, amounting to \$3,930,043, were credited to the Funding Deposit Account. For fiscal 2011 the contribution rate was again maintained at 13.50%. The additional funds collected, amounting to \$1,619,995, were also credited to the Funding Deposit Account. For fiscal 2012, the contribution rate was maintained at 13.50%. The additional funds collected, amounting to \$1,469,805, were also credited to the Funding Deposit Account.

The current year actuarial assumptions utilized for the report are outlined on pages thirty-four through thirty-seven. All assumptions are within our "best estimate range" of future long-term experience for the fund. All calculations, recommendations, and conclusions are based on the assumptions specified. To the extent that prospective experience differs from that assumed, adjustments will be required to contribution levels. Such differences will be revealed in future actuarial valuations.

## CHANGES IN PLAN PROVISIONS

The following changes in plan provisions were enacted during the 2012 Regular Session of the Louisiana Legislature:

**Act 225** provided that at such time as the system's frozen unfunded accrued liability shall be fully amortized, the system shall be funded on the Aggregate Funding Method.

**Act 482** allows members to receive vesting and benefit accrual for qualified military service if the member timely remits any employee contributions which would have been required. Survivors of members who die while on a leave of absence to perform qualified military service are also allowed to remit employee contributions which would have been required to receive vesting and benefit accrual. If the survivor does not remit employee contributions, then no benefits are accrued during the period of military service. The act also allows the system to promulgate rules in accordance with the Administrative Procedure Act to maintain compliance with the Internal Revenue Code and Regulations.

**Act 479** provides for forfeiture of retirement benefits by a public employee or elected official hired or beginning service after January 1, 2013 who is convicted of a “public corruption crime” as defined in the act. The act allows the sentencing judge, in his discretion, to order forfeiture after appellate review is exhausted. The act limits forfeiture to benefits in excess of employee contributions. The act also states that the forfeiture shall not impinge on a community property interest of a current or former spouse.

### **ASSET EXPERIENCE**

The market and actuarial rates of return for the past ten years are given below. These rates of return on assets were determined by assuming a uniform distribution of income and expense throughout the fiscal year.

	<u>Market Value</u>	<u>Actuarial Value</u>
2003	15.3%	-0.7%
2004	10.0%	6.0%
2005	13.4%	11.7%
2006	9.1%	* 14.0%
2007	14.7%	12.1%
2008	-13.7%	1.9%
2009	6.6%	6.8%
2010	7.7%	5.1%
2011	-1.2%	2.6%
2012	18.4%	3.5%

\* Includes effect of change in asset valuation method. Effective with the 2006 valuation the method was changed from smoothing capital gains and losses over 3 years to smoothing investment income above or below the assumed rate of return over 5 years.

The market rate of return gives a measure of investment return on a total return basis and includes realized and unrealized capital gains and losses as well as interest income and dividends. This rate of return gives an indication of performance for an actively managed portfolio where securities are bought and sold with the objective of producing the highest total rate of return. During 2012, the fund earned \$2,420,050 in dividends, interest, and other recurring income. In addition, the fund experienced net realized and unrealized capital gains of \$36,761,926. Investment expenses totaled \$392,526. The geometric mean of the market value rates of return measured over the last ten years was 7.6%. The geometric mean of the market value rates of return measured over the last twenty years was 6.8%.

The actuarial rate of return is presented for comparison to the assumed long-term rate of return of 7.5% used for the valuation. This rate is calculated based on the actuarial value of assets and all interest, dividends, and recognized capital gains as given in Exhibit VI. The difference between rates of return on an actuarial and market value basis results from the smoothing of investment income. Yields in excess of the 7.5% assumption will reduce future costs; yields below 7.5% will increase future costs. For fiscal 2012 the system experienced net actuarial investment earnings of \$9,271,232 less than the assumed actuarial valuation interest rate of 7.5%. These actuarial losses increased the normal cost accrual rate by 2.7632%.

## **DEMOGRAPHIC AND LIABILITY EXPERIENCE**

A reconciliation of the census for the system is given in Exhibit X. The average active member is 49 years old with 12.71 years of service and an annual salary of \$51,582. The fund's active membership increased over the course of the year by 14 members. The active plan population over the last five years has increased by 10 members. A review of the active census by age indicates that over the last ten years that portion of the population in the age group between forty and fifty has significantly decreased while the portion of the active population between the age of fifty and seventy has experienced a like increase. In relation to service, the plan has seen a significant decrease in the number of members with fifteen to twenty-five years of service and an increase in the number of members with less than fifteen or more than twenty-five years of service over the last ten years.

The average service retiree is 72 years old with a monthly benefit of \$2,514. The number of retirees and beneficiaries receiving benefits from the system decreased by 4 over the last fiscal year. Over the last five years the number of retirees and beneficiaries has increased by 46; during this same period, annual benefits in payment increased by \$4,572,484.

Plan liability experience for fiscal 2012 was favorable. Salary increases were slightly below expected levels. Retirements were significantly below projected levels. These factors tend to reduce costs. Withdrawals were below projected levels. These factors tend to increase costs. Other factors were near projected levels. As a result, an experience gain was incurred in fiscal 2012. Net plan liability experience decreased the normal cost accrual rate by 1.5390%.

## **FUNDING ANALYSIS AND RECOMMENDATIONS**

Actuarial funding of a retirement system is a process whereby funds are accumulated over the working lifetimes of employees in such a manner as to have sufficient assets available at retirement to pay for the lifetime benefits accrued by each member of the system. The required contributions are determined by an actuarial valuation based on rates of mortality, termination, disability, and retirement, as well as investment return and other statistical measures specific to the particular group. Each year a determination is made of two cost components, and the actuarially required contributions are based on the sum of these two components plus administrative expenses. These two components are the normal cost and the amortization payment on the unfunded actuarial accrued liability. The normal cost refers to the portion of annual cost based on the salary of active participants. The term unfunded accrued liability (UAL) refers to the excess of the present value of plan benefits over the sum of current assets and future normal costs. Each year the UAL grows with interest and is reduced by payments. Under the funding method used for the plan, changes in plan experience, benefits, or

assumptions do not affect the frozen unfunded actuarial accrued liability. These items increase or decrease future normal costs.

In order to establish the actuarially required contribution in any given year, it is necessary to define the assumptions, funding method, and method of amortizing the UAL. Thus, the determination of what contribution is actuarially required depends upon the funding method and amortization schedules employed. Regardless of the method selected, the ultimate cost of providing benefits is dependent upon the benefits, expenses, and investment earnings. Only to the extent that some methods accumulate assets more rapidly and thus produce greater investment earnings does the funding method affect the ultimate cost.

The derivation of the actuarially required contribution for the current fiscal year is given in Exhibit I. The normal cost for fiscal 2013 as of October 1, 2012, is \$11,982,547. The amortization payment on the fund's frozen unfunded actuarial accrued liability as of October 1, 2012, is \$3,021,806. The total actuarially required contribution is determined by adjusting these two values for interest (since payments are made throughout the fiscal year) and adding estimated administrative expenses. As given on line 15 of Exhibit I the total actuarially required contribution for fiscal 2013 is \$15,806,464. When this amount is reduced by projected tax contributions and revenue sharing funds, the resulting employers' net direct actuarially required contribution for fiscal 2013 is \$4,197,099. This is 10.58% of the projected payroll for fiscal 2013.

Liability and asset experience as well as changes in assumptions and benefits can increase or lower plan costs. In addition to these factors, any COLA granted in the prior fiscal year will increase required contributions. New entrants to the system can also increase or lower costs as a percent of payroll depending upon their demographic distribution and other factors related to prior plan experience. Finally, contributions above or below requirements may reduce or increase future costs.

The effects of various factors on the fund's cost structure are outlined below:

Normal Cost Accrual Rate – Fiscal 2012	31.9765%
Factors Increasing the Normal Cost Accrual Rate:	
Asset Experience	2.7632%
Factors Decreasing the Normal Cost Accrual Rate:	
Liability Experience	1.5390%
New Members	0.9946%
Normal Cost Accrual Rate – Fiscal 2013	32.2062%

In addition to the above factors, payroll growth affects plan costs to the extent that payments on the system's unfunded liability are on a schedule that varies from actual trends in payroll growth or decline. If payroll changes at rates not consistent with the amortization schedule, the result will be costs that change as a percentage of payroll. For fiscal 2013, the net effect of the change in payroll on amortization costs was to decrease such costs by 0.13% of payroll. Required net direct employer contributions are also affected by the projected ad valorem taxes and revenue sharing funds which the system is expected to receive each year. When these funds change as a percentage of payroll, net direct employer contributions are adjusted accordingly. We estimate that these funds collected in

fiscal 2013 will decrease by 0.87% of payroll. The net effect of the above changes in the cost structure of the system resulted in a minimum actuarially required net direct employer contribution rate for fiscal 2013 of 10.58%; the actual employer contribution rate for fiscal 2013 is 13.50% of payroll. Any funds collected above the actuarially required contributions for fiscal 2013 will be added to the Funding Deposit Account. R.S. 11:103 requires that the net direct employer contributions be rounded to the nearest 0.25%, hence we are recommending a minimum net direct employer contribution rate of 10.50% for fiscal 2014.

Under the provisions of R.S. 11:107 the board may set the net direct employer contribution rate at any rate between 10.50% and 13.50% of payroll. Should the net direct employer contribution rate be set at a level above 10.50% under R.S. 11:107, the resulting additional contributions paid by the employers, if they exceed any potential contribution losses, would be added to the Funding Deposit Account.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions, changes in economic or demographic assumptions, completion of amortization payments or credit schedules, and changes in plan provisions or applicable law. Analysis of the effect of all these factors is beyond the scope of this report. We have, however, calculated the sensitivity of the valuation to a decrease in the valuation interest rate. Contribution rates to the fund as given in this report are a function of the assumed long-term rate of return on assets used for the valuation. That rate of return should be consistent with long-term capital market expectations and the asset allocation utilized by the fund. The sensitivity of each plan's contribution rate with regard to the assumed rate of return is unique. For the Assessors' Retirement Fund, we have determined that a decrease in the long-term assumed rate of return of 1% would lead to an increase in the required employer contribution rate of 12.0% of payroll. Please note that the above results are only intended to serve as an illustration of the impact of a change in the valuation interest rate. Any actual change in the valuation interest rate should only be effected with a review of all other plan assumptions. In addition, we have determined that based on current assets and demographics, for each percentage earnings in a single year under (or over) the assumed rate of return on the actuarial value of assets, there will be a corresponding increase (or reduction) in the normal cost accrual rate of 0.73% for the Fund. The impact of such other changes in assumptions are not reflected in the above the results.

## **COST OF LIVING INCREASES**

During fiscal 2012 the actual cost of living (as measured by the US Department of Labor CPI-U) increased by 1.99%. Cost of living provisions for the system are detailed in R.S.11:241, R.S. 11:246 and R.S. 11:1461. RS 11:241 provides that cost of living benefits shall be in the form (unless the board otherwise specifies) of  $\$X \times (A+B)$  where X is at most \$1 and "A" represents the number of years of credited service accrued at retirement or at death of the member or retiree and "B" is equal to the number of years since retirement or since death of the member or retiree to June 30<sup>th</sup> of the initial year of such increase. The provisions of this subpart do not repeal provisions relative to cost of living adjustments contained within the individual laws governing systems; however, they are to be controlling in cases of conflict.

R.S. 11:1461 allows the board of trustees to provide a cost of living increase from excess interest to members who have been retired for at least one full calendar year. The increase cannot exceed the lesser of 3% of the retiree's original benefit or an increase of \$300 per year for each year of retirement.

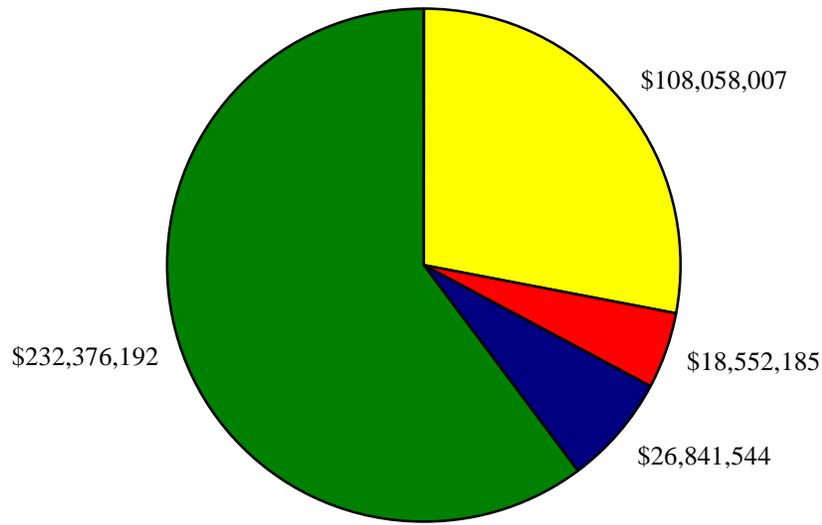
R.S. 11:246 allows the board of trustees to grant an additional cost of living increase from excess interest to all retirees and beneficiaries over age 65 equal to two percent of the benefit paid on October 1, 1977, (or the member's retirement date, if later).

R.S. 11:1461 and R.S. 11:246 provide that those COLA's may be paid only when the investment earnings of the system are sufficiently above the valuation interest rate to fund the benefit granted. For fiscal 2012 the fund achieved an actuarial rate of return of 3.5% and no excess interest was produced. In addition, in order to grant the above cost of living increases to retirees or survivors, the ratio of the actuarial value of assets to the Pension Benefit Obligation must equal or exceed a statutory target ratio defined in R.S. 11:242. The funded ratio of the system, as calculated under R.S. 11:242, is 80.49%. This is below the target ratio of 85.69%. Thus, for fiscal 2012, the target ratio was not met by the fund.

In addition, Act 113 of the 2008 Regular Legislation Session provides for a COLA of 3% of the normal monthly benefit but not less than \$20 per month. Although this COLA is permanent, it may only be granted once. Below is a summary of the expected cost of this COLA:

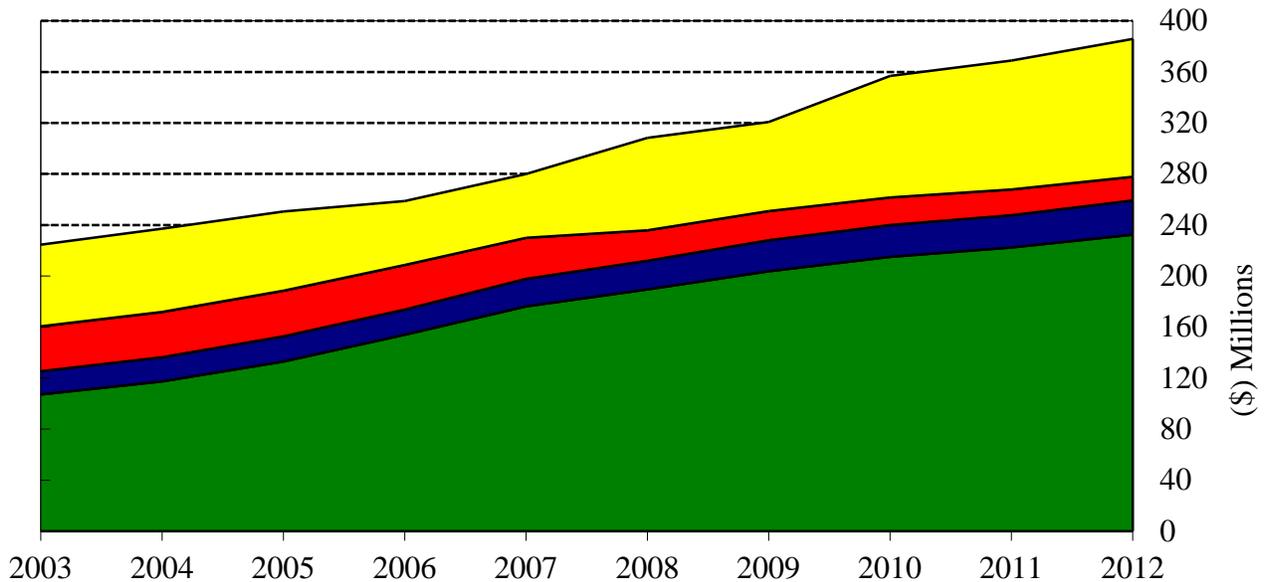
<u>Increase in Annual Benefits</u>	<u>Present Value</u>	<u>Expected Increase in Normal Cost Accrual Rate</u>
\$ 413,742	\$ 3,912,247	1.17%

## Components of Present Value of Future Benefits September 30, 2012



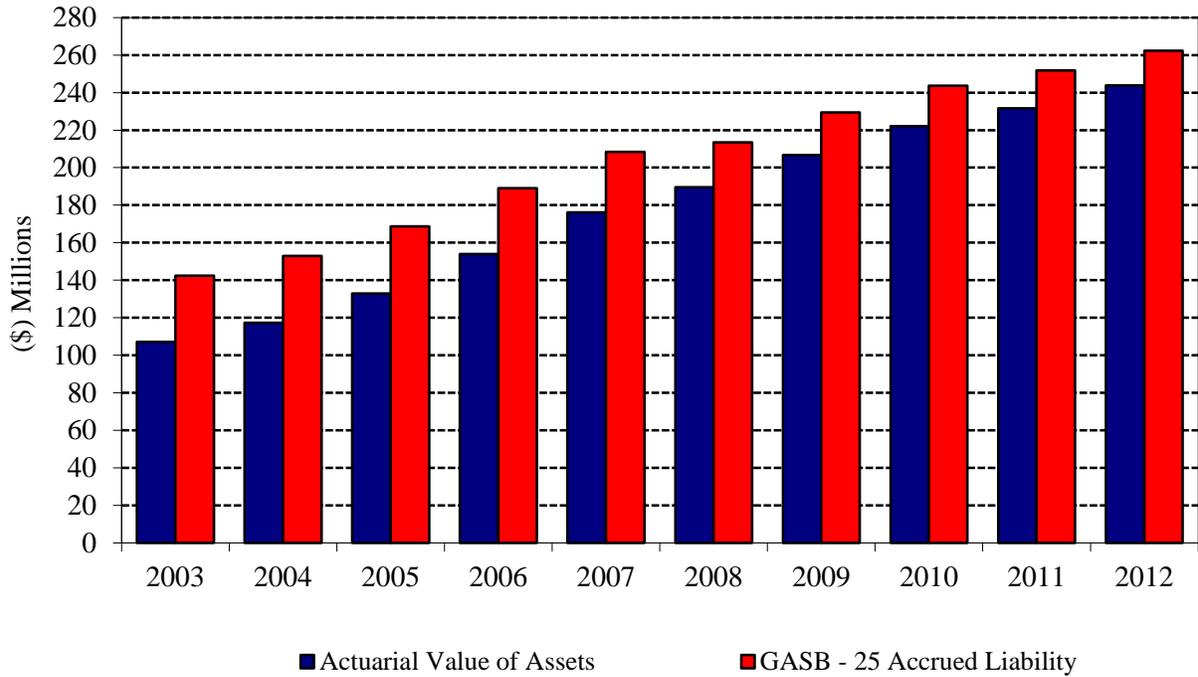
- Present Value of Future Employer Normal Cost
- Frozen Unfunded Accrued Liability
- Present Value of Future Employee Contributions
- Actuarial Value of Assets (Net of Funding Deposit Account)

## Components of Present Value of Future Benefits

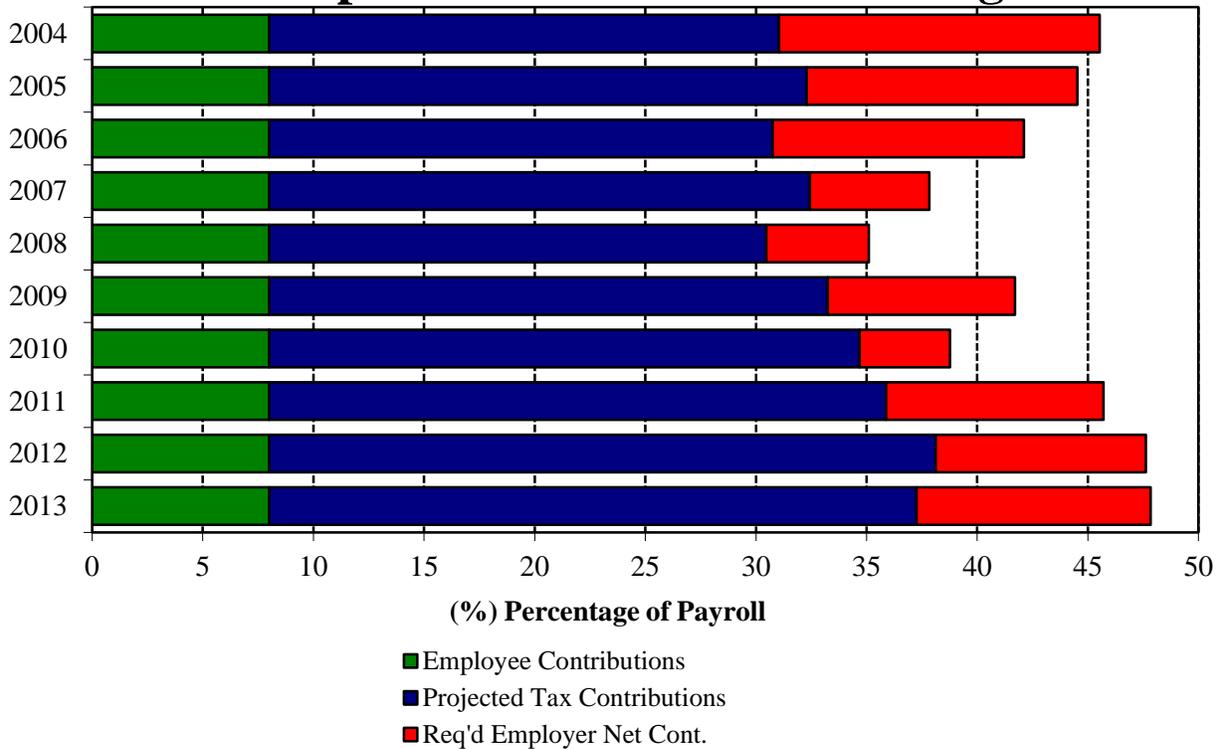


- Present Value of Future Employer Contributions
- Frozen UAL
- Present Value of Future Employee Contributions
- Actuarial Value of Assets (Net of Funding Deposit Account)

# Actuarial Value of Assets vs. GASB – 25 Accrued Liability

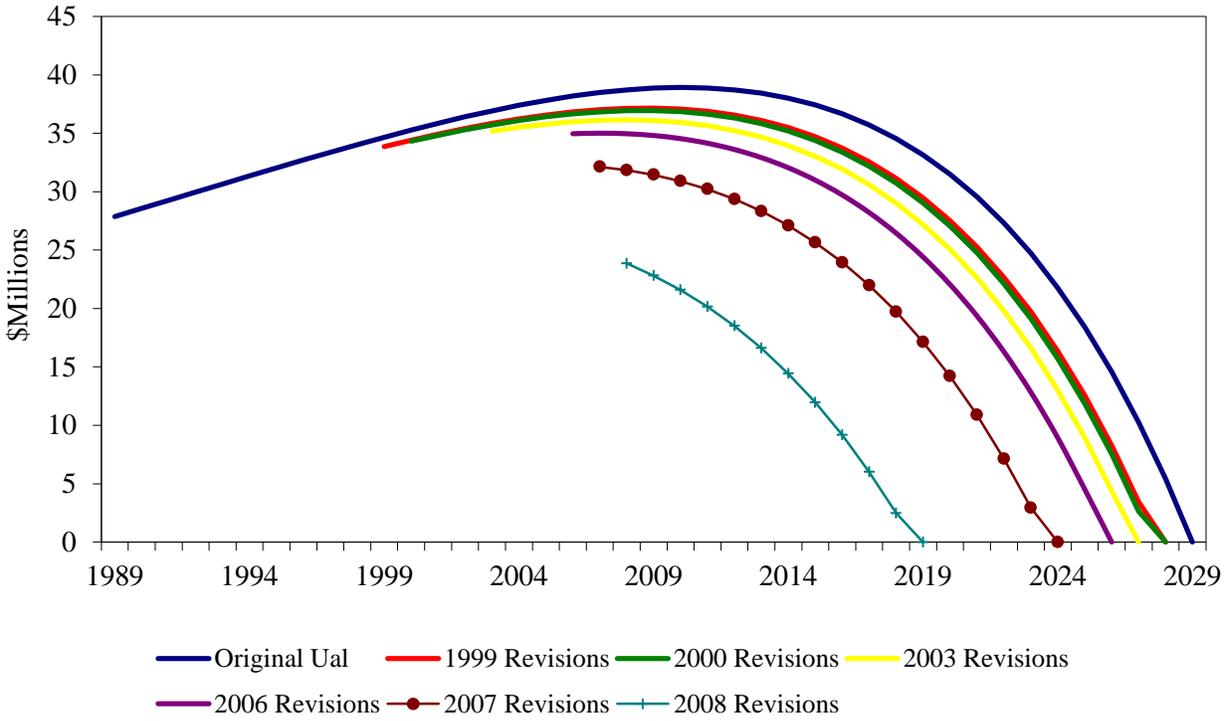


## Components of Actuarial Funding

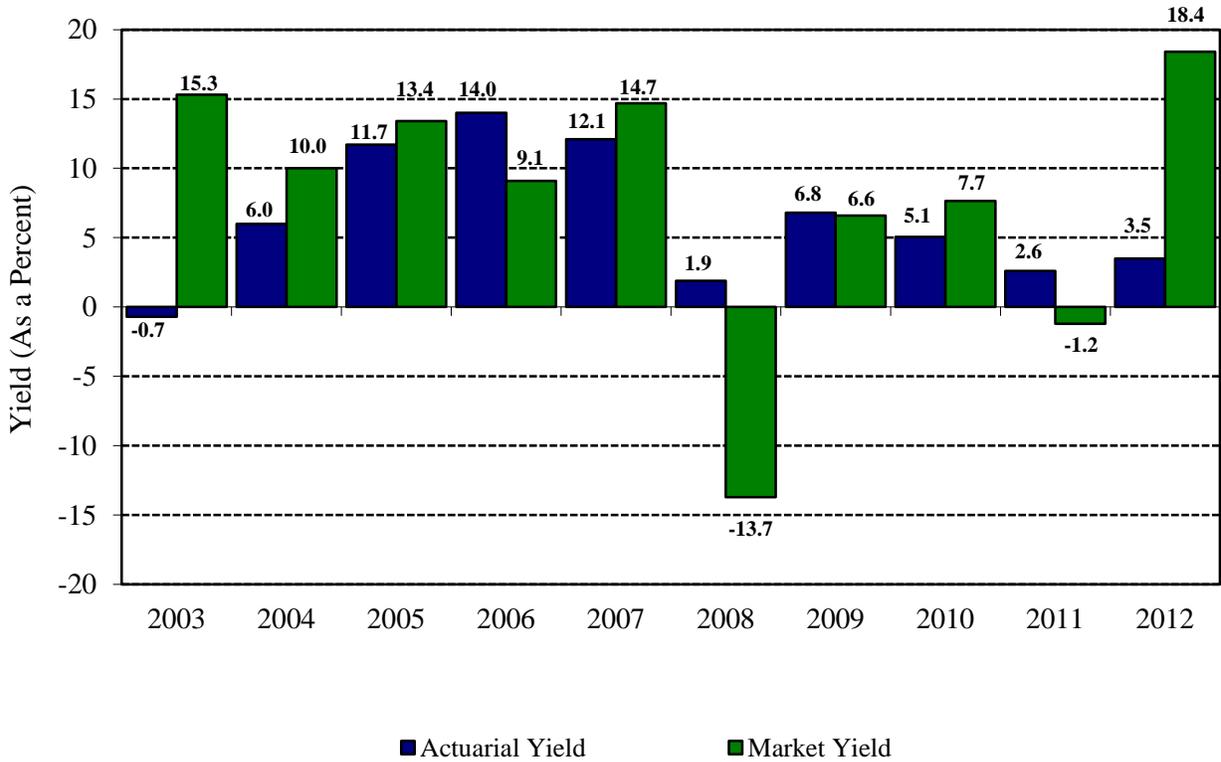


Projected Tax Contributions Consist of the lesser of Actuarially Required Contributions and amount of taxes available divided by the valuation payroll.

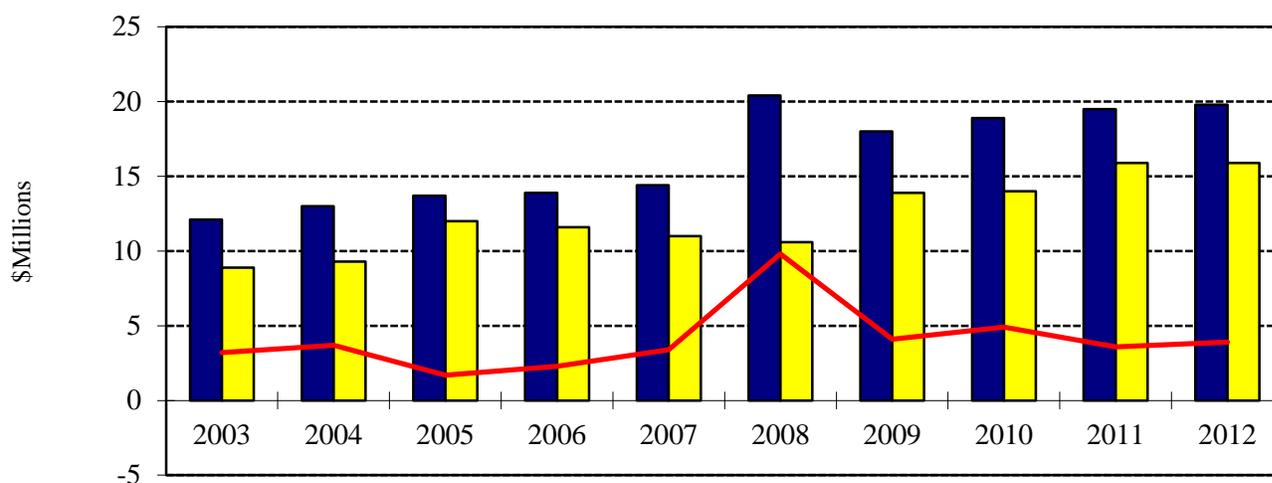
## Frozen Unfunded Accrued Liability



## Historical Asset Yields

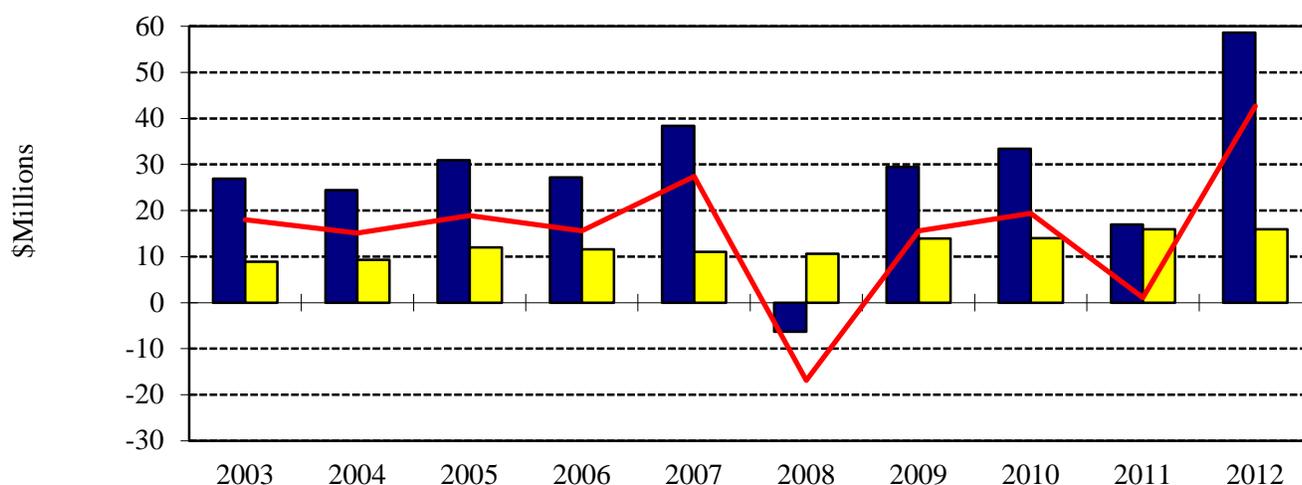


## Net Non-Investment Income



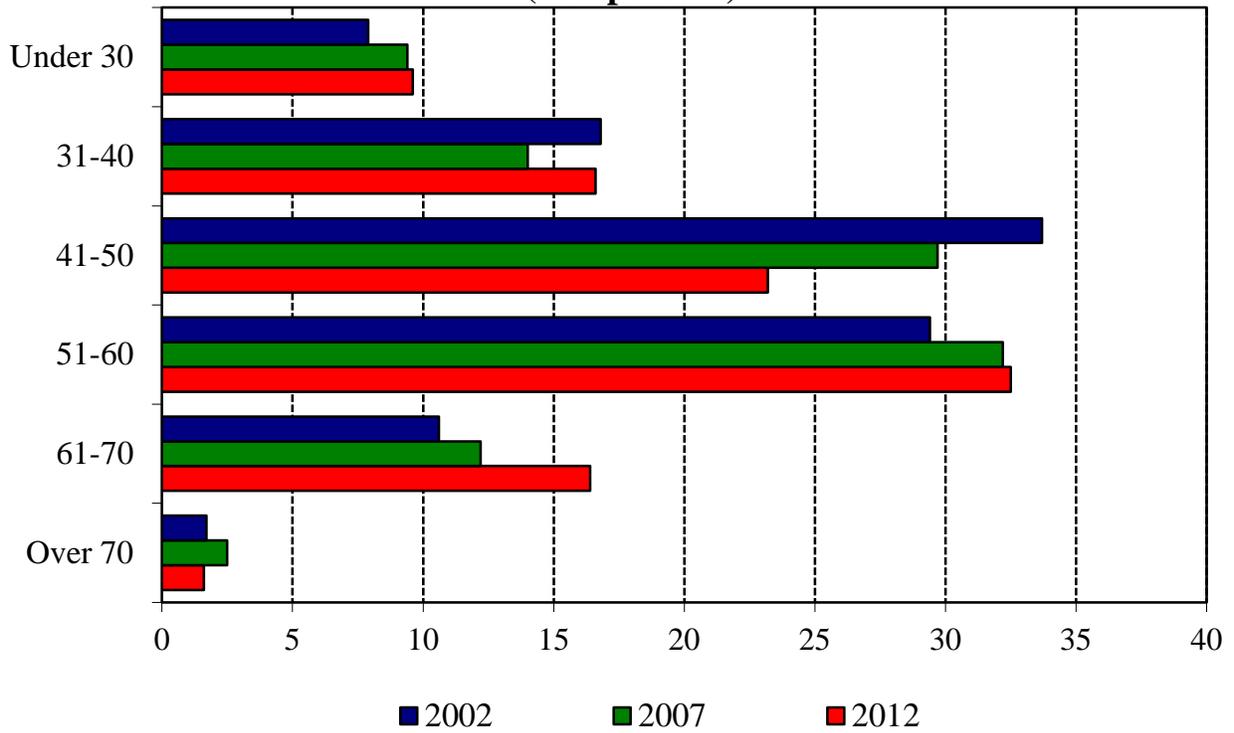
		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Non-Investment Income (\$Mil)	■	12.1	13	13.7	13.9	14.4	20.4	18.0	18.9	19.5	19.8
Benefits and Expenses (\$Mil)	■	8.9	9.3	12.0	11.6	11.0	10.6	13.9	14.0	15.9	15.9
Net Non-Investment Income (\$Mil)	—	3.2	3.7	1.7	2.3	3.4	9.8	4.1	4.9	3.6	3.9

## Total Income vs. Expenses (Based on Market Value of Assets)

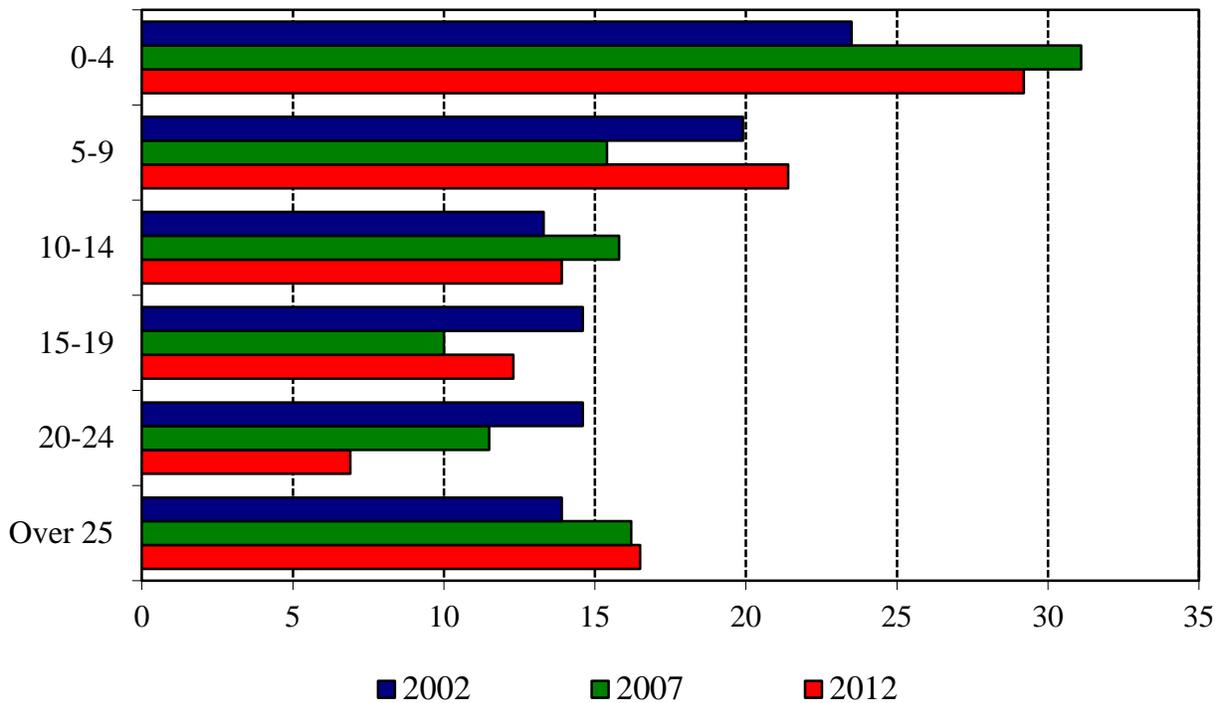


		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Total Income (\$Mil)	■	26.9	24.4	30.9	27.2	38.4	-6.3	29.5	33.4	17.0	58.6
Benefits and Expenses (\$Mil)	■	8.9	9.3	12.0	11.6	11.0	10.6	13.9	14.0	15.9	15.9
Net Change in MVA (\$Mil)	—	18.0	15.1	18.9	15.6	27.4	-16.9	15.6	19.4	1.1	42.7

## Active – Census By Age (as a percent)



## Active – Census By Service (as a percent)



## **EXHIBITS**

**EXHIBIT I**  
**ANALYSIS OF ACTUARIALLY REQUIRED CONTRIBUTIONS**

1. Present Value of Future Benefits .....	\$ 385,827,928
2. Frozen Unfunded Actuarial Accrued Liability .....	\$ 18,552,185
3. Actuarial Value of Assets .....	\$ 243,797,375
4. Present Value of Future Employee Contributions .....	\$ 26,841,544
5. Funding Deposit Account Credit Balance .....	\$ 11,421,183
6. Present Value of Future Employer Normal Costs (1-2-3-4+5).....	\$ 108,058,007
7. Present Value of Future Salaries .....	\$ 335,519,298
8. Employer Normal Cost Accrual Rate (6 ÷ 7) .....	32.206197%
9. Projected Fiscal 2013 Salary for Current Membership.....	\$ 37,205,719
10. Employer Normal Cost as of October 1, 2012 (8 x 9).....	\$ 11,982,547
11. Amortization Payment on Frozen Unfunded Accrued Liability of \$18,552,185 with Payments increasing at 3.50% per year .....	\$ 3,021,806
12. TOTAL Employer Normal Cost & Amortization Payment (10 + 11).....	\$ 15,004,353
13. Normal Cost and Amortization Payment Interest Adjusted for Midyear Payment .....	\$ 15,556,844
14. Estimated Administrative Cost for Fiscal 2013 .....	\$ 249,620
15. TOTAL Administrative and Interest Adjusted Actuarial Costs (13 + 14).....	\$ 15,806,464
16. Projected Revenue Sharing Funds for Fiscal 2013 .....	\$ 352,145
17. Projected Ad Valorem Contributions for Fiscal 2013 .....	\$ 11,257,220
18. Employers' Net Direct Actuarially Required Contribution for Fiscal 2013 (15-16-17) .....	\$ 4,197,099
19. Projected Payroll (Fiscal 2013).....	\$ 39,676,975
20. Employers' Minimum Net Direct Actuarially Required Contribution as a % of Projected Payroll for Fiscal 2013 (18÷19) .....	10.58%
21. Minimum Recommended Net Direct Employer Contribution Rate for Fiscal 2014 (20 Rounded to nearest .25%).....	10.50%

**EXHIBIT II**  
**PRESENT VALUE OF FUTURE BENEFITS**

Present Value of Future Benefits for Active Members:

Retirement Benefits.....	\$ 233,669,578
Survivor Benefits .....	6,265,015
Disability Benefits.....	293,373
Vested Deferred Termination Benefits .....	4,014,707
Contribution Refunds.....	2,220,082

TOTAL Present Value of Future Benefits for Active Members..... \$ 246,462,755

Present Value of Future Benefits for Terminated Members:

Terminated Vested Members Due Benefits at Retirement ..	\$ 3,433,671
Terminated Members with Reciprocal	
Due Benefits at Retirement.....	1,866
Terminated Members Due a Refund.....	456,061

TOTAL Present Value of Future Benefits for Terminated Members ..... \$ 3,891,598

Present Value of Future Benefits for Retirees:

Regular Retirees	
Maximum .....	\$ 52,250,493
Option 2.....	\$ 52,416,478
Option 3.....	\$ 18,762,055

TOTAL Regular Retirees ..... \$ 123,429,026

Disability Retirees ..... 449,240

Survivors & Widows ..... 11,595,309

DROP Account Balances..... 0

TOTAL Present Value of Future Benefits for Retirees & Survivors ..... \$ 135,473,575

TOTAL Present Value of Future Benefits..... \$ 385,827,928

**EXHIBIT III – Schedule A  
MARKET VALUE OF ASSETS**

Current Assets:

Cash in Banks .....	\$ 15,351,842
Contributions Receivable from Members .....	211,451
Contributions Receivable from Employers.....	348,145
Accrued Interest on Investments .....	210,156
Notes Receivable .....	61,576
Other Receivable.....	9,109
<b>TOTAL CURRENT ASSETS.....</b>	<b>\$ 16,192,279</b>

Property, Plant and Equipment (Net of accumulated depreciation) .....	\$ 1,289
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Investments:

Stock Mutual Fund.....	\$ 145,082,614
Bond Mutual Fund .....	51,377,268
Corporate Bonds .....	14,756,357
U. S. Government Agency Securities .....	8,944,187
Real Estate Fund .....	7,972,410
LAMP Funds.....	3,148,167
Short-term investments .....	2,749,994
Foreign Government Securities .....	946,901
<b>TOTAL INVESTMENTS.....</b>	<b>\$ 234,977,898</b>

<b>TOTAL ASSETS.....</b>	<b>\$ 251,171,466</b>
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Current Liabilities:

Accounts Payable .....	\$ 74,977
<b>TOTAL CURRENT LIABILITIES .....</b>	<b>\$ 74,977</b>

<b>NET MARKET VALUE OF ASSETS .....</b>	<b>\$ 251,096,489</b>
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**EXHIBIT III – SCHEDULE B  
ACTUARIAL VALUE OF ASSETS**

Excess (Shortfall) of invested income  
for current and previous 4 years:

Fiscal year 2012.....	\$ 23,015,456
Fiscal year 2011 .....	(18,213,819)
Fiscal year 2010.....	295,050
Fiscal year 2009.....	(1,514,897)
Fiscal year 2008.....	<u>(41,221,359)</u>
Total for five years .....	\$ (37,639,569)

Deferral of excess (shortfall) of invested income:

Fiscal year 2012 (80%).....	\$ 18,412,365
Fiscal year 2011 (60%).....	(10,928,292)
Fiscal year 2010 (40%).....	118,020
Fiscal year 2009 (20%).....	(302,979)
Fiscal year 2008 ( 0%).....	<u>0</u>
Total deferred for year .....	\$ 7,299,114

Market value of plan net assets, end of year..... \$ 251,096,489

Preliminary actuarial value of plan assets, end of year ..... \$ 243,797,375

Actuarial value of assets corridor

85% of market value, end of year.....	\$ 213,432,016
115% of market value, end of year.....	\$ 288,760,962

Final actuarial value of plan net assets, end of year ..... \$ 243,797,375

**EXHIBIT IV**  
**PRESENT VALUE OF FUTURE CONTRIBUTIONS**

Employee Contributions to the Annuity Savings Fund .....	\$ 26,841,544
Employer Normal Contributions to the Pension Accumulation Fund.....	108,058,007
Employer Amortization Payments to the Pension Accumulation Fund .....	18,552,185
Funding Deposit Account Credit Balance .....	(11,421,183)
TOTAL PRESENT VALUE OF FUTURE CONTRIBUTIONS .....	\$142,030,553

**EXHIBIT V**  
**CHANGE IN FROZEN UNFUNDED ACTUARIAL ACCRUED LIABILITY**

Prior Year Frozen Unfunded Accrued Liability .....	\$ 20,177,466
Interest on Unfunded Accrued Liability .....	\$ 1,513,310
Normal Cost for Prior Year .....	11,264,694
Interest on the Normal Cost.....	844,852
Administrative Expenses .....	308,949
Interest on Administrative Expenses .....	11,376
Credit to Funding Deposit Account.....	1,469,805
TOTAL Increases to Frozen Unfunded Accrued Liability.....	\$ 15,412,986
Direct Employer Contributions.....	\$ 5,261,219
Interest on Employer Contributions.....	193,729
Ad Valorem Taxes and Revenue Sharing.....	11,171,945
Interest on Ad Valorem Taxes and Revenue Sharing Funds.....	411,374
Contribution Short Fall (Excess).....	0
Interest on Contribution Shortfall (Excess).....	0
TOTAL Decreases to Frozen Unfunded Accrued Liability .....	\$ 17,038,267
Current Year Frozen Unfunded Accrued Liability .....	\$ 18,552,185

**EXHIBIT VI**  
**ANALYSIS OF INCREASE IN ASSETS**

Actuarial Value of Assets (September 30, 2011) ..... \$ 231,647,617

Income:

Member Contributions .....	\$ 3,159,835	
Employer Contributions .....	5,261,219	
Ad Valorem Tax Funds .....	10,819,050	
Revenue Sharing Funds .....	352,895	
Transfer and Purchases .....	174,550	
Miscellaneous .....	950	
<b>TOTAL CONTRIBUTIONS .....</b>		<b>\$ 19,768,499</b>

Net Appreciation in Fair Value of Investments .....	\$ 36,761,926	
Interest and Dividends .....	2,420,050	
Prior Period Adjustment .....	0	
Investment Expenses .....	(392,526)	
<b>NET INVESTMENT INCOME .....</b>		<b>\$ 38,789,450</b>

TOTAL Income ..... \$ 58,557,949

Expenses:

Retirement Benefits .....	\$ 13,874,857
DROP Account Payments .....	1,505,900
Refunds of Contributions .....	161,216
Funds Transferred to Another System .....	13,900
Administrative Expenses .....	308,949

TOTAL Expenses ..... \$ 15,864,822

Net Market Income for Fiscal 2012 (Income - Expenses)..... \$ 42,693,127

Adjustment for Actuarial Smoothing..... \$ (30,543,369)

Actuarial Value of Assets (September 30, 2012) ..... \$ 243,797,375

**EXHIBIT VII  
FUND BALANCE**

Present Assets of the System Creditable to:

Annuity Savings Fund .....	\$ 28,074,215
Annuity Reserve Fund .....	135,473,575
Pension Accumulation Fund.....	74,406,876
DROP Account .....	1,720,640
Funding Deposit Account .....	11,421,183
NET MARKET VALUE OF ASSETS.....	\$251,096,489
Adjustment for Actuarial Smoothing.....	(7,299,114)
NET ACTUARIAL VALUE OF ASSETS .....	\$243,797,375

**EXHIBIT VIII  
PENSION BENEFIT OBLIGATION**

Present Value of Credited Projected Benefits Payable to Current Employees.....	\$ 163,536,800
Present Value of Benefits Payable to Terminated Employees .....	3,891,598
Present Value of Benefits Payable to Current Retirees and Beneficiaries .....	135,473,575
TOTAL PENSION BENEFIT OBLIGATION .....	\$ 302,901,973
NET ACTUARIAL VALUE OF ASSETS .....	\$ 243,797,375
Ratio of Net Actuarial Value of Assets to Pension Benefit Obligation.....	80.49%

**EXHIBIT IX**  
**COST OF LIVING ADJUSTMENTS - TARGET RATIO**

Actuarial Value of Assets Divided by PBO as of Fiscal 1986: .....	44.48%
Amortization of Unfunded Balance over 30 years: .....	48.12%

Adjustments in Funded Ratio Due to Changes in Assumption(s):

Changes for Fiscal 1988 .....	7.69%
Changes for Fiscal 1989 .....	(0.99%)
Changes for Fiscal 1994 .....	0.15%
Changes for Fiscal 1995 .....	(1.76%)
Changes for Fiscal 1996 .....	(1.39%)
Changes for Fiscal 1999 .....	(0.37%)
Changes for Fiscal 2000 .....	(1.56%)
Changes for Fiscal 2003 .....	0.06%
Changes for Fiscal 2005 .....	(2.48%)
Changes for Fiscal 2006 .....	2.36%
Changes for Fiscal 2010 .....	(6.16%)

TOTAL Adjustments .....

	(4.45%)
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Amortization of Adjustments in Funded Ratio over 30 years:

Changes for Fiscal 1988 .....	(6.15%)
Changes for Fiscal 1989 .....	0.76%
Changes for Fiscal 1994 .....	(0.09%)
Changes for Fiscal 1995 .....	1.00%
Changes for Fiscal 1996 .....	0.74%
Changes for Fiscal 1999 .....	0.16%
Changes for Fiscal 2000 .....	0.62%
Changes for Fiscal 2003 .....	(0.02%)
Changes for Fiscal 2005 .....	0.58%
Changes for Fiscal 2006 .....	(0.47%)
Changes for Fiscal 2010 .....	0.41%

TOTAL Amortization of Adjustments .....

	(2.46%)
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Target Ratio for Current Fiscal Year .....	85.69%
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Actuarial Value of Assets Divided by PBO as of Fiscal 2012 .....	80.49%
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**EXHIBIT X  
CENSUS DATA**

	<b>Active</b>	<b>Terminated with Funds on Deposit</b>	<b>DROP</b>	<b>Retired</b>	<b>Total</b>
Number of members as of September 30, 2010	744	88	0	493	1,325
Additions to Census					
Initial membership	46	(1)			45
Death of another member				6	6
Omitted in error last year				(9)	(9)
Change in Status during Year					
Actives terminating service	(11)	11			
Actives who retired	(15)			15	
Actives entering DROP					
Term. members rehired	5	(5)			
Term. members who retire		(1)		1	
Retirees who are rehired					
Refunded who are rehired		1			1
DROP participants retiring					
DROP returned to work					
Omitted in error last year					
Eliminated from Census					
Refund of contributions	(10)	(5)			(15)
Deaths	(1)			(17)	(18)
Included in error last year					
Adjustment for multiple records					
Number of members as of September 30, 2011	758	88	0	489	1,335

ACTIVES CENSUS BY AGE:

Age	Number Male	Number Female	Total Number	Average Salary	Total Salary
21 - 25	4	15	19	29,369	558,008
26 - 30	16	38	54	35,648	1,924,987
31 - 35	25	40	65	38,974	2,533,315
36 - 40	22	39	61	40,737	2,484,949
41 - 45	25	44	69	50,785	3,504,194
46 - 50	26	81	107	51,079	5,465,406
51 - 55	50	86	136	55,012	7,481,677
56 - 60	41	69	110	56,930	6,262,257
61 - 65	46	36	82	62,631	5,135,749
66 - 70	23	19	42	68,393	2,872,499
71 - 75	4	6	10	57,091	570,912
76 - 80	1	1	2	88,460	176,919
81 - 85	0	1	1	127,926	127,926
TOTAL	283	475	758	51,582	39,098,798

THE ACTIVE CENSUS INCLUDES 327 ACTIVES WITH VESTED BENEFITS, INCLUDING 0 DROP PARTICIPANTS AND 13 ACTIVE FORMER DROP PARTICIPANTS.

TERMINATED MEMBERS DUE A DEFERRED RETIREMENT BENEFIT:

Age	Number Male	Number Female	Total Number	Average Benefit	Total Benefit
36 - 40	0	1	1	18,765	18,765
41 - 45	1	1	2	49,885	99,769
46 - 50	1	4	5	18,556	92,781
51 - 55	1	7	8	27,024	216,194
56 - 60	0	1	1	16,838	16,838
61 - 65	0	1	1	185	185
TOTAL	3	15	18	24,696	444,532

TERMINATED MEMBERS DUE A REFUND OF CONTRIBUTIONS:

Contributions Ranging From	To	Number	Total Contributions
0	99	6	270
100	499	4	979
500	999	5	3,975
1000	1999	10	15,537
2000	4999	17	59,214
5000	9999	11	75,731
10000	19999	13	180,358
20000	119999	4	119,997
	TOTAL	70	456,061

**REGULAR RETIREES:**

Age	Number Male	Number Female	Total Number	Average Benefit	Total Benefit
51 - 55	1	13	14	57,261	801,652
56 - 60	8	36	44	41,387	1,821,010
61 - 65	18	52	70	37,844	2,649,067
66 - 70	31	32	63	38,584	2,430,800
71 - 75	25	46	71	25,187	1,788,270
76 - 80	33	31	64	23,645	1,513,267
81 - 85	22	30	52	19,409	1,009,274
86 - 90	7	24	31	14,051	435,579
91 - 99	3	5	8	16,334	130,668
<b>TOTAL</b>	<b>148</b>	<b>269</b>	<b>417</b>	<b>30,167</b>	<b>12,579,587</b>

**DISABILITY RETIREES:**

Age	Number Male	Number Female	Total Number	Average Benefit	Total Benefit
51 - 55	0	1	1	41,900	41,900
91 - 99	0	1	1	5,727	5,727
<b>TOTAL</b>	<b>0</b>	<b>2</b>	<b>2</b>	<b>23,814</b>	<b>47,627</b>

**SURVIVORS:**

Age	Number Male	Number Female	Total Number	Average Benefit	Total Benefit
51 - 55	0	1	1	75,461	75,461
56 - 60	0	3	3	69,599	208,798
61 - 65	1	0	1	8,042	8,042
66 - 70	0	2	2	23,725	47,450
71 - 75	1	10	11	21,457	236,023
76 - 80	1	13	14	28,284	395,969
81 - 85	1	19	20	19,916	398,318
86 - 90	1	11	12	9,450	113,400
91 - 99	2	4	6	13,444	80,665
<b>TOTAL</b>	<b>7</b>	<b>63</b>	<b>70</b>	<b>22,345</b>	<b>1,564,126</b>

ACTIVE MEMBERS:

Attained Ages	Completed Years of Service											Total			
	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30&Over				
0 - 20															0
21 - 25	6	7	1		2	3									19
26 - 30	6	10	8	9	8	13									54
31 - 35	3	4	5	7	10	28	8								65
36 - 40	9	3	6	3	4	21	7	7							61
41 - 45	5	3	4	4	5	21	8	12	1						69
46 - 50	4	5	4	6	6	14	23	12	11						107
51 - 55	4	2	5	4	4	22	19	24	15						136
56 - 60	5	2	2	9	5	19	16	16	9						110
61 - 65	3	3	2	1	4	12	16	15	4						82
66 - 70					3	7	5	9	6						42
71 & Over		1			1	2	3	3							13
Totals	45	40	36	43	57	162	105	93	52	69	56				758

AVERAGE ANNUAL SALARY OF ACTIVE MEMBERS:

Attained Ages	Completed Years of Service											Average Salary			
	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30&Over				
0 - 20															0
21 - 25	32,285	22,886	28,839		29,390	38,826									29,369
26 - 30	32,122	39,636	36,010	35,389	32,462	36,125									35,648
31 - 35	27,809	30,796	36,637	38,523	34,484	42,122	43,702								38,974
36 - 40	38,410	36,607	36,036	36,269	37,263	36,287	58,824	47,926							40,737
41 - 45	30,893	36,378	37,991	61,671	39,612	46,841	60,028	66,156	46,083						50,785
46 - 50	40,014	54,231	35,505	43,461	34,207	42,832	49,872	57,146	59,710						51,079
51 - 55	32,521	42,665	60,573	61,406	44,242	45,890	62,759	53,184	47,513						55,012
56 - 60	36,264	44,225	30,114	71,043	66,731	44,429	56,784	60,578	47,371						56,930
61 - 65	48,762	31,554	44,275	32,876	34,124	52,712	56,960	68,486	47,204						62,631
66 - 70					38,582	54,629	36,569	65,764	56,903						68,393
71 & Over		44,867			52,950	45,061	42,275	48,495							67,366
Average	35,284	37,079	38,927	49,356	39,521	43,640	54,387	59,780	52,186	66,790	81,956				51,582

TERMINATED MEMBERS DUE A DEFERRED RETIREMENT BENEFIT:

Attained Ages	Years Until Retirement Eligibility										Total	
	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29		30&Over
0 - 35												0
36 - 40								1				1
41 - 45							2					2
46 - 50						5						5
51 - 55		1	2	3	2							8
56 - 60	1											1
61 - 65	1											1
66 & Over												0
Totals	2	1	2	3	2	5	2	1	0	0	0	18

AVERAGE ANNUAL BENEFITS OF TERMINATED MEMBERS DUE A DEFERRED RETIREMENT BENEFIT:

Attained Ages	Years Until Retirement Eligibility										Average Benefit	
	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29		30&Over
0 - 35												0
36 - 40								18,765				18,765
41 - 45							49,885					49,885
46 - 50						18,556						18,556
51 - 55		13,481	27,415	38,639	15,984							27,024
56 - 60	16,838											16,838
61 - 65	185											185
66 & Over												0
Average	8,512	13,481	27,415	38,639	15,984	18,556	49,885	18,765	0	0	0	24,636

**SERVICE RETIREES:**

Attained Ages	Completed Years Since Retirement											Total	
	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30&Over		
0 - 50													0
51 - 55	4	5	3	1	1								14
56 - 60	3	16	6	7	4	8							44
61 - 65	5	9	4	10	5	33	4						70
66 - 70	2	9	2	7		26	15	2					63
71 - 75	1	5	5	3	2	14	20	16	5				71
76 - 80	1		2	4	3	10	17	11	14	2			64
81 - 85			1	1		3	9	12	12	13	1		52
86 - 90						1	3	7	5	7	8		31
91 & Over						1	3	1		3	4		8
Totals	16	44	23	33	15	95	68	49	36	25	13		417

**AVERAGE ANNUAL BENEFITS PAYABLE TO SERVICE RETIREES:**

Attained Ages	Completed Years Since Retirement											Average Benefit	
	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30&Over		
0 - 50													0
51 - 55	45,849	74,334	51,239	40,638	52,230								57,261
56 - 60	36,058	43,233	41,640	39,733	36,469	43,407							41,387
61 - 65	56,239	39,874	38,921	49,411	37,003	31,770	31,442						37,844
66 - 70	78,887	52,609	21,066	68,352		35,996	19,146	27,930					38,584
71 - 75	68,276	38,744	23,895	46,635	18,667	27,885	23,522	16,262	21,707				25,187
76 - 80	40,746		51,574	29,446	18,790	20,354	25,405	16,847	16,847	24,831			23,645
81 - 85			17,849	74,031		38,355	26,469	19,131	15,361	9,362	28,500		19,409
86 - 90						25,705	16,955	15,812	11,720	16,810	9,007		14,051
91 & Over								57,307		11,606	9,636		16,334
Average	52,472	47,488	36,602	49,184	31,788	32,277	23,594	20,161	16,314	12,954	10,700		30,167

DISABILITY RETIREES:

Attained Ages	Completed Years Since Retirement										Total	
	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29		30&Over
0 - 50												0
51 - 55				1								1
56 - 60												0
61 - 65												0
66 - 70												0
71 - 75												0
76 - 80												0
81 - 85												0
86 - 90												0
91 & Over										1		1
Totals	0	0	0	1	0	0	0	0	0	0	1	2

AVERAGE ANNUAL BENEFITS PAYABLE TO DISABILITY RETIREES:

Attained Ages	Completed Years Since Retirement										Average Benefit	
	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29		30&Over
0 - 50												0
51 - 55				41,900								41,900
56 - 60												0
61 - 65												0
66 - 70												0
71 - 75												0
76 - 80												0
81 - 85												0
86 - 90												0
91 & Over										5,727		5,727
Average	0	0	0	41,900	0	0	0	0	0	0	5,727	23,813

**SURVIVING BENEFICIARIES OF FORMER MEMBERS:**

Attained Ages	Completed Years Since Retirement											Total
	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30&Over	
0 - 50												0
51 - 55							1					1
56 - 60	1						2					3
61 - 65								1				1
66 - 70								2				2
71 - 75		1				4	2	1	1	2		11
76 - 80				1		2	2	4	2	1	2	14
81 - 85						1	1	7	4	4	4	20
86 - 90							1	1	1	4	6	12
91 & Over											6	6
Totals	1	1	0	1	0	6	8	16	8	11	18	70

**AVERAGE ANNUAL BENEFITS PAYABLE TO SURVIVORS OF FORMER MEMBERS:**

Attained Ages	Completed Years Since Retirement											Average Benefit
	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30&Over	
0 - 50												0
51 - 55							75,461					75,461
56 - 60	151,180						28,809					69,599
61 - 65								8,042				8,042
66 - 70								23,725				23,725
71 - 75		44,422				10,247	28,774	18,820	17,274	28,486		21,457
76 - 80				83,947		31,478	27,140	30,161	14,820	33,343	5,580	28,284
81 - 85							59,637	16,961	28,776	13,837	12,375	19,916
86 - 90								14,054	13,787	7,127	9,508	9,450
91 & Over											13,444	13,444
Average	151,180	44,422	0	83,947	0	17,324	38,068	20,484	21,976	15,834	11,021	22,345

**EXHIBIT XI  
YEAR-TO-YEAR COMPARISON**

	Fiscal 2012	Fiscal 2011	Fiscal 2010	Fiscal 2009
Number of Active Members	758	744	768	777
Number of Retirees & Survivors	489	493	460	454
Number Terminated Due Benefits at Retirement	18	20	22	23
Number Terminated Due Refund	70	68	60	58
Active Lives Payroll	\$ 39,098,798	\$ 36,976,826	\$ 37,837,825	\$ 38,039,395
Retiree Benefits in Payment	\$ 14,191,340	\$ 13,718,479	\$ 11,705,460	\$ 11,184,513
Market Value of Assets	\$ 251,096,489	\$ 208,403,362	\$ 207,336,952	\$ 187,888,278
Ratio of Actuarial Value of Assets to GASB-25 Accrued Liability	92.93%	91.99%	91.14%	90.06%
Actuarial Value of Assets	\$ 243,797,375	\$ 231,647,617	\$ 222,141,802	\$ 206,677,106
Frozen Unfunded Actuarial Accrued Liability	\$ 18,552,185	\$ 20,177,466	\$ 21,590,624	\$ 22,817,329
Present Value of Future Employer Normal Costs	\$ 108,058,007	\$ 101,041,103	\$ 95,265,554	\$ 69,846,719
Present Value of Future Employee Contributions	\$ 26,841,544	\$ 25,278,807	\$ 24,956,172	\$ 24,352,444
Funding Deposit Account Credit Balance	\$ 11,421,183	\$ 9,257,096	\$ 7,104,280	\$ 2,939,108
Present Value of Future Benefits	\$ 385,827,928	\$ 368,887,897	\$ 356,849,872	\$ 320,754,490

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	Fiscal 2013	Fiscal 2012	Fiscal 2011	Fiscal 2010
Employee Contribution Rate	8.00%	8.00%	8.00%	8.00%
Proj. Tax Contribution as % of Projected Payroll	29.26%	30.13%	27.88%	26.69%
Minimum Actuarially Required Net Direct Employer Contribution Rate	10.58%	9.49%	9.83%	4.08%
Actual Net Direct Employer Contribution Rate	13.50%	13.50%	13.50%	13.50%

Fiscal 2008	Fiscal 2007	Fiscal 2006	Fiscal 2005	Fiscal 2004	Fiscal 2003
786	748	718	729	718	696
437	443	443	426	418	408
22	21	23	22	24	24
54	45	39	23	18	24
\$ 36,638,923	\$ 33,568,909	\$ 29,478,685	\$ 29,277,391	\$ 28,757,562	\$ 26,991,176
\$ 9,705,668	\$ 9,618,856	\$ 9,320,275	\$ 8,590,184	\$ 7,985,977	\$ 7,574,674
\$ 172,306,395	\$ 189,183,894	\$ 161,766,254	\$ 146,141,263	\$ 127,276,144	\$ 112,205,374
88.82%	84.58%	81.50%	78.80%	76.78%	75.29%
\$ 189,537,035	\$ 176,223,629	\$ 154,009,532	\$ 132,989,725	\$ 117,414,626	\$ 107,179,684
\$ 23,857,602	\$ 32,124,893	\$ 34,970,588	\$ 35,788,138	\$ 35,516,590	\$ 35,184,693
\$ 72,468,052	\$ 50,033,632	\$ 50,121,433	\$ 62,093,867	\$ 65,268,813	\$ 64,000,521
\$ 22,452,996	\$ 21,608,375	\$ 19,681,683	\$ 19,720,674	\$ 18,926,490	\$ 18,207,224
N/A	N/A	N/A	N/A	N/A	N/A
\$ 308,315,685	\$ 279,990,529	\$ 258,783,236	\$ 250,592,404	\$ 237,126,519	\$ 224,572,122

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Fiscal 2009	Fiscal 2008	Fiscal 2007	Fiscal 2006	Fiscal 2005	Fiscal 2004
8.00%	8.00%	8.00%	8.00%	8.00%	8.00%
25.25%	22.46%	24.44%	22.75%	24.30%	23.04%
8.45%	4.64%	5.39%	11.36%	12.23%	14.49%
13.50%	13.50%	13.50%	14.00%	14.50%	14.00%

\* Rate of 5.75% from October 1, 2000 – June 30, 2001; Rate of 7.25% from July 1, 2001 – September 30, 2001

## SUMMARY OF PRINCIPAL PLAN PROVISIONS

The Louisiana Assessors' Retirement Fund is a defined benefit pension plan that provides retirement allowances and other benefits for the assessors and their permanent, full-time employees. The plan was established by Act 91 of the 1950 Louisiana Legislative Session. Provisions of the plan are set forth in the Louisiana Revised Statutes (R.S. 11:1401 through R.S. 11:1483). The following summary of plan provisions is for general informational purposes only and does not constitute a guarantee of benefits.

**CONTRIBUTION RATES** - The fund is financed by employee contributions of 8.00% of salary and employer contributions at a rate that is determined annually based on the results of the actuarial valuation for the prior year. Each assessor has the option of electing to pay all or a portion of their employees' contribution into the retirement fund. This election remains in effect for 1 year and can be rescinded only upon written notice to the retirement system. In addition, the statutory provisions require the payment of 0.25% of the taxes to be collected as shown on the tax rolls of each parish and revenue sharing funds as appropriated each year by the legislature.

**RETIREMENT BENEFITS** - Members with thirty years of creditable service may retire at any age and members with at least twelve years of service may retire at age fifty-five. The benefit accrual rate is three and one-third percent for all years of service. The normal retirement benefit for individuals hired prior to October 1, 2006, will be equal to three and one-third percent of the highest monthly average final compensation received during any thirty-six consecutive months while employed in an assessor's office or other creditable employment times the number of years of the member's creditable service not to exceed one hundred percent of the member's monthly average final compensation after taking into account the reduction arising from any optional retirement selected. The normal retirement benefit for individuals hired on or after October 1, 2006, will be equal to three and one-third percent of the highest monthly average final compensation received during any sixty consecutive months while employed in an assessor's office or other creditable employment times the number of years of the member's creditable service not to exceed one hundred percent of the member's monthly average final compensation after taking into account the reduction arising from any optional retirement selected.

**OPTIONAL ALLOWANCES** - Members may receive their benefits as a life annuity, or in lieu of such receive a reduced benefit according to the option selected that is the actuarial equivalent of the maximum benefit. If, upon retirement, a member selects their spouse as their beneficiary under Option 2 or Option 3 or Option 4, the option reduction factor will be based on the ages of the member and his or her beneficiary as of the member's sixtieth birthday. If a participant selects an option 4 for someone other than their spouse, the option reduction factor is based on the ages of the member and beneficiary as of the later of the date of the member's retirement or the member's sixtieth birthday.

**Option 1** - If the member dies before he has received in annuity payments the present value of his member's annuity, as it was at the time of retirement the balance is paid to his beneficiary.

**Option 2** - Upon retirement, the member receives a reduced benefit. Upon the member's death, the surviving spouse will continue to receive the same reduced benefit.

**Option 3** - Upon retirement, the member receives a reduced benefit. Upon the member's death, the surviving spouse will receive one-half of the member's reduced benefit.

**Option 4** - Upon retirement, the member may elect to receive a board-approved benefit that is actuarially equivalent to the maximum benefit.

**EXCESS BENEFIT PLAN** – Under the provisions of this excess benefit plan a member may receive a benefit equal to the amount by which the member’s monthly benefit from the fund has been reduced because of the limitations of Section 415 of the Internal Revenue Code.

**DISABILITY BENEFITS** - Disability benefits are awarded to active members who are totally disabled with twelve or more years of creditable service. In addition, any member with twenty years of service who withdraws from service prior to reaching retirement age is eligible for disability benefits. The disability benefit is equal to the lesser of three and one-third percent of the final three year average compensation multiplied by the number of years of creditable service (but not less than forty-five percent) or three and one-third percent of final compensation multiplied by years of service to earliest normal retirement age.

**SURVIVOR BENEFITS** - If a member dies in service with less than twelve years of service credit, his accumulated contributions are paid to the surviving spouse. If a member dies with twelve or more years of creditable service and is not eligible for retirement, the surviving spouse receives an automatic option 2 benefit that ceases on remarriage. If a member dies who is eligible for retirement, the surviving spouse receives an automatic option 2 benefit that does not terminate on remarriage. The minor children or handicapped children of a member with no spouse who dies in the line of duty or with four years of creditable service receives \$50 per month for the first child and \$10 per month for each additional child.

**DEFERRED RETIREMENT OPTION PLAN** - In lieu of terminating employment and accepting a service retirement allowance, any member who becomes eligible for normal retirement may elect to participate in the Deferred Retirement Option Plan (DROP) for up to three years and defer the receipt of benefits. Upon commencement of participation in the plan, active membership in the system terminates. During participation in the plan both employer and employee contributions continue to be payable. The monthly retirement benefits that would have been payable, had the member elected to cease employment and receive a service retirement allowance, are paid into the deferred retirement option plan account. In addition, no cost-of-living increases are payable to participants until employment which made them eligible to become members of the system has been terminated for at least one full year.

Upon termination of employment at the end of the specified period of participation, a participant in the program may receive, at his option, a lump sum payment from the account equal to the payments to the account, or a true annuity based upon his account balance, or he may elect any other method of payment if approved by the board of trustees. The monthly benefits that were being paid into the fund during the period of participation will begin to be paid to the retiree. If employment is not terminated at the end of the participation period, payments into the account cease and the member resumes active membership in the system. If a member, who was eligible to participate in DROP prior to January 1, 2004, completes participation in the plan and does not terminate employment their account will earn interest at the actual rate of return less 1%. A member’s account will cease to earn interest upon termination of employment. For individuals who become eligible to participate in DROP on or after January 1, 2004, all amounts which remain credited to the individual’s subaccount after termination in the plan will be placed in liquid asset money market investments at the discretion of the board of

trustees. These subaccounts may be credited with interest at the actual rate of return earned on the subaccount investments less one-fourth of one percent per annum, or at the option of the system, the funds may be credited to self-directed subaccounts. The participant in the self-directed portion of this plan must agree that the benefits payable to the participant are not the obligations of the state or the system, and that any returns and other rights of the plan are the sole liability and responsibility of the participant and the designated provider to which contributions have been made. Upon termination, the member receives a lump sum payment for the DROP fund equal to the payments made into that fund on his behalf, or a true annuity based on his account (subject to approval by the board of trustees). The monthly benefit payments that were being paid into the DROP fund are paid to the retiree and an additional benefit based on the additional service rendered since termination of DROP participation is calculated based on the subsequent participation compensation and service credit only. In no event can the entire monthly benefit paid to the retiree exceed 100% of the average compensation used to compute the additional benefit. If a participant dies after the period of participation in the program, automatic option 2 benefits are paid to the surviving spouse with whom the member was living at the time of death on the supplemental benefits earned since DROP participation. No entries to the DROP are permitted after September 30, 2008.

Back-DROP – In lieu of receiving a service retirement allowance any member of the fund who has more than sufficient service for a regular service retirement may elect to receive a “Back-DROP” benefit. The Back-DROP benefit is based upon the Back-DROP period selected and the final average compensation prior to the period selected. The Back-DROP period is the lesser of three years or the service accrued between the time a member first becomes eligible for retirement and his actual date of retirement. At retirement the member’s maximum monthly retirement benefit is based upon his service, final average compensation, and plan provisions in effect on the last day of creditable service immediately prior to the commencement of the Back-DROP period. In addition to the monthly benefit at retirement, the member receives a lump-sum payment equal to the maximum monthly benefit as calculated above multiplied by the number of months in the Back-DROP period.

CONTRIBUTION REFUNDS - Upon withdrawal from service, members not entitled to a retirement allowance are paid a refund of accumulated contributions upon request. Receipt of such a refund cancels all accrued benefits in the system. If the total of all benefits paid to a retiree and all benefits paid on the retiree’s account after their death is less than the retiree’s accumulated employee contributions, the remaining accumulated employee contributions shall be paid to the retiree’s beneficiary or to their estate if they do not have a designated beneficiary. Upon the death of a member or former member who has not been paid any benefits from the fund and who is not survived by any person eligible for any benefits from the fund, the accumulated employee contributions of the member or former member shall be paid to their designated beneficiary or to their estate if they do not have a designated beneficiary.

COST OF LIVING INCREASES - The board of trustees may use excess interest earnings as determined by the actuary to provide a cost of living increase in benefits for retired members or their beneficiaries of three percent of their original benefit (not to exceed three hundred dollars per year). In addition, the board of trustees may grant an additional cost of living increase of two percent of their original benefit (or the benefit as of October 1, 1977 if they retired prior to that time). In order to grant either cost of living increase the ratio of the systems assets to pension benefit obligations must exceed a target ratio that is set by statute. In lieu of the above described cost of living increases, the board may provide a cost of living increase in the form of up to \$1.00 per month for each year of service plus the number of years since retirement.

## ACTUARIAL ASSUMPTIONS

In determining actuarial costs, certain assumptions must be made regarding future experience under the plan. These assumptions include the rate of investment return, mortality of plan members, rates of salary increase, rates of retirement, rates of termination, rates of disability, and various other factors that have an impact on the cost of the plan. To the extent that future experience varies from the assumptions selected for valuation, future costs will be either higher or lower than anticipated. The following chart illustrates the effect of emerging experience on the plan.

Factor	Increase in Factor Results in
Investment Earnings Rate	Decrease in Cost
Annual Rate of Salary Increase	Increase in Cost
Rates of Retirement	Increase in Cost
Rates of Termination	Decrease in Cost
Rates of Disability	Increase in Cost
Rates of Mortality	Decrease in Cost

**ACTUARIAL COST METHOD:** Frozen Attained Age Normal Actuarial Method with allocation based on earnings. The actuarial accrued liabilities utilized to calculate the frozen unfunded accrued liability were calculated on the Projected Unit Credit Cost Method. Changes in assumptions and plan benefits are funded through adjustments to future normal costs.

**VALUATION INTEREST RATE:** 7.5% (Net of Investment Expense)

**ACTUARIAL ASSET VALUES:** Assets are valued at market value adjusted to defer four-fifths of all earnings above or below the valuation interest rate in the valuation year, three-fifths of all earnings above or below the valuation interest rate in the prior year, two-fifths of all earnings above or below the valuation interest rate from two years prior, and one-fifth of all earnings above or below the valuation interest rate from three years prior. The resulting smoothed values are subject to a corridor of 85% to 115% of the market value of assets. If the smoothed value falls outside the corridor, the actuarial value is set equal to the average of the corridor limit and the smoothed value.

**ANNUAL SALARY INCREASE RATE:** 6% (3.00% inflation / 3.00% merit)

**ACTIVE MEMBER, ANNUITANT, AND BENEFICIARY MORTALITY:** RP 2000 Combined Healthy Table set back 3 years for males and 2 years for females

RETIREE COST OF LIVING INCREASES:

The present value of future retirement benefits is based on benefits currently being paid by the system and includes previously granted cost of living increases. The present values do not include provisions for potential future increases not yet authorized by the Board of Trustees.

RETIREMENT RATES:

The table of these rates is included later in the report. These rates apply only to those individuals eligible to retire. DROP participants are assumed to retire at the end of the DROP participation period.

RETIREMENT LIMITATIONS:

Projected retirement benefits are not subject to IRS Section 415 limits.

WITHDRAWAL RATES:

The rates of withdrawal are applied based upon completed years of service according to the following table:

Service	Factor	Service	Factor
<1	0.120	10	0.030
1	0.120	11	0.030
2	0.050	12	0.030
3	0.050	13	0.020
4	0.050	14	0.020
5	0.050	15	0.010
6	0.050	>15	0.010
7	0.040		
8	0.040		
9	0.030		

Note: Withdrawal rates for members eligible to retire are assumed to be zero.

DROP PARTICIPATION:

All persons who enter DROP are assumed to participate for the full three-year period and retire immediately thereafter.

RETIREMENT RATES FOR ACTIVE FORMER DROP PARTICIPANTS:

The rate for all ages is assumed to be 33%.

DISABILITY RATES:

4% of the disability rates used for the 21<sup>st</sup> valuation of the Railroad Retirement System for individuals with 10-19 years of service. The table of these rates is included later in the report.

DISABLED LIVES MORTALITY: RP-2000 Disabled Lives Mortality Tables for Males and Females

VESTING ELECTING PERCENTAGE: 70% of those vested elect deferred benefits in lieu of contribution refunds.

MARRIAGE AND OPTION SELECTION: 80% of members are assumed to be married. Wives are assumed to be 3 years younger than their husbands. Fifty-five percent of married members who retire are assumed to select a Joint and 100% Survivor Annuity form of optional benefits.

FAMILY STATISTICS: Assumptions utilized in determining the costs of various survivor benefits as listed below, are derived from the information provided in the 2000 U. S. Census:

<u>Member's Age</u>	<u>% With Children</u>	<u>Number of Children</u>	<u>Average Age</u>
25	62%	1.7	6
35	82%	2.1	10
45	66%	1.8	13
55	19%	1.4	15
65	2%	1.4	15

Back-DROP BENEFITS: Members eligible for Back-DROP benefits are assumed to elect the benefit form with the greatest present value.

## ACTUARIAL TABLES AND RATES

Age	Male Mortality Rates	Female Mortality Rates	Retirement Rates	Disability Rates
18	0.00027	0.00018	0.00000	0.00006
19	0.00028	0.00019	0.00000	0.00006
20	0.00030	0.00019	0.00000	0.00006
21	0.00032	0.00019	0.00000	0.00006
22	0.00033	0.00019	0.00000	0.00006
23	0.00035	0.00019	0.00000	0.00006
24	0.00036	0.00020	0.00000	0.00006
25	0.00037	0.00020	0.00000	0.00006
26	0.00037	0.00021	0.00000	0.00006
27	0.00038	0.00021	0.00000	0.00006
28	0.00038	0.00022	0.00000	0.00006
29	0.00038	0.00024	0.00000	0.00006
30	0.00038	0.00025	0.00000	0.00006
31	0.00039	0.00026	0.00000	0.00006
32	0.00041	0.00031	0.00000	0.00006
33	0.00044	0.00035	0.00000	0.00006
34	0.00050	0.00039	0.00000	0.00006
35	0.00056	0.00044	0.00000	0.00007
36	0.00063	0.00047	0.00000	0.00008
37	0.00070	0.00051	0.00000	0.00008
38	0.00077	0.00055	0.00000	0.00010
39	0.00084	0.00060	0.00000	0.00011
40	0.00090	0.00065	0.00000	0.00012
41	0.00096	0.00071	0.00000	0.00014
42	0.00102	0.00077	0.00000	0.00016
43	0.00108	0.00085	0.00000	0.00018
44	0.00114	0.00094	0.00000	0.00020
45	0.00122	0.00103	0.00000	0.00023
46	0.00130	0.00112	0.22000	0.00026
47	0.00140	0.00122	0.22000	0.00029
48	0.00151	0.00133	0.22000	0.00033
49	0.00162	0.00143	0.22000	0.00038
50	0.00173	0.00155	0.44000	0.00043
51	0.00186	0.00168	0.44000	0.00049
52	0.00200	0.00185	0.44000	0.00055
53	0.00214	0.00202	0.44000	0.00063
54	0.00245	0.00221	0.44000	0.00071
55	0.00267	0.00242	0.04000	0.00081
56	0.00292	0.00272	0.04000	0.00092
57	0.00320	0.00309	0.04000	0.00104
58	0.00362	0.00348	0.18000	0.00118
59	0.00420	0.00392	0.18000	0.00135
60	0.00469	0.00444	0.18000	0.00195
61	0.00527	0.00506	0.18000	0.00195
62	0.00595	0.00581	0.18000	0.00195
63	0.00675	0.00666	0.28000	0.00195
64	0.00768	0.00765	0.28000	0.00195
65	0.00876	0.00862	0.28000	0.00195

## GLOSSARY

**Accrued Benefit** – The pension benefit that an individual has earned as of a specific date based on the provisions of the plan and the individual’s age, service, and salary as of that date.

**Actuarial Accrued Liability** – The actuarial present value of benefits payable to members of the fund less the present value of future normal costs attributable to the members.

**Actuarial Assumptions** - Assumptions as to the occurrence of future events affecting pension costs. These assumptions include rates of mortality, withdrawal, disablement, and retirement. Also included are rates of investment earnings, changes in compensation, as well as statistics related to marriage and family composition.

**Actuarial Cost Method** – A procedure for determining the portion of the cost of a pension plan to be allocated to each year. Each cost method allocates a certain portion of the actuarial present value of benefits between the actuarial accrued liability and future normal costs. Once this allocation is made, a determination of the normal cost attributable to a specific year can be made along with the payment to amortize any unfunded actuarial accrued liability. To the extent that a particular funding method allocates a greater (lesser) portion of the actual present value of benefits to the actuarial accrued liability it will allocate less (more) to future normal costs.

**Actuarial Equivalence** – Payments or receipts with equal actuarial value on a given date when valued using the same set of actuarial assumptions.

**Actuarial Gain (Loss)** – The financial effect on the fund of the difference between the expected and actual experience of the fund. The experience may be related to investment earnings above (or below) those expected or changes in the liability structure due to fewer (or greater) than the expected numbers of retirements, deaths, disabilities, or withdrawals. In addition, other factors such as pay increases above (or below) those forecast can result in actuarial gains or losses. The effect of such gains (or losses) is to decrease (or increase) future costs.

**Actuarial Present Value** - The value, as of a specified date, of an amount or series of amounts payable or receivable thereafter, with each amount adjusted to reflect the time value of money (through accrual of interest) and the probability of payments. For example: if \$600 invested today will be worth \$1,000 in 10 years and there is a 50% probability that a person will live 10 years, then the actuarial present value of \$1,000 payable to that person if he should survive 10 years is \$300.

**Actuarial Value of Assets** - The value of cash, investments, and other property belonging to the pension plan as used by the actuary for the purpose of the actuarial valuation. This may correspond to the book value, market value, or some modification involving either or both book and market value. Adjustments to market values are often made to reduce the volatility of asset values.

**Asset Gain (Loss)** - That portion of the actuarial gain attributable to investment performance above (below) the expected rate of return in the actuarial assumptions.

**Amortization Payment** - That portion of the pension plan contribution designated to pay interest and reduce the outstanding principal balance of unfunded actuarial accrued liability. If the amortization payment is less than the accrued interest on the unfunded actuarial accrued liability the outstanding principal balance will increase.

**Contribution Shortfall (Excess)** - The difference between contributions recommended in the prior valuation and the actual amount received.

**Decrements** – Events which result in the termination of membership in the system such as retirement, disability, withdrawal, or death.

**Employer Normal Cost** - That portion of the normal cost not attributable to employee contributions. It includes both direct contributions made by the employer and contributions from other non-employee sources such as revenue sharing and revenues related to taxes.

**Funded Ratio** – A measure of the ratio of assets to liabilities of the system according to a specific definition of those two values. Typically the assets used in the measure are the actuarial value of assets; the liabilities are defined by reference to some recognized actuarial funding method. Thus the funded ratio of a plan depends not only on the financial strength of the plan but also on the funding method used to determine the liabilities and the asset valuation method used to determine the assets in the ratio.

**Normal Cost** - That portion of the actuarial present value of pension plan benefits and expenses allocated to a valuation year by the actuarial cost method. This is analogous to one year's insurance premium.

**Pension Benefit Obligation** - The actuarial present value of benefits earned or credited to date based on the members expected final average compensation at retirement. For current retirees or terminated members this is equivalent to the actuarial present value of their accrued benefit.

**Projected Benefits** – The benefits expected to be paid in the future based on the provisions of the plan and the actuarial assumptions. The projected values are based on anticipated future advancement in age and accrual of service as well as increases in salary paid to the participant.

**Unfunded Actuarial Accrued Liability** - The excess of the actuarial accrued liability over the actuarial value of assets.

**Vested Benefits** - Benefits that the members are entitled to even if they withdraw from service.

## NOTES