

SHERIFFS' PENSION & RELIEF FUND

ACTUARIAL VALUATION AS OF
JUNE 30, 2011

G. S. CURRAN & COMPANY, LTD.

Actuarial Services

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November 21, 2011

Board of Trustees
Sheriffs Pension & Relief Fund
1225 Nicholson Drive
Baton Rouge, Louisiana 70802

Ladies and Gentlemen:

We are pleased to present our report on the actuarial valuation of the Sheriffs' Pension & Relief Fund for the fiscal year ending June 30, 2011. Our report is based on the actuarial assumptions specified and relies on the data supplied by the system's administrator and accountants. This report was prepared at the request of the Board of Trustees of the Sheriffs' Pension & Relief Fund. The primary purposes of the report are to determine the actuarially required contribution for the retirement system for the fiscal year ending June 30, 2012, to recommend the net direct employer contribution rate for fiscal 2013, and to provide information required for the system's financial statements. This report was prepared exclusively for the Sheriffs' Pension & Relief Fund for a specific limited purpose. 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 SHERIFFS' PENSION & RELIEF FUND

Valuation Date:	June 30, 2011	June 30, 2010
Census Summary: Active Members	14,754	14,711
Retired Members and Survivors	3,716	3,510
Terminated Due a Deferred Benefit	323	325
Terminated Due a Refund	4,743	4,727
Payroll:	\$ 623,084,570	\$ 603,250,449
Benefits in Payment:	\$ 83,741,250	\$ 76,379,208
Frozen Unfunded Accrued Liability	\$ 68,826,417	\$ 71,042,296
Actuarial Asset Value:	\$ 1,935,179,988	\$1,773,450,705
Market Value of Assets:	\$ 1,907,946,452	\$1,522,233,162
Actuarial Accrued Liabilities (As defined by GASB-25)	\$ 2,004,006,405	\$1,844,493,001

Ratio of Net AVA to GASB-25 Accrued Liability:	96.57%	96.15%
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	FISCAL 2012	FISCAL 2011
Employer Normal Cost (July 1):	\$ 106,947,304	\$ 102,866,459
Amortization Cost (July 1):	\$ 7,570,127	\$ 7,314,133
Gross Employer Actuarially Required Contribution (Including Estimated Administrative Costs):	\$ 120,370,005	\$ 115,938,030
Projected Revenue Sharing, Ad Valorem, and Insurance Premium Taxes	\$ 32,073,791	\$ 31,652,175
Net Direct Actuarially Required Employer Contributions:	\$ 88,296,214	\$ 84,285,855

Actuarially Required Net Direct Contribution Rate:	13.78%	13.56%
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Direct Employer Contribution Rate (adjusted for FDA payment)	13.75%	12.75%
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Minimum Recommended Net Direct Employer Cont. Rate: Fiscal 2013:	13.75%	Fiscal 2012: 13.75%
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Employee Contribution Rate: 10% of payroll

Dedicated Funding: 0.50% of ad valorem taxes plus revenue sharing funds and funds from the state's Insurance Premium Taxes as allocated by the Louisiana Public Retirement Systems' Actuarial Committee.

Actuarial Cost Method: Frozen Attained Age Normal Actuarial Cost Method

Valuation Interest Rate: 8% (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 system 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 like 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 14,754 active members in the system of whom 4,344 have vested retirement benefits; 3,716 former system members or their beneficiaries are receiving retirement benefits. An additional 5,066 terminated members have contributions remaining on deposit with the system; of this number, 323 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 administrator 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 administrator 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 were based on information furnished by the system's auditor, the firm of Duplantier, Hrapmann, Hogan & Maher, Certified Public Accountants. As indicated in the system's audit report, the net market value of the system's assets was \$1,907,946,452 as of June 30, 2011. Net investment income for fiscal 2011 measured on a market value basis amounted to \$314,383,359. Contributions to the system for the fiscal year totaled \$176,959,281; benefits and expenses amounted to \$105,629,350.

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 June 30, 1989. Under the provisions of Louisiana R.S. 11:103 the unfunded accrued liability which was determined to be \$69,702,461 as of June 30, 1989, was amortized over forty years with payments increasing at 3.50% per year. Payroll growth in excess of 3.50% per year will reduce future amortization payments as a percent of payroll; payroll growth less than 3.50% 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 as are contribution surpluses and shortfalls.

Prior to the passage of Act 247 in the 2009 legislative session, in any year in which the net direct employer contribution was 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. Notwithstanding such a decrease, payments were made according to the regular amortization schedule, thereby reducing the amortization period. In fiscal 2008 the excess contributions collected from the frozen employer contribution rate reduced the frozen unfunded actuarial accrued liability by \$22,548,024. Based upon the additional contributions collected during fiscal 2008, the current frozen unfunded actuarial accrued liability will be fully amortized by June 30, 2023. Subsequent to June 30, 2008, any surplus contributions collected as a result of R. S. 11:2175.1 are credited to the Funding Deposit Account. The funds may then be used, at the discretion of the Board, to reduce the Unfunded Accrued Liability, future normal costs, or as an offset to direct employer contributions.

The current year actuarial assumptions utilized for the report are outlined on pages thirty-six through thirty-nine. The assumptions used are the same as those used for the prior year report. In the aggregate the assumptions represent our "best estimate" 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 2011 Regular Session of the Louisiana Legislature:

Act 120 established a new benefit structure for persons whose first employment making the eligible for membership begins on or after January 1, 2012. The normal retirement eligibility standard for such members was set at twelve years of service for members who have attained age sixty-two; twenty years of service for members who have attained age sixty; and thirty years of service for members who have attained age fifty-five. The benefit accrual rate for such members with less than thirty years of service is three percent; for members with thirty or more years of service, the accrual rate is three and one-third percent. The accrual rate is also set at three and one-third percent for members who die or become totally and permanently disabled from a violent act or accident during

pursuit, apprehension, or arrest of a criminal suspect. The act also sets the final average compensation period at sixty months for the group as well as setting the sixty-month final average compensation period for disabled members who first entered employment on or after July 1, 2006. The act also clarifies benefit payments to survivors under option 5.

Act 377 excludes from earnable compensation for any member of a state or statewide retirement system who was elected for a term commencing July 1, 2011 or later, and who is employed in another position of public office or employment, any compensation earned from legislative service.

ASSET EXPERIENCE

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

	<u>Market Value</u>	<u>Actuarial Value</u>
2002	-3.0%	0.3%
2003	4.2%	0.0%
2004	8.4%	3.0%
2005	8.1%	6.1%
2006	8.5%	* 13.8%
2007	16.0%	10.2%
2008	-6.4%	6.5%
2009	-17.4%	** -5.0%
2010	10.9%	5.8%
2011	20.2%	5.0%

* Includes effect of change in asset valuation method. Effective with 2006 valuation the method of calculating the actuarial value of assets was changed from a three-year smoothing of realized and unrealized capital gains and losses to a four-year smoothing of all investment returns above or below the current valuation interest rate.

** Includes effect of change in asset valuation method. Effective with 2009 fiscal year, the smoothing period was increased from four to five years and the corridor limits were increased to 85% to 115% of the market value of assets and the final asset value was determined by averaging the smoothed value and the corridor limit if the smoothed value extends beyond the corridor.

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 2011, the fund earned \$28,539,371 of dividends, interest, and other recurring income. Net income was increased by realized and unrealized capital gains of \$297,632,475 (not including a prior period adjustment of \$4,629,166). Investment expenses reduced income by \$7,159,321. The geometric mean of the market value rates of return measured over the last ten years was 4.4%. The geometric mean of the market value rates of return measured over the last twenty years was 6.7%.

The actuarial rate of return is presented for comparison to the assumed long-term rate of return of 8% 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. Investment income used to calculate this yield is based upon a smoothing of investment returns above or below the valuation

interest rate over a five-year period subject to constraints. The difference between rates of return on an actuarial and market value basis results from the smoothing of investment income relative to the valuation interest rate. Yields in excess of the 8.0% assumption will reduce future costs; yields below 8.0% will increase future costs. For fiscal 2011, the system experienced net actuarial investment earnings of \$54,275,012 below the actuarial assumed earnings rate of 8.0%. This deficiency in earnings produced an actuarial loss, which increased the normal cost accrual rate by 0.9385%.

DEMOGRAPHICS AND LIABILITY EXPERIENCE

A reconciliation of the census for the system is given in Exhibit X. The average active member is 43 years old with 8.9 years of service and an average salary of \$42,232. The system's active contributing membership increased during the fiscal year by 43 members. The plan has experienced an increase in the active plan population of 1,919 members over the last five years. A review of the active census by age indicates that over the last ten years the population in the under-forty age group has decreased while the proportion of active members over-forty increased. During this ten-year period the plan showed a decrease in the percentage of members with service less than five years.

The average service retiree is 68 years old with a monthly benefit of \$2,093. The retired population increased by 206 during the last fiscal year. Over the last five years the number of retirees increased by 857. During this same period, annual benefits in payment increased by \$33,128,663.

Plan liability experience for fiscal 2011 was favorable. Salary increases below projected levels, disabilities below projected levels, retiree deaths above projected levels, and retirements below projected levels decreased costs. These factors were partially offset by withdrawals below projections. Overall, plan liability experience decreased the normal cost accrual rate by 0.4610%.

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 2012 as of July 1, 2011, is \$106,947,304. The amortization payment on the fund's frozen unfunded actuarial accrued liability as of July 1, 2011, is \$7,570,127. 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 2012 is \$120,370,005. When this amount is reduced by projected ad valorem tax contributions, revenue sharing funds, and insurance premium taxes the remaining portion to be funded by direct employer contributions for fiscal 2012 is \$88,296,214. This is 13.78% of projected payroll for the fiscal year.

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 2011	18.0074%
Factors Increasing the Normal Cost Accrual Rate:	
Contribution Loss	0.0648%
Asset Experience Loss	0.9384%
Factors Decreasing the Normal Cost Accrual Rate:	
Liability Experience Gain	0.4610%
New Members Gain	0.4905%
Normal Cost Accrual Rate – Fiscal 2012	18.0591%

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 2012 the net effect of the change in payroll on amortization costs was to decrease this cost by 0.01% of projected payroll. Required net direct employer contributions are also affected by the available ad valorem taxes, revenue sharing funds, and insurance premium taxes which the system receives 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 2012 will decrease by 0.09% of projected payroll.

Although the actuarially required net direct employer contribution rate for fiscal 2012 is 13.78%, the actual employer contribution rate for fiscal 2012 is 13.75% of payroll (i.e. 12.50% directly from employers and 1.25% from the Funding Deposit Account). Any deficit in employer contributions collected in the fiscal year will increase the Fund's normal cost accrual rate. We estimate that this deficit will not affect the normal cost accrual rate in fiscal 2013. 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 13.75% for fiscal 2013.

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 plans' costs to two factors. First, 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 0.33%. We have also determined that a 1% reduction in the valuation interest rate would increase the actuarially required contribution rate for fiscal 2012 by 7.92%.

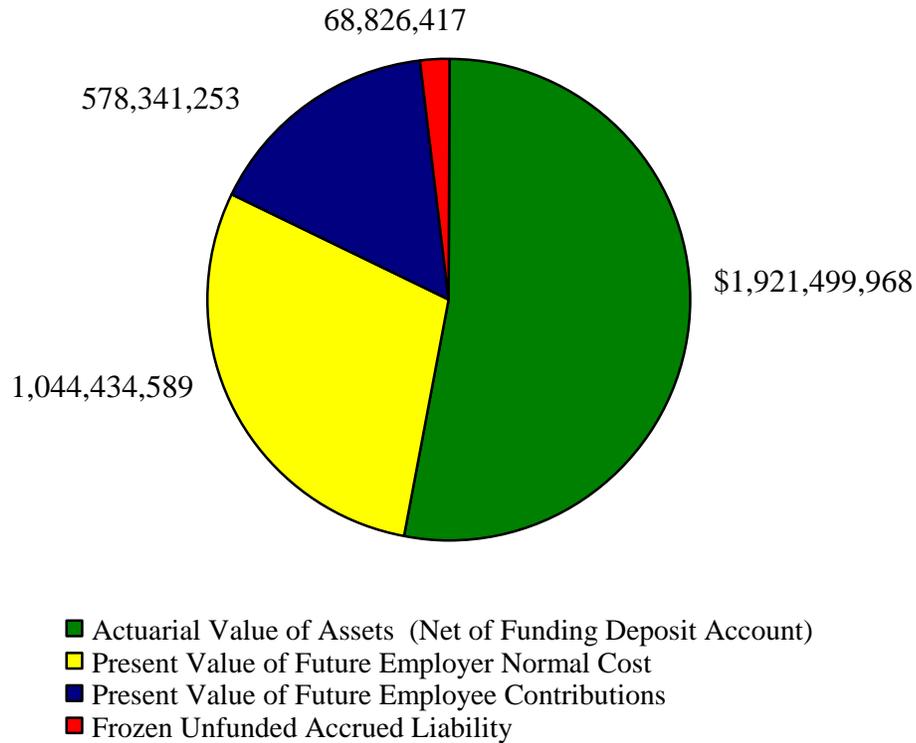
Notwithstanding recent contribution increases, a significant portion of investment losses incurred in fiscal 2009 have not yet been released into the actuarial value of assets due to the current asset smoothing methodology. These losses will be released over the next two years and, even when the investment gains for the fiscal 2011 are factored in, this will put upward pressure on costs as they are released into income unless they are offset by substantial asset or liability gains.

COST OF LIVING INCREASES

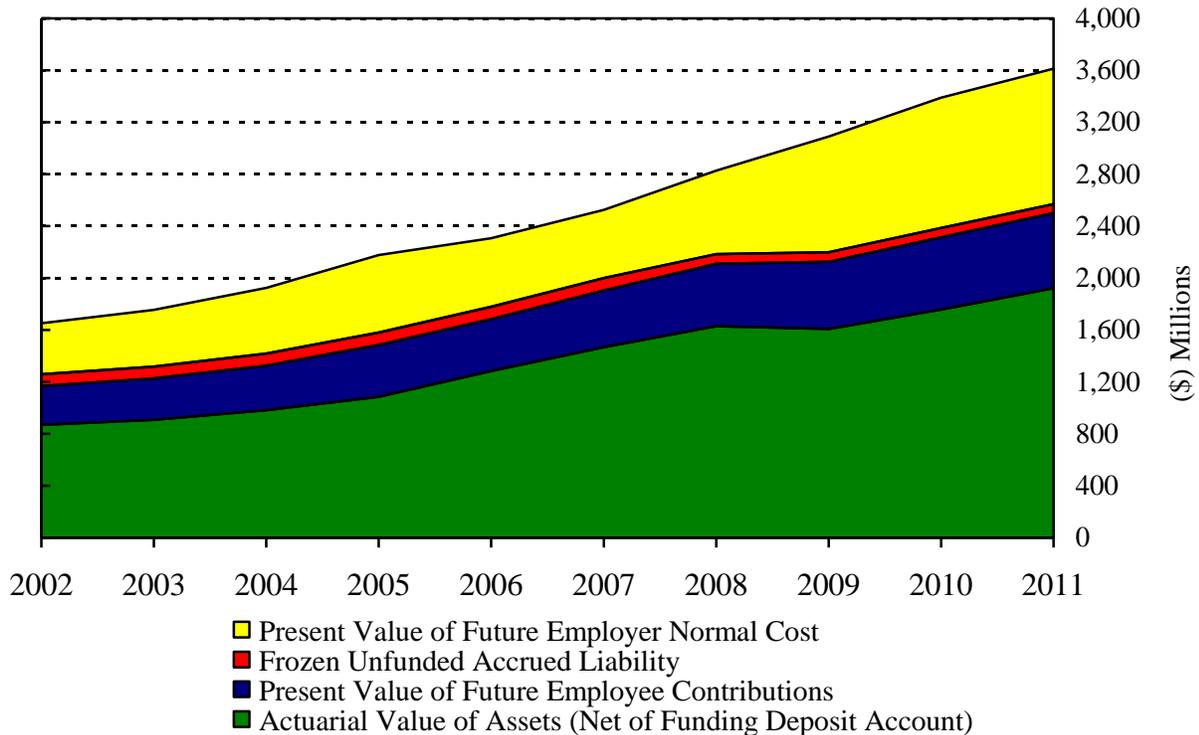
During fiscal 2011, the actual cost of living (as measured by the US Department of Labor CPI-U) increased by 3.56%. Cost of living provisions for the system are detailed in R.S. 11:2178(K) and R.S. 11:246. The former statute allows the board to grant annual cost of living increases of between 2% and 3% of each retiree's benefit with a minimum benefit of \$20 per month.

R.S. 11:246 provides cost of living increases of retirees and beneficiaries over the age of 65 equal to 2% of the benefit in payment on October 1, 1977, or the date the benefit was originally received if retirement commenced after that date. R.S. 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 30th 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. All of the above provisions require that the system earn sufficient excess interest earnings to fund the increases. In addition, the ratio of the plan's assets to benefit obligations must meet the criteria established in R.S. 11:242. This section sets forth a minimum "target ratio" of the actuarial value of assets to the Pension benefit Obligation. We have determined that for fiscal 2011 the fund has not met the necessary target ratio and that the plan's investment experience was below assumptions. Therefore, the Fund is unable to grant COLAs to retirees at this time under the provisions of R.S. 11:2178(K) and R.S. 11:246.

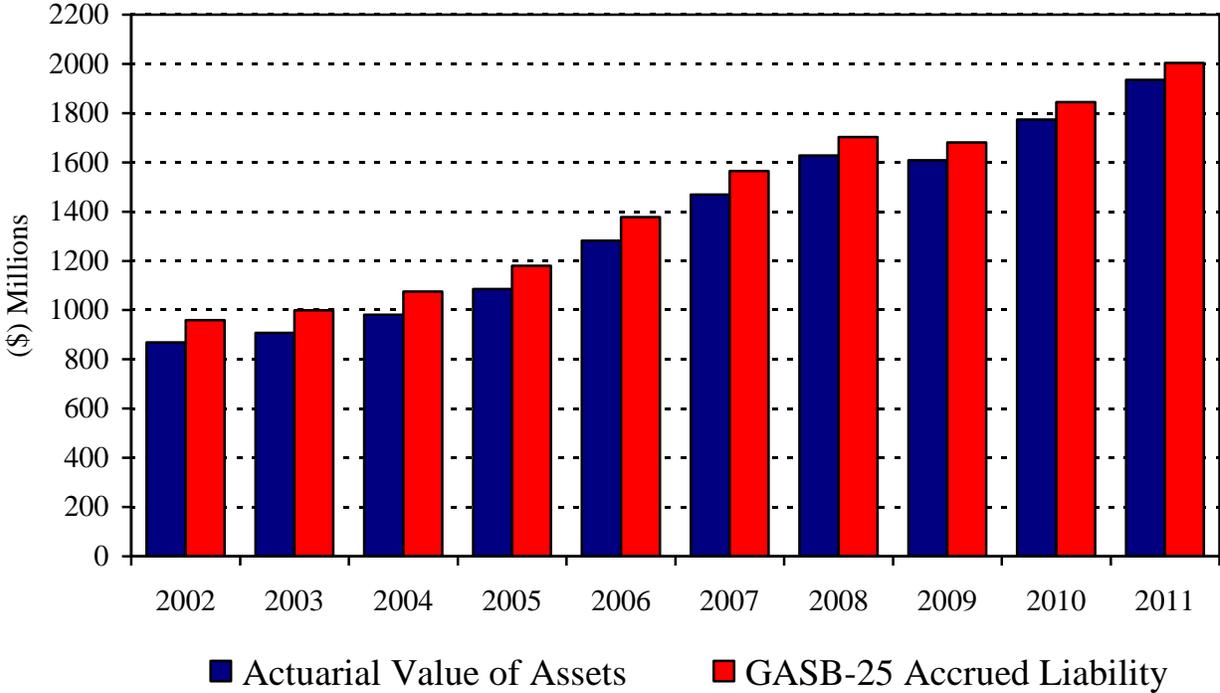
Components of Present Value of Future Benefits June 30, 2011



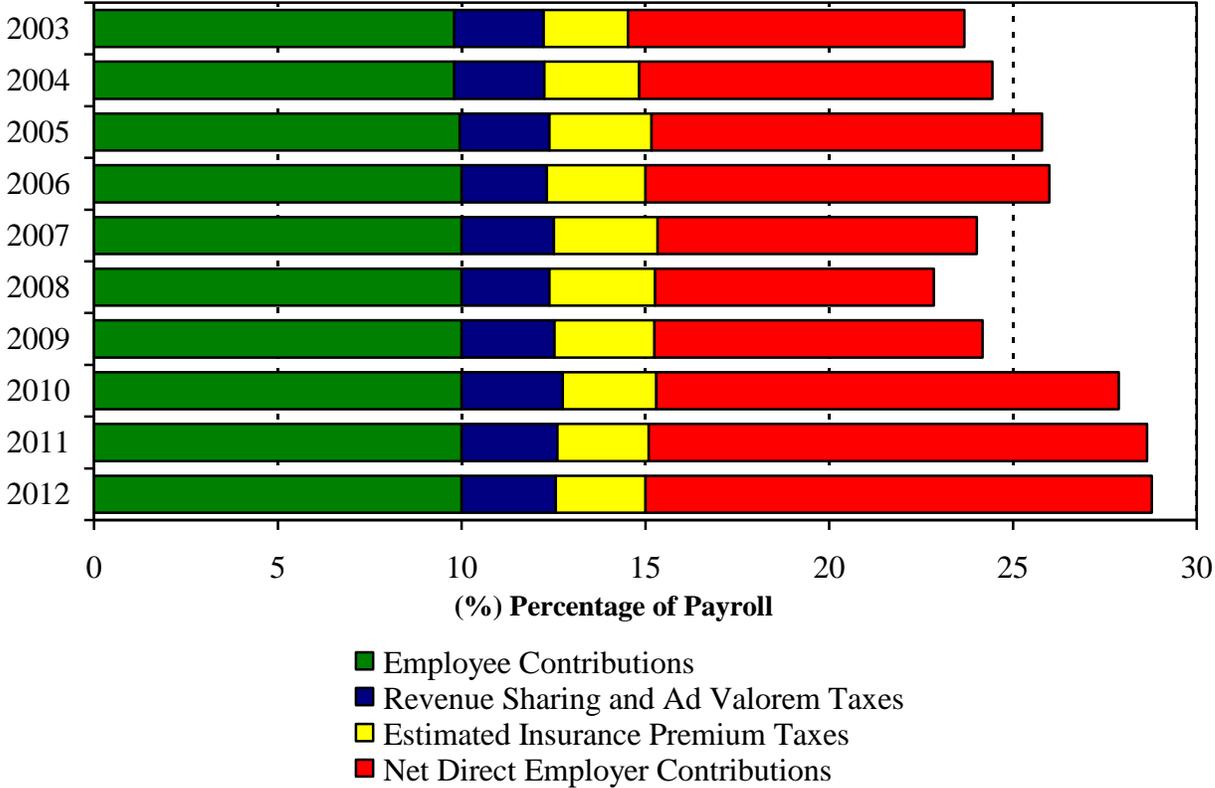
Components of Present Value of Future Benefits



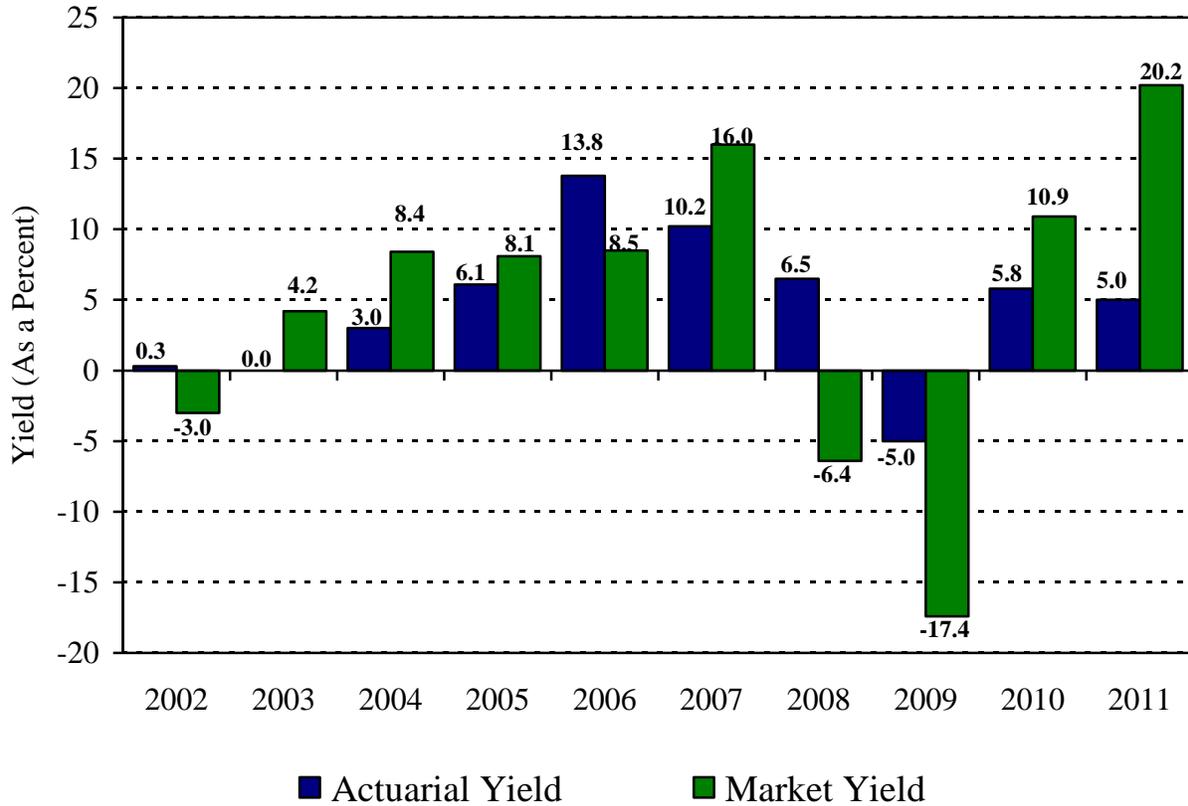
Actuarial Value of Assets vs. GASB-25 Accrued Liability



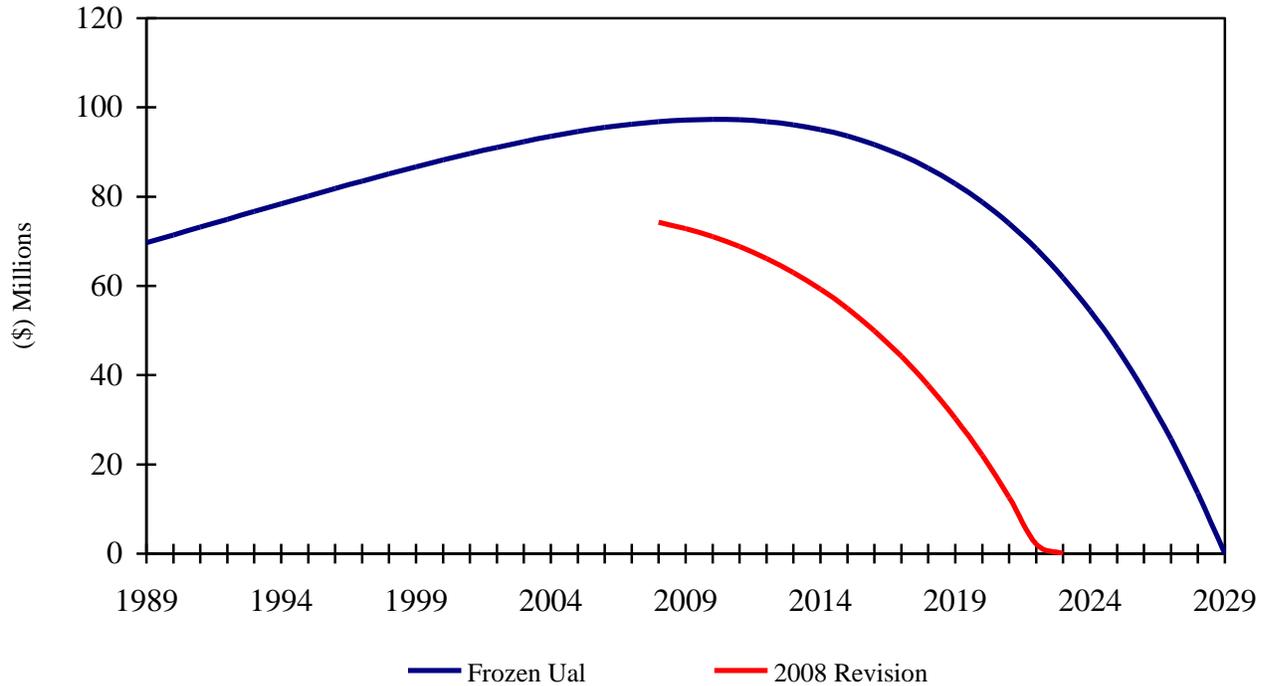
Components of Actuarial Funding



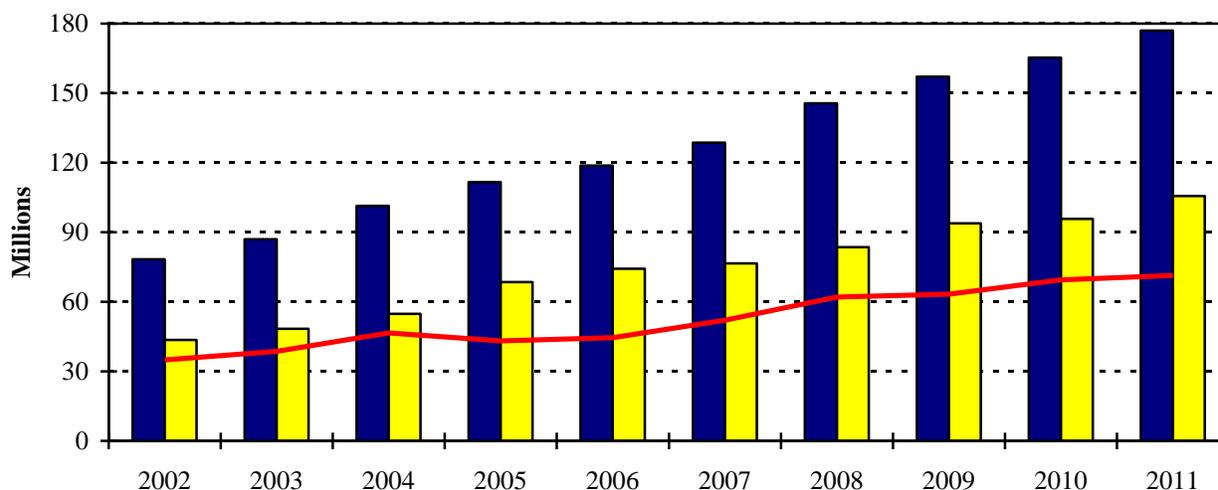
Historical Asset Yields



Frozen Unfunded Actuarial Accrued Liability

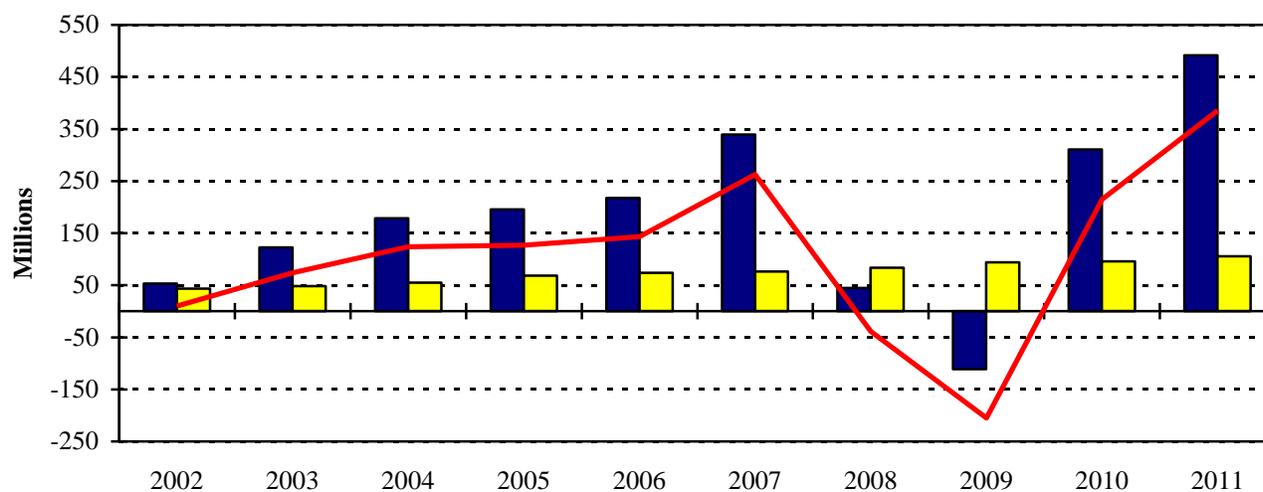


Net Non-Investment Income



		2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Non-Investment Income (\$Mil)	■	78.4	87.0	101.4	111.7	118.7	128.6	145.7	157.1	165.3	177.0
Benefits and Expenses (\$Mil)	■	43.5	48.4	54.8	68.5	74.2	76.6	83.6	93.8	95.8	105.6
Net Non-Investment Income (\$Mil)	—	34.9	38.6	46.6	43.2	44.5	52.0	62.1	63.3	69.5	71.4

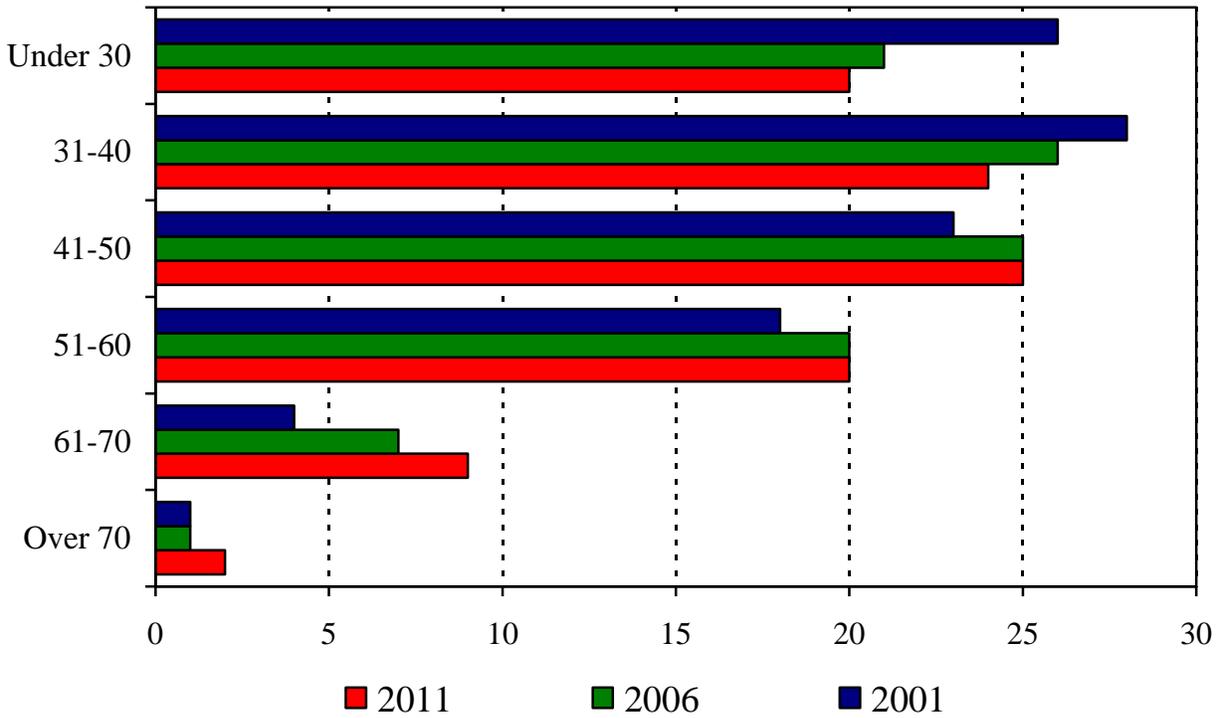
Total Income vs. Expenses



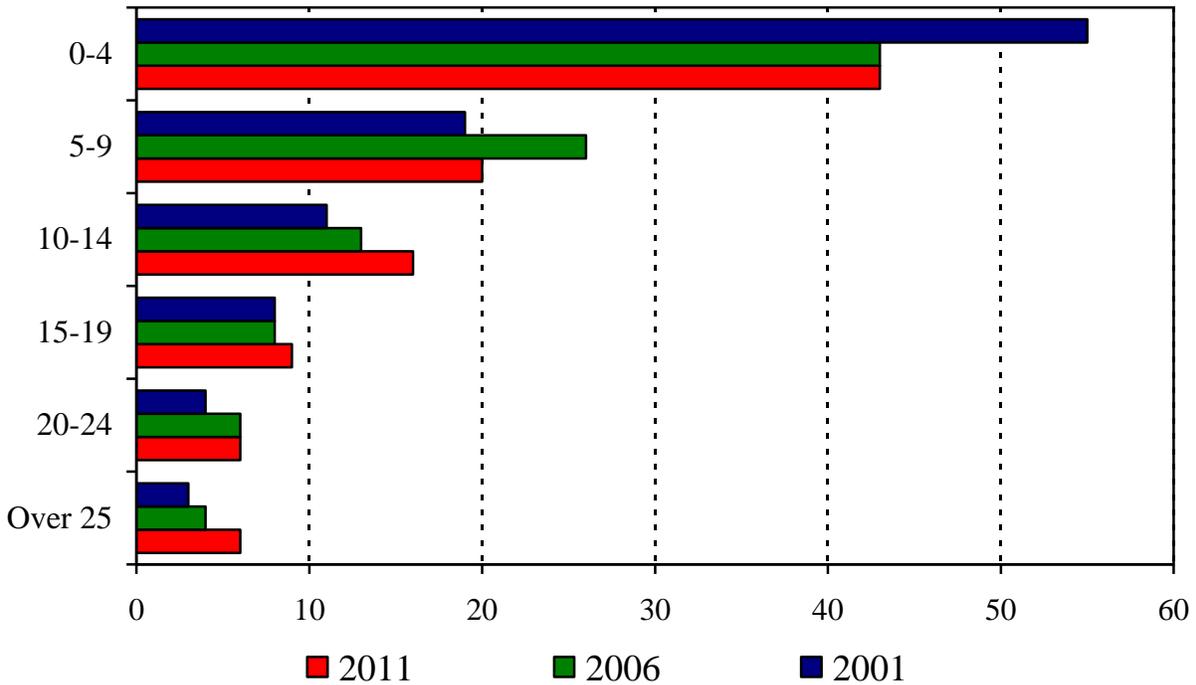
(Based on Market Value of Assets)

		2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Total Income (\$Mil)	■	53.5	122.4	178.4	195.5	217.5	339.3	44.6	-111.0	311.0	491.3
Benefits and Expenses (\$Mil)	■	43.5	48.4	54.8	68.5	74.2	76.6	83.6	93.8	95.8	105.6
Net Change in MVA (\$Mil)	—	10.0	74.0	123.6	127.0	143.3	262.7	-39.0	-204.8	215.2	385.7

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.....	\$ 3,613,102,227
2. Present Value of Future Employee Contributions.....	\$ 578,341,253
3. Unfunded Actuarial Accrued Liability	\$ 68,826,417
4. Actuarial Value of Assets	\$ 1,935,179,988
5. Funding Deposit Account Credit Balance	\$ 13,680,020
6. Present Value of Future Employer Normal Costs (1 – 2 – 3 – 4 + 5)	\$ 1,044,434,589
7. Present Value of Future Salaries	\$ 5,783,412,698
8. Employer Normal Cost Accrual Rate (6 ÷ 7)	18.059140%
9. Projected Fiscal 2012 Salary for Current Membership	\$ 592,205,961
10. Employer Normal Cost as of July 1, 2011 (8 x 9).....	\$ 106,947,304
11. Amortization Payment on Frozen Unfunded Accrued Liability of \$ 68,826,417 with Payments increasing at 3.5% per year	\$ 7,570,127
12. Total Employer Normal Cost & Amortization Payment (10+ 11)	\$ 114,517,431
13. Normal Cost and Amortization Payment Interest Adjusted for Midyear Payment.....	\$ 119,010,005
14. Estimated Administrative Cost for Fiscal 2012	\$ 1,360,000
15. Gross Employer Actuarially Required Contribution for Fiscal 2012(13 + 14).....	\$ 120,370,005
16. Projected Income from Ad Valorem Taxes for Fiscal 2012.....	\$ 16,012,037
17. Projected Income from Revenue Sharing Funds for Fiscal 2012.....	\$ 424,053
18. GROSS Employer Actuarially Required Contribution to be funded by direct employer contributions and Insurance Premium Taxes for Fiscal 2012 (15 - 16 - 17).....	\$ 103,933,915
19. Estimated Insurance Premium Taxes due for fiscal 2012	\$ 15,637,701
20. Employer's Net Direct Actuarially Required Contribution (18 – 19).....	\$ 88,296,214
21. Projected Payroll (July 1, 2011 through June 30, 2012)	\$ 640,894,601
22. Net Direct Employer Actuarially Required Contribution as a % of Projected Payroll for Fiscal 2012 (20 ÷ 21).....	13.78%
23. Employer Contribution Rate for Fiscal 2012 (adjusted for FDA payment)	13.75%
24. Contribution Shortfall (Excess) as a Percentage of Payroll (22 – 23).....	0.03%
25. Increase (Reduction) to Following Year Payment for Contribution Shortfall (Excess)	0.00%
26. Recommended Net Direct Employer Contribution Rate for fiscal 2013 (Rounded to nearest .25%)	13.75%

EXHIBIT II
PRESENT VALUE OF FUTURE BENEFITS

Present Value of Future Benefits for Active Members:

Retirement Benefits	\$ 2,439,691,901
Survivor Benefits	80,520,589
Disability Benefits	72,467,405
Vested Deferred Termination Benefits	71,526,526
Contribution Refunds.....	83,417,149

TOTAL Present Value of Future Benefits for Active Members \$ 2,747,623,570

Present Value of Future Benefits for Terminated Members:

Terminated Vested Members Due Benefits at Retirement	\$ 35,424,748
Terminated Members with Reciprocals Due Benefits at Retirement ...	1,613,696
Terminated Members Due a Refund.....	13,197,904

TOTAL Present Value of Future Benefits for Terminated Members \$ 50,236,348

Present Value of Future Benefits for Pensioners:

Regular Retirees

Maximum	\$ 191,582,771
Option 1.....	78,051,025
Option 2.....	121,450,633
Option 2a.....	156,446,591
Option 3.....	36,060,110
Option 3a.....	64,076,506
Option 4.....	1,017,579
Option 5.....	39,201,281

TOTAL Regular Retirees \$ 687,886,496

Disability Retirees 26,252,980

Survivors & Widows..... 87,097,806

Annuities Certain Payable to Retirees..... 5,124,191

DROP and Back-DROP Account Balances 8,880,836

TOTAL Present Value of Future Benefits for Pensioners \$ 815,242,309

TOTAL Present Value of Future Benefits \$ 3,613,102,227

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

Current Assets:

Cash in Banks	\$ 8,328,200
Contributions Receivable from Members.....	4,906,013
Contributions Receivable from Employers	5,461,604
Accrued Interest and Dividends on Investments	4,129,335
Sold Investment Receivables.....	37,340,235
Miscellaneous Receivables.....	1,091,173

TOTAL CURRENT ASSETS \$ 61,256,560

Property, Plant and Equipment (Net of accumulated depreciation)..... \$ 2,742,047

Investments:

Equities and Other Investments.....	\$ 1,288,301,970
Bonds.....	540,818,931
Cash Equivalents.....	101,961,821

TOTAL INVESTMENTS \$ 1,931,082,722

TOTAL ASSETS \$ 1,995,081,329

Current Liabilities:

Purchased Investments Payables	\$ 78,836,090
Refunds Payable	791,903
Accounts Payable	1,857,281
Accrued Leave Payables.....	83,896
Pensions Payable	5,395
Other Payables.....	5,286,200
Obligations Under Securities Lending Program.....	274,112

TOTAL CURRENT LIABILITIES..... \$ 87,134,877

NET MARKET VALUE OF ASSETS..... \$ 1,907,946,452

**EXHIBIT III – Schedule B
ACTUARIAL VALUE OF ASSETS**

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

Fiscal year 2011	\$ 189,806,398
Fiscal year 2010	38,459,312
Fiscal year 2009	(391,592,607)
Fiscal year 2008	(227,585,992)
Fiscal year 2007	<u>105,612,001</u>
Total for five years.....	\$ (285,300,888)

Deferral of excess (shortfall) of invested income:

Fiscal year 2011 (80%)	\$ 151,845,118
Fiscal year 2010 (60%)	23,075,587
Fiscal year 2009 (40%)	(156,637,043)
Fiscal year 2008 (20%)	(45,517,198)
Fiscal year 2007 (0%)	<u>0</u>
Total deferred for current year.....	\$ (27,233,536)

Market value of plan net assets, end of year \$ 1,907,946,452

Preliminary actuarial value of plan assets, end of year \$ 1,935,179,988

Actuarial value of assets corridor

85% of market value, end of year.....	\$ 1,621,754,484
115% of market value, end of year.....	\$ 2,194,138,420

Final actuarial value of plan net assets, end of year \$ 1,935,179,988

EXHIBIT IV
PRESENT VALUE OF FUTURE CONTRIBUTIONS

Employee Contributions to the Annuity Savings Fund.....	\$ 578,341,253
Employer Normal Contributions to the Pension Accumulation Fund	1,044,434,589
Employer Amortization Payments to the Pension Accumulation Fund.....	68,826,417
Funding Deposit Account Credit.....	(13,680,020)
TOTAL PRESENT VALUE OF FUTURE CONTRIBUTIONS	\$ 1,677,922,239

EXHIBIT V
CHANGE IN FROZEN UNFUNDED ACTUARIAL ACCRUED LIABILITY

Prior Year Frozen Unfunded Accrued Liability.....	\$ 71,042,296
Interest on Frozen Unfunded Accrued Liability	\$ 5,683,384
Normal Cost for Prior Year	102,866,459
Interest on the Normal Cost	8,229,317
Administrative Expense	1,560,075
Interest on Administrative Expenses.....	61,202
Credit to Funding Deposit Account	0
TOTAL Increases to Frozen Unfunded Accrued Liability	\$118,400,437
Direct Employer Contributions	\$ 75,994,854
Interest on Employer Contributions	2,981,315
Ad Valorem, Revenue Sharing, and Insurance Premium Taxes	31,802,992
Interest on Taxes	1,247,647
Contribution Shortfall	3,745,681
Withdraw From Funding Deposit Account.....	4,660,975
Interest on Withdrawal	182,852
TOTAL Decreases to Frozen Unfunded Accrued Liability	\$120,616,316
Net Change in Frozen Unfunded Accrued Liability	(2,215,879)
CURRENT YEAR FROZEN UNFUNDED ACCRUED LIABILITY	\$ 68,826,417

EXHIBIT VI
ANALYSIS OF INCREASE IN ASSETS

Actuarial Value of Assets (June 30, 2010).....		\$ 1,773,450,705
Income:		
Member Contributions	\$ 63,356,650	
Employer Contributions	75,994,854	
Ad Valorem Taxes	15,946,180	
Revenue Sharing Funds	426,126	
Funds Transferred into the System.....	5,722,191	
Other	82,594	
State Insurance Premium Taxes	15,430,686	
Total Contribution Income.....		\$ 176,959,281
Interest Income	\$ 19,259,844	
Dividend Income	9,279,527	
Net Change in Fair Values of Investments.....	297,632,475	
Investment Expense	(7,159,321)	
Adjustment for prior period.....	(4,629,166)	
Total Investment Income.....		\$ 314,383,359
TOTAL Income		\$ 491,342,640
Expenses:		
Retirement Benefits	\$ 91,519,622	
Refunds of Contributions	11,122,012	
Administrative Expenses & Depreciation	1,560,075	
Funds Transferred To Another System	1,427,641	
TOTAL Expenses.....		\$ 105,629,350
Net Market Income for Fiscal 2011 (Income - Expenses)		\$ 385,713,290
Adjustment for Actuarial Smoothing		\$ (223,984,007)
Actuarial Value of Assets (June 30, 2011).....		\$ 1,935,179,988

**EXHIBIT VII
FUND BALANCE**

Present Assets of the System Creditable to:

Annuity Savings Fund.....	\$ 451,189,942
Annuity Reserve Fund.....	806,361,473
Pension Accumulation Fund	626,937,486
DROP and Back-DROP Accounts	9,777,531
Funding Deposit Account	13,680,020
MARKET VALUE OF ASSETS.....	\$ 1,907,946,452
ADJUSTMENT FOR ACTUARIAL SMOOTHING	27,233,536
ACTUARIAL VALUE OF ASSETS	\$ 1,935,179,988

**EXHIBIT VIII
PENSION BENEFIT OBLIGATION**

Present Value of Credited Projected Benefits Payable to Current Employees	\$ 1,523,018,324
Present Value of Benefits Payable to Terminated Employees	50,236,348
Present Value of Benefits Payable to Current Retirees and Beneficiaries	815,242,309
TOTAL PENSION BENEFIT OBLIGATION	2,388,496,981
ACTUARIAL VALUE OF ASSETS	1,935,179,988
Ratio of Net Actuarial Value of Assets to Pension Benefit Obligation.....	81.02%

EXHIBIT IX
COST OF LIVING ADJUSTMENTS - TARGET RATIO

Actuarial Value of Assets Divided by PBO as of Fiscal 1986:..... 51.50%

Amortization of Unfunded Balance over 30 years:..... 40.42%

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

Changes for Fiscal 1988	9.71%
Changes for Fiscal 1994	(2.60%)
Changes for Fiscal 1996	2.93%
Changes for Fiscal 1997	(3.69%)
Changes for Fiscal 1998	(3.72%)
Changes for Fiscal 2000	0.13%
Changes for Fiscal 2001	(2.09%)
Changes for Fiscal 2003	1.34%
Changes for Fiscal 2005	(0.19%)
Changes for Fiscal 2006	5.34%
Changes for Fiscal 2009	8.49%
Changes for Fiscal 2010	(2.27%)

TOTAL Adjustments..... 13.38%

Amortization of Adjustments in Funded Ratio over 30 years:

Changes for Fiscal 1988	(7.44%)
Changes for Fiscal 1994	1.47%
Changes for Fiscal 1996	(1.47%)
Changes for Fiscal 1997	1.72%
Changes for Fiscal 1998	1.61%
Changes for Fiscal 2000	(0.05%)
Changes for Fiscal 2001	0.70%
Changes for Fiscal 2003	(0.36%)
Changes for Fiscal 2005	0.04%
Changes for Fiscal 2006	(0.89%)
Changes for Fiscal 2009	(0.57%)
Changes for Fiscal 2010	0.08%

TOTAL Amortization of Adjustments..... (5.16%)

Target Ratio for Current Fiscal Year (Limited to 100%)..... 100.00%

Actuarial Value of Assets Divided by PBO as of Fiscal 2011 81.02%

**EXHIBIT X
CENSUS DATA**

	Active	Terminated with Funds on Deposit	Retired	Total
Number of members as of June 30, 2010	14,711	5,052	3,510	23,273
Additions to Census				
Initial membership	1,296	135		1,431
Death of another member			36	36
Omitted in error last year	1		9	10
Change in Status during Year				
Actives terminating service	(402)	402		0
Actives who retired	(234)		234	0
Suspended Benefits Reinstated				
Term. members rehired	87	(87)		0
Term. members who retire		(32)	32	0
Retirees who are rehired	4		(4)	0
Refunded who are rehired	63	7		70
DROP participants retiring				
DROP returned to work				
Omitted in error last year				
Eliminated from Census				
Refund of contributions	(750)	(407)		(1,157)
Deaths	(22)	(4)	(101)	(127)
Included in error last year				
Adjustment for multiple records				
Number of members as of June 30, 2011	14,754	5,066	3,716	23,536

ACTIVES CENSUS BY AGE:

Age	Number Male	Number Female	Total Number	Average Salary	Total Salary
16 - 20	64	18	82	25,379	2,081,037
21 - 25	712	303	1,015	32,220	32,703,094
26 - 30	1,239	594	1,833	37,515	68,764,504
31 - 35	1,142	623	1,765	40,719	71,869,822
36 - 40	1,205	589	1,794	43,161	77,430,903
41 - 45	1,306	649	1,955	45,700	89,343,515
46 - 50	1,085	718	1,803	46,006	82,948,881
51 - 55	956	687	1,643	45,715	75,109,889
56 - 60	795	471	1,266	45,283	57,328,877
61 - 65	623	303	926	43,551	40,328,587
66 - 70	292	108	400	40,569	16,227,437
71 - 75	160	34	194	32,769	6,357,203
76 - 80	49	14	63	33,749	2,126,204
81 - 85	11	1	12	29,396	352,757
86 - 90	2	0	2	36,510	73,019
91 - 95	1	0	1	38,841	38,841
TOTAL	9,642	5,112	14,754	42,232	623,084,570

THE ACTIVE CENSUS INCLUDES 4,344 ACTIVES WITH VESTED BENEFITS, INCLUDING 0 DROP PARTICIPANTS AND 15 ACTIVE FORMER DROP PARTICIPANTS.

TERMINATED MEMBERS DUE A DEFERRED RETIREMENT BENEFIT:

Age	Number Male	Number Female	Total Number	Average Benefit	Total Benefit
31 - 35	1	0	1	16,978	16,978
36 - 40	16	4	20	23,088	461,766
41 - 45	62	18	80	18,964	1,517,114
46 - 50	85	22	107	18,175	1,944,775
51 - 55	63	21	84	19,218	1,614,332
56 - 60	12	5	17	11,081	188,381
61 - 65	4	2	6	9,141	54,844
66 - 70	3	1	4	5,636	22,544
71 - 75	1	0	1	14,663	14,663
76 - 80	1	0	1	1,881	1,881
81 - 85	1	0	1	2,081	2,081
91 - 99	1	0	1	399	399
TOTAL	250	73	323	18,080	5,839,758

TERMINATED MEMBERS DUE A REFUND OF CONTRIBUTIONS:

Contributions Ranging From	To	Number	Total Contributions
0	99	1,259	52,906
100	499	1,367	346,278
500	999	537	388,223
1000	1999	437	630,344
2000	4999	466	1,502,338
5000	9999	290	2,075,607
10000	19999	241	3,420,756
20000	99999	146	4,060,041
TOTAL		4,743	12,476,493

REGULAR RETIREES:

Age	Number Male	Number Female	Total Number	Average Benefit	Total Benefit
46 - 50	3	2	5	38,819	194,096
51 - 55	58	33	91	36,570	3,327,864
56 - 60	327	149	476	32,152	15,304,487
61 - 65	453	179	632	28,420	17,961,549
66 - 70	483	162	645	23,358	15,065,880
71 - 75	327	111	438	20,703	9,067,888
76 - 80	205	72	277	17,601	4,875,484
81 - 85	123	42	165	20,315	3,352,050
86 - 90	42	27	69	18,458	1,273,611
91 - 99	9	5	14	13,230	185,213
TOTAL	2,030	782	2,812	25,110	70,608,122

DISABILITY RETIREES:

Age	Number Male	Number Female	Total Number	Average Benefit	Total Benefit
26 - 30	0	1	1	13,302	13,302
31 - 35	1	2	3	11,138	33,413
36 - 40	3	2	5	13,324	66,619
41 - 45	10	3	13	12,455	161,917
46 - 50	17	5	22	17,875	393,243
51 - 55	22	9	31	21,614	670,032
56 - 60	27	14	41	15,016	615,641
61 - 65	20	4	24	11,854	284,493
66 - 70	15	4	19	12,077	229,459
71 - 75	12	3	15	10,724	160,865
76 - 80	4	3	7	12,518	87,625
81 - 85	6	0	6	11,010	66,061
86 - 90	1	0	1	14,020	14,020
TOTAL	138	50	188	14,876	2,796,690

SURVIVORS:

Age	Number Male	Number Female	Total Number	Average Benefit	Total Benefit
0 - 25	10	36	46	5,343	245,761
26 - 30	0	4	4	9,660	38,641
31 - 35	0	5	5	13,078	65,392
36 - 40	3	8	11	16,952	186,477
41 - 45	0	7	7	15,844	110,907
46 - 50	3	23	26	17,031	442,812
51 - 55	2	25	27	15,643	422,355
56 - 60	2	63	65	19,825	1,288,647
61 - 65	2	65	67	17,005	1,139,349
66 - 70	6	96	102	15,468	1,577,747
71 - 75	3	91	94	13,877	1,304,442
76 - 80	3	90	93	13,969	1,299,104
81 - 85	3	83	86	15,884	1,366,023
86 - 90	1	63	64	10,241	655,409
91 - 99	1	18	19	10,177	193,372
TOTAL	39	677	716	14,436	10,336,438

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	66	13	3										82
21 - 25	286	293	188	141	75	32							1,015
26 - 30	256	276	270	290	232	486	23						1,833
31 - 35	157	190	176	175	162	553	339	13					1,765
36 - 40	138	154	142	122	141	371	498	214	14				1,794
41 - 45	111	128	127	134	123	354	383	369	213	13			1,955
46 - 50	95	127	105	122	95	310	272	224	244	189	20		1,803
51 - 55	79	107	82	103	86	274	312	175	158	184	83		1,643
56 - 60	69	67	71	76	60	258	236	155	112	81	81		1,266
61 - 65	51	41	47	70	55	208	197	107	67	51	32		926
66 - 70	20	14	22	30	20	78	101	45	30	25	15		400
71 & Over	12	13	20	26	21	58	57	32	12	14	7		272
Totals	1340	1423	1253	1289	1070	2982	2418	1334	850	557	238		14754

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	24,953	28,002	23,372										25,379
21 - 25	27,657	30,831	34,166	37,088	38,072	39,116	43,519						32,220
26 - 30	28,936	32,992	36,475	38,843	40,929	42,473	47,850						37,515
31 - 35	29,619	32,958	34,807	39,590	40,485	44,205	47,850	52,177					40,719
36 - 40	29,075	32,635	36,980	38,742	39,422	43,827	49,037	53,464	52,498				43,161
41 - 45	28,401	32,455	37,248	37,225	37,547	43,935	47,966	55,790	58,283	59,628			45,700
46 - 50	28,093	31,657	33,709	36,435	37,267	41,911	46,105	52,669	59,151	61,902	63,580		46,006
51 - 55	28,203	27,785	34,282	36,639	35,327	38,611	45,641	52,190	54,806	63,468	72,234		45,715
56 - 60	28,198	28,010	32,802	42,712	38,898	38,589	43,550	51,158	57,001	61,884	74,538		45,283
61 - 65	26,364	26,793	32,287	34,179	37,927	40,218	45,422	46,857	55,072	60,171	87,616		43,551
66 - 70	25,104	23,299	28,140	35,349	31,142	34,654	41,236	42,339	54,376	62,299	75,662		40,569
71 & Over	26,998	22,331	28,968	28,804	27,684	28,888	33,808	38,966	43,018	49,318	52,562		32,897
Average	28,203	31,293	34,992	37,862	38,588	41,725	46,365	52,273	57,015	61,907	73,997		42,232

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 - 30													0
31 - 35									1				1
36 - 40								20					20
41 - 45							76	4					80
46 - 50						106	1						107
51 - 55	8	15	13	25	18	5							84
56 - 60	11	2	1	2	1								17
61 - 65	6												6
66 - 70	4												4
71 - 75	1												1
76 - 80	1												1
81 - 85	1												1
86 - 90	1												0
91 & Over	1												1
Totals	33	17	14	27	19	111	77	24	1	0	0	0	323

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 - 30													0
31 - 35									16,978				16,978
36 - 40								23,088					23,088
41 - 45							19,779	3,484					18,964
46 - 50						18,331	1,719						18,175
51 - 55	19,750	16,092	20,305	23,136	19,204	5,381							19,218
56 - 60	14,814	2,046	1,705	9,569	494								11,081
61 - 65	9,141												9,141
66 - 70	5,636												5,636
71 - 75	14,663												14,663
76 - 80	1,881												1,881
81 - 85	2,081												2,081
86 - 90													0
91 & Over	399												399
Average	12,647	14,440	18,976	22,131	18,220	17,747	19,544	19,821	16,978	0	0	0	18,080

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	4				1										5
51 - 55	31	18	15	12	11	4									91
56 - 60	85	76	94	54	56	106	5								476
61 - 65	73	43	71	47	56	301	38	3							632
66 - 70	39	31	51	46	37	245	165	31							645
71 - 75	11	14	16	14	11	130	140	67	34	1					438
76 - 80	7	5	8	2	10	27	93	56	51	18					277
81 - 85	3	2		2	2	11	26	38	35	38	8				165
86 - 90			1		2	3	1	8	22	20	14				69
91 & Over								1	3	1	9				14
Totals	253	189	256	177	184	827	468	204	145	78	31				2812

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	45,818				10,823										38,819
51 - 55	34,623	37,287	38,580	39,540	36,490	32,203	17,081								36,570
56 - 60	36,361	30,692	32,557	29,422	29,534	32,950	19,877								32,152
61 - 65	31,362	29,031	30,082	27,019	30,103	28,318	19,877	17,758							28,420
66 - 70	26,334	29,197	24,601	22,074	24,014	25,173	19,584	18,590							23,358
71 - 75	17,170	25,584	23,608	29,242	19,041	24,306	19,276	16,817	15,639	7,422					20,703
76 - 80	14,638	15,458	18,448	7,413	25,541	25,361	18,146	17,037	13,181	15,514					17,601
81 - 85	8,450	7,952	6,448	41,403	14,028	19,408	28,884	20,794	20,718	15,759	15,165				20,315
86 - 90						21,888	10,417	17,849	21,641	19,136	13,534				18,458
91 & Over								10,336	18,169	17,416	11,439				13,230
Average	31,543	29,675	29,536	27,432	27,899	27,130	19,700	17,910	16,963	16,483	13,347				25,110

DISABILITY RETIREES:

Completed Years Since Retirement

Attained Ages	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30&Over	Total
0 - 30			1									1
31 - 35		2	1	1								3
36 - 40		3	1									5
41 - 45	2	3	6	3	2	3	1	1				13
46 - 50	3	4	4	2	1	5	4					22
51 - 55	2	4	4	2	1	6	6	3	3			31
56 - 60	4	1	2	3	1	7	12	5	3	3		41
61 - 65		2	2	2		4	7	4	2	1		24
66 - 70			2			3	4	4	5	1		19
71 - 75		1				1	1	3	6	1	2	15
76 - 80									1	3	3	7
81 - 85						1				1	4	6
86 - 90									1			1
91 & Over									1			0
Totals	11	13	18	11	5	32	38	20	21	10	9	188

AVERAGE ANNUAL BENEFITS PAYABLE TO DISABILITY RETIREES:

Completed Years Since Retirement

Attained Ages	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30&Over	Average Benefit
0 - 30			13,302									13,302
31 - 35		10,976	12,696	11,462								11,138
36 - 40		16,953	17,499	27,298	9,518	14,855	9,358					13,324
41 - 45	14,836	16,953	17,499	27,298	24,750	13,912	9,095	7,239				12,455
46 - 50	18,230	32,056	39,563	26,208	29,966	16,303	11,350					17,875
51 - 55	15,020	11,960	11,074	12,545	11,420	16,554	18,470	10,817	9,511			21,614
56 - 60	9,763	16,683	18,859	12,380	11,420	28,166	14,259	9,885	12,879	12,368		15,016
61 - 65			8,711			14,809	8,814	9,926	9,606	8,799		11,854
66 - 70						11,052	15,623	11,365	12,228	9,787		12,077
71 - 75		7,511				9,269	8,410	7,270	12,550	12,593	12,988	10,724
76 - 80									16,852	12,698	10,893	12,518
81 - 85						6,063				15,975	11,006	11,010
86 - 90									14,020			14,020
91 & Over												0
Average	13,950	19,529	20,363	18,924	17,034	17,441	13,067	9,804	12,081	12,235	11,409	14,876

SURVIVING BENEFICIARIES OF FORMER MEMBERS:

Completed Years Since Retirement

Attained Ages	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30&Over	Total
0 - 20		7	4	3	4	11	4					33
21 - 25				2	2	7	2					13
26 - 30				1		1	2					4
31 - 35		1			2		2					5
36 - 40			2		5	2	1				1	11
41 - 45		1			1	2	3					7
46 - 50	1	2	2	1	2	8	5	4	1			26
51 - 55		3	3	1	4	18	7	5	1		1	27
56 - 60	8	2	7	6	3	15	8	9	2	2	1	65
61 - 65	4	7	3	7	4	27	13	8	2	4	1	67
66 - 70	6	7	13	6	6	20	13	13	3	1		102
71 - 75	8	9	6	2	5	25	16	10	7	4	2	94
76 - 80	2	2	8	5	6	22	19	11	10	6	2	93
81 - 85	3	6	6		6	13	14	15	13	6	10	86
86 - 90		1	1	1	2	11	15	4	11	7	11	64
91 & Over		1		1		2	2	3	3	2	5	19
Totals	34	49	55	36	42	168	132	82	53	32	33	716

AVERAGE ANNUAL BENEFITS PAYABLE TO SURVIVORS OF FORMER MEMBERS:

Completed Years Since Retirement

Attained Ages	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30&Over	Average Benefit
0 - 20		7,375	4,440	6,931	5,034	5,291	4,852					5,694
21 - 25				5,823	4,133	3,785	5,717					4,449
26 - 30				25,196		2,925	5,260					9,660
31 - 35		22,069			13,432		8,230					13,078
36 - 40			14,571		21,509	17,976	8,792				5,044	16,952
41 - 45		39,492			8,567	15,194	10,820					15,844
46 - 50	16,783	27,891	25,005	36,658	23,157	15,479	11,079	12,879	6,520			17,031
51 - 55	25,890	19,806	26,909	15,507	15,791	10,974	10,969	15,089	15,089		5,002	15,643
56 - 60	16,275	32,238	27,773	13,819	31,348	23,203	18,566	13,071	14,160	12,122	4,798	19,825
61 - 65	14,476	14,303	26,014	20,876	18,954	20,874	15,037	13,828	15,179	7,939		17,005
66 - 70	14,709	17,023	20,265	17,976	17,172	11,238	15,931	18,078	9,529	10,343		15,468
71 - 75	18,955	12,182	12,266	7,833	20,017	16,027	11,683	13,681	7,417	14,454	9,837	13,877
76 - 80	24,674	6,829	10,000	25,751	14,469	15,504	11,626	9,829	17,840	11,956	10,137	13,969
81 - 85	14,203	19,366	19,912	5,576	5,804	14,706	22,128	12,699	14,852	16,906	10,177	15,884
86 - 90		10,189	5,989	9,310		11,230	11,615	10,322	10,007	11,326	8,514	10,241
91 & Over		11,184				16,220	11,726	10,288	9,857	12,804	6,189	10,177
Average	17,310	15,775	18,047	16,834	16,407	14,667	13,565	13,137	12,678	12,569	8,520	14,436

EXHIBIT XI
YEAR -TO-YEAR COMPARISON

	Fiscal 2011	Fiscal 2010	Fiscal 2009	Fiscal 2008
Number of Active Members	14,754	14,711	14,396	14,038
Number of Retirees and Survivors	3,716	3,510	3,369	3,140
Number Terminated Due Deferred Benefits	323	325	306	328
Number Terminated Due Refund	4,743	4,727	4,435	4,156
Active Lives Payroll	\$ 623,084,570	\$ 603,250,449	\$ 577,078,980	\$ 537,082,456
Retiree Benefits in Payment	\$ 83,741,250	\$ 76,379,208	\$ 71,517,150	\$ 64,309,775
Market Value of Assets	\$1,907,946,452	\$1,522,233,162	\$1,306,974,663	\$1,511,820,016
Ratio of AVA to GASB-25 Accrued Liability	96.57%	96.15%	95.67%	95.64%
Accrued Liability (as Defined by GASB-25)	\$2,004,006,405	\$1,844,493,001	\$1,681,075,062	\$1,702,582,378
Actuarial Value of Assets	\$1,935,179,988	\$1,773,450,705	\$1,608,228,363	\$1,628,303,910
Frozen Unfunded Actuarial Accrued Liability	\$ 68,826,417	\$ 71,042,296	\$ 72,846,699	\$ 74,278,468
Present Value of Future Employer Normal Cost	\$1,044,434,589	\$1,003,967,230	\$ 890,632,040	\$ 641,924,601
Present Value of Future Employee Contributions	\$ 578,341,253	\$ 557,530,584	\$ 517,818,601	\$ 482,053,768
Funding Deposit Account (FDA)	\$ 13,680,020	\$ 17,151,710	\$ 15,881,213	\$ 0
Present Value of Future Benefits	\$3,613,102,227	\$3,388,839,105	\$3,073,644,490	\$2,826,560,747

	Fiscal 2012	Fiscal 2011	Fiscal 2010	Fiscal 2009
Employee Contribution Rate	10.00%	10.00%	10.00%	10.00%
Projected Ad Valorem and Revenue Sharing Funds as a % of Projected Payroll	2.56%	2.61%	2.75%	2.53%
Estimated Insurance Premium Taxes as a % of Projected Payroll	2.44%	2.48%	2.55%	2.72%
Actuarially Required Net Direct Employer Contributions as a % of Projected Payroll	13.78%	13.56%	12.58%	8.92%
Actual Net Direct Employer Contribution Rate	13.75% ‡	12.75% †	11.00%	11.00%

† 12.00% paid directly by employers with additional 0.75% allocated from the Funding Deposit Account

‡ 12.50% paid directly by employers with additional 1.25% allocated from the Funding Deposit Account

Fiscal 2007	Fiscal 2006	Fiscal 2005	Fiscal 2004	Fiscal 2003	Fiscal 2002
13,530	12,835	13,863	13,657	13,595	13,267
2,995	2,859	2,693	2,488	2,325	2,195
340	329	279	299	280	263
3,939	3,722	3,152	2,977	2,793	2,560
\$ 481,418,484	\$ 436,370,158	\$ 432,019,757	\$ 406,020,215	\$ 383,388,474	\$ 360,267,884
\$ 55,471,909	\$ 50,612,587	\$ 45,968,384	\$ 39,124,305	\$ 35,381,798	\$ 32,217,500
\$1,550,829,081	\$1,288,100,175	\$1,144,751,928	\$1,017,722,292	\$ 894,112,820	\$ 820,104,918
93.85%	93.07%	91.99%	91.30%	90.76%	90.51%
\$1,564,897,616	\$1,378,133,705	\$1,180,095,189	\$1,075,107,796	\$ 999,746,836	\$ 959,788,254
\$1,468,646,528	\$1,282,638,484	\$1,085,515,384	\$ 981,583,851	\$ 907,401,749	\$ 868,729,107
\$ 96,251,088	\$ 95,495,221	\$ 94,579,805	\$ 93,523,945	\$ 92,345,087	\$ 91,059,147
\$ 524,216,581	\$ 527,090,828	\$ 598,357,461	\$ 503,285,937	\$ 435,520,804	\$ 393,484,597
\$ 436,275,292	\$ 400,515,989	\$ 399,070,734	\$ 344,408,426	\$ 319,054,283	\$ 298,862,302
\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
\$2,525,389,489	\$2,305,740,522	\$2,177,523,384	\$1,922,802,159	\$1,754,321,923	\$1,652,135,153

Fiscal 2008	Fiscal 2007	Fiscal 2006	Fiscal 2005	Fiscal 2004	Fiscal 2003
10.00%	10.00%	10.00%	10.00%/9.80%*	9.80%	9.80%
2.39%	2.47%	2.32%	2.44%	2.45%	2.43%
2.87%	2.77%	2.68%	2.78%	2.58%	2.30%
7.59%	8.69%	10.99%	10.62%	9.61%	9.15%
11.00%	11.00%	10.75%	9.75%	9.25%	7.75%

* Increase effective October 1, 2004

SUMMARY OF PRINCIPAL PLAN PROVISIONS

The Sheriffs' Pension & Relief Fund is a defined benefit pension plan that provides retirement allowances and other benefits. The following summary of plan provisions is for general informational purposes only and does not constitute a guarantee of benefits.

MEMBERSHIP - Any sheriff elected or deputy employed, who is otherwise eligible for membership must become a participating member of the fund. All salaried employees of the Sheriffs' Pension and Relief Fund and the Louisiana Sheriffs' Association who meet certain requirements are also eligible to become members of the retirement system.

CONTRIBUTION RATES - The fund is financed by a combination of employee contributions, employer contributions, dedicated ad valorem taxes, revenue sharing funds, and insurance premium taxes. The employee contribution rate is determined by the Board of Trustees but cannot be less than 9.8% nor more than 10.25%. Gross employer contributions are determined by actuarial valuation and are subject to change each year in accordance with R. S. 11:103 and R. S. 11:105. Also, the fund annually receives revenue sharing funds and ad valorem taxes equal to 0.5% of the aggregate amount of the tax shown to be collected by the tax roll of each respective parish, and additional funds as indicated by valuation and apportioned by the Public Employees' Retirement Systems' Actuarial Committee from available insurance premium taxes described in R. S. 22:1419.

CONTRIBUTION REFUNDS - Upon withdrawal from service, members not entitled to a retirement allowance who have remained out of service for a period of thirty days are paid a refund of accumulated contributions upon request. Receipt of such a refund cancels all accrued benefits in the system.

NORMAL RETIREMENT BENEFITS - For members whose first employment making them eligible for membership in the system began on or before December 31, 2011: Members with twelve years of creditable service may retire at age fifty-five; members with thirty years of creditable service may retire at any age. The retirement allowance is equal to three and one-third percent of the member's average final compensation multiplied by his years of creditable service, not to exceed (after reduction for optional payment form) 100% of average final compensation.

For members whose first employment making them eligible for membership in the system began on or after January 1, 2012: Members with twelve years of creditable service may retire at age sixty-two; members with twenty years of service may retire at age sixty; members with thirty years of creditable service may retire at age fifty-five. The benefit accrual rate for such members with less than thirty years of service is three percent; for members with thirty or more years of service, the accrual rate is three and one-third percent. The retirement allowance is equal to the benefit accrual rate times the member's average final compensation multiplied by his years of creditable service, not to exceed (after reduction for optional payment form) 100% of average final compensation.

EARLY RETIREMENT BENEFITS - For members whose first employment making them eligible for membership in the system began on or before December 31, 2011: Active, contributing members with at least ten years of creditable service may retire at age sixty. The accrued normal retirement benefit is reduced actuarially for each month or fraction thereof that retirement begins prior the member's earliest normal retirement date assuming continuous service.

For all members: Members with twenty or more years of service may retire with a reduced retirement at age fifty.

FINAL AVERAGE COMPENSATION – For a member whose first employment making him eligible for membership in the system began on or before June 30, 2006, final average compensation is based on the average monthly earnings during the highest thirty-six consecutive months or joined months if service was interrupted. The earnings to be considered for each twelve month period within the thirty-six month period shall not exceed 125% of the preceding twelve month period.

For a member whose first employment making him eligible for membership in the system began after June 30, 2006, final average compensation is based on the average monthly earnings during the highest sixty consecutive months or joined months if service was interrupted.

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, which is the actuarial equivalent of the maximum benefit.

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 spouse to whom the member was married and living with at the time of retirement will continue to receive the same reduced benefit.

Option 2A - Upon retirement, the member receives a reduced benefit. Upon the member's death, the spouse to whom the member was married and living with at the time of retirement will continue to receive the same reduced benefit. If the member's spouse dies before the member, the member's benefit will revert to the maximum.

Option 3 - Upon retirement, the member receives a reduced benefit. Upon the member's death, the spouse to whom the member was married and living with at the time of retirement will receive one-half of the member's reduced benefit.

Option 3A - Upon retirement, the member receives a reduced benefit. Upon the member's death, the spouse to whom the member was married and living with at the time of retirement will receive one-half of the member's reduced benefit. If the member's spouse dies before the member, the member's benefit will revert to the maximum.

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

Option 5 - Upon retirement, the member may receive ninety percent of the maximum benefit. Upon the member's death, if survived by a surviving spouse to whom the member was married and living with at the time of retirement, fifty percent of the member's benefit shall be paid to the spouse during said spouse's lifetime.

A member may also elect to receive an actuarially reduced benefit which provides for an automatic 2½% annual compound increase in monthly retirement benefits based on the reduced benefit and commencing on the later of age fifty-five or retirement anniversary; this COLA is in addition to any ad hoc COLAs which are payable. Back-DROP participants are not eligible for this benefit.

DISABILITY BENEFITS - Ten years of creditable service are required in order to be eligible for disability benefits when a non-service related disability is incurred; there are no service requirements for a service related disability. Totally disabled members receive the lesser of their accrued retirement benefit (with a minimum of 45%) or their accrued retirement benefit assuming continued service to their earliest normal retirement age. Members who become partially disabled receive 75% of the amount payable for total disability.

SURVIVOR BENEFITS - Survivor benefits for death solely as a result of injuries received in the line of duty are based on the following. For a spouse alone, a sum equal to 50% of the member's final average compensation with a minimum of \$150 per month. If a spouse is entitled to benefits and has a child or children under eighteen years of age (or over said age if physically or mentally incapacitated and dependent upon the member at the time of his death), an additional sum of 15% of the member's final average compensation is paid to each child with total benefits paid to spouse and children not to exceed 100%. If a member dies with no surviving spouse, surviving children under age eighteen receive monthly benefits of 15% of the member's final average compensation up to a maximum of 60% of final average compensation if there are more than four children. If a member is eligible for normal retirement at the time of death, the surviving spouse receives an automatic option 2 benefit; the additional benefit payable to children is the same as those available for members who die in the line of duty. In lieu of receiving option 2 benefits, the surviving spouse may receive a refund of the member's accumulated contributions. Benefits payable to surviving children are extended through age twenty-two, if the child is a full time student in good standing enrolled at a board approved or accredited school, college, or university.

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. Members who have thirty or more years of service may elect a Back-DROP period not to exceed the lesser of forty-eight months or the number of months of creditable service accrued after the member first became eligible for regular 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. In addition, the member’s Back-DROP account is credited with employee contributions received by the retirement fund during the Back-DROP period. Any DROP or Back-DROP balances left on deposit are managed by a third party, fixed income investment manager. Participants have the option to opt out of this program and take a distribution, if eligible, or to rollover the assets to another qualified plan.

COST OF LIVING INCREASES - The board of trustees is authorized to grant retired members and widows of members who have retired an annual cost of living increase of between 2% and 3% of

their current benefit, (not less than twenty dollars per month). When such a cost of living increase is granted in any fiscal year, no such cost-of-living increase may be granted in the immediately following fiscal year. Members retiring on or after July 1, 2007, who have not attained the age of sixty years, may not receive this cost-of-living increase until they have been retired for three years. Those who have attained the age of sixty years may not receive this cost-of-living increase until they have been retired for one year. Different waiting periods applied to retirements prior to July 1, 2007. In addition, the board may grant retired members and widows who are sixty-five years of age and older a 2% increase in their original benefit (or the benefit being received on October 1, 1977 if retirement had commenced prior to that date). In order for the board to grant either of these increases the system must meet certain criteria in the statutes related to funding status and interest earnings. In lieu of these cost of living adjustments the board may also grant an increase in the form of $X \times (A+B)$ where "X" is any amount up to \$1 per month and "A" is equal to 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 thirtieth of the initial year of such increase. The board may only grant such COLA's in years in which the fund meets certain funding and investment earnings targets.

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 cost method with allocation based on earnings. The frozen actuarial accrued liabilities were calculated on the projected unit credit cost method.

VALUATION INTEREST RATE: 8%

ACTUARIAL ASSET VALUES: Invested 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% (3.25% Inflation; 2.75% Merit)

ACTIVE MEMBER MORTALITY: RP 2000 Employee Table set back 1 year for males and females

ANNUITANT AND BENEFICIARY MORTALITY RP 2000 Healthy Annuitant Table set back 1 year for males and females

Back-DROP: Members eligible for Back-DROP are assumed to take the benefit with the greatest present value.

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.

RATES OF RETIREMENT: The table of these rates is included later in the report. These rates apply only to those individuals eligible to retire. Retirement rates for members who have completed DROP participation and are currently active are 0.3.

RETIREMENT LIMITATIONS: Projected retirement benefits are not subjected to IRS Section 415 limits.

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

Service	Factor	Service	Factor
<1	0.260	15	0.025
1	0.170	16	0.025
2	0.130	17	0.025
3	0.120	18	0.025
4	0.100	19	0.015
5	0.080	20	0.015
6	0.070	21	0.015
7	0.070	22	0.015
8	0.060	23	0.015
9	0.040	24	0.015
10	0.040	25	0.015
11	0.040	26	0.015
12	0.040	27	0.015
13	0.025	28	0.015
14	0.025	29	0.015

Note: The withdrawal rate for individuals eligible to retire is assumed to be zero.

MARRIAGE STATISTICS: 85% of the members are assumed to be married; husbands are assumed to be three years older than wives.

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

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

SERVICE RELATED DEATHS: 15% of total deaths

RATES OF DISABILITY: 15% of the disability rates used for the 21st valuation of the Railroad Retirement System for individuals with 10 – 19 years of service.

PARTIAL DISABILITIES: 20% of Total Disabilities

SERVICE RELATED DISABILITIES: 20% of Total Disabilities

VESTING ELECTING PERCENTAGE: 60% of those members under age 50 who are terminated vested elect deferred benefits in lieu of contribution refunds. 80% of those who are at least age 50 who are terminated vested elect deferred benefits in lieu of contribution refunds.

ACTUARIAL TABLES AND RATES

Age	Male Employee Mortality	Female Employee Mortality	Male Retiree Mortality	Female Retiree Mortality	Retirement Rates	Disability Rates
18	0.00030	0.00018	0.00030	0.00018	0.00000	0.00023
19	0.00032	0.00019	0.00032	0.00019	0.00000	0.00023
20	0.00033	0.00019	0.00033	0.00019	0.00000	0.00023
21	0.00035	0.00019	0.00035	0.00019	0.00000	0.00023
22	0.00036	0.00019	0.00036	0.00019	0.00000	0.00023
23	0.00037	0.00019	0.00037	0.00019	0.00000	0.00023
24	0.00037	0.00020	0.00037	0.00020	0.00000	0.00023
25	0.00038	0.00020	0.00038	0.00020	0.00000	0.00023
26	0.00038	0.00021	0.00038	0.00021	0.00000	0.00023
27	0.00038	0.00021	0.00038	0.00021	0.00000	0.00023
28	0.00038	0.00022	0.00038	0.00022	0.00000	0.00023
29	0.00039	0.00024	0.00039	0.00024	0.00000	0.00023
30	0.00041	0.00025	0.00041	0.00025	0.00000	0.00023
31	0.00044	0.00026	0.00044	0.00026	0.00000	0.00023
32	0.00050	0.00031	0.00050	0.00031	0.00000	0.00023
33	0.00056	0.00035	0.00056	0.00035	0.00000	0.00023
34	0.00063	0.00039	0.00063	0.00039	0.00000	0.00023
35	0.00070	0.00044	0.00070	0.00044	0.00000	0.00025
36	0.00077	0.00047	0.00077	0.00047	0.00000	0.00029
37	0.00084	0.00051	0.00084	0.00051	0.00000	0.00031
38	0.00090	0.00055	0.00090	0.00055	0.00000	0.00036
39	0.00096	0.00060	0.00096	0.00060	0.00000	0.00041
40	0.00102	0.00065	0.00102	0.00065	0.00000	0.00047
41	0.00108	0.00071	0.00108	0.00071	0.00000	0.00053
42	0.00114	0.00077	0.00114	0.00077	0.00000	0.00058
43	0.00122	0.00085	0.00122	0.00085	0.00000	0.00066
44	0.00130	0.00094	0.00130	0.00094	0.00000	0.00075
45	0.00140	0.00103	0.00140	0.00103	0.00000	0.00086
46	0.00151	0.00112	0.00151	0.00112	0.15000	0.00098
47	0.00162	0.00122	0.00162	0.00122	0.15000	0.00110
48	0.00173	0.00133	0.00173	0.00133	0.15000	0.00125
49	0.00186	0.00143	0.00186	0.00143	0.15000	0.00141
50	0.00200	0.00155	0.00200	0.00155	0.07000	0.00161
51	0.00214	0.00168	0.00535	0.00234	0.07000	0.00183
52	0.00229	0.00181	0.00553	0.00246	0.07000	0.00207
53	0.00245	0.00197	0.00564	0.00265	0.07000	0.00236
54	0.00262	0.00213	0.00572	0.00290	0.07000	0.00267
55	0.00281	0.00232	0.00580	0.00319	0.15000	0.00303
56	0.00303	0.00253	0.00590	0.00353	0.15000	0.00345
57	0.00331	0.00276	0.00612	0.00393	0.15000	0.00392
58	0.00363	0.00301	0.00644	0.00438	0.15000	0.00444
59	0.00400	0.00329	0.00690	0.00492	0.15000	0.00505
60	0.00441	0.00360	0.00749	0.00553	0.15000	0.00732
61	0.00488	0.00393	0.00820	0.00620	0.15000	0.00732
62	0.00538	0.00429	0.00900	0.00692	0.15000	0.00732
63	0.00592	0.00466	0.00991	0.00769	0.15000	0.00732
64	0.00647	0.00504	0.01095	0.00851	0.15000	0.00732
65	0.00703	0.00543	0.01212	0.00939	0.24000	0.00732

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