

SHERIFFS' PENSION & RELIEF FUND

ACTUARIAL VALUATION AS OF
JUNE 30, 2014

G. S. CURRAN & COMPANY, LTD.

Actuarial Services

10555 N. Glenstone Place • Baton Rouge, Louisiana 70810 • (225)769-4825

Gary S. Curran, FCA, MAAA, ASA, EA
Consulting Actuary

Gregory M. Curran, FCA, MAAA, ASA, EA
Consulting Actuary

December 8, 2014

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

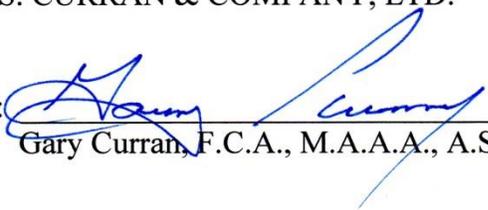
Ladies and Gentlemen:

We are pleased to present our report on the actuarial valuation of the Sheriffs' Pension & Relief Fund for the fiscal year ending June 30, 2014. 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 Sheriffs' Pension & Relief Fund of the State of Louisiana. The primary purpose of this report is to determine the actuarially required contribution for the retirement system for the fiscal year ending June 30, 2015, and to recommend the net direct employer contribution rate for fiscal 2016. This report does not contain the information necessary for accounting disclosures as required by Governmental Accounting Standards Board (GASB) Statements 67 and 68; that information is included in a separate report. 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.

In our opinion, all of the assumptions on which this valuation is based are reasonable individually and in the aggregate. Both economic and demographic assumptions are based on our expectations for future experience for the fund. 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.


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, 2014	June 30, 2013
Census Summary:		
Active Members	14,575	14,559
Retired Members and Survivors	4,510	4,293
Terminated Due a Deferred Benefit	362	343
Terminated Due a Refund	5,150	5,069
Payroll:	\$ 634,536,119	\$ 622,720,506
Benefits in Payment:	\$ 114,122,739	\$ 105,832,204
Funding Deposit Account Balance:	\$ 0	\$ 3,689,049
Frozen Unfunded Actuarial Accrued Liability:	\$ 59,264,382	\$ 62,983,756
Actuarial Asset Value (AVA):	\$ 2,513,293,197	\$ 2,203,646,722
Market Value of Assets (MVA):	\$ 2,733,132,117	\$ 2,272,263,124
Actuarial Accrued Liability (Entry Age Normal):	\$ 3,129,132,635	\$ 2,942,457,560

Funded Ratio (MVA/Entry Age Normal Accrued Liability): 87.34% 77.22%

	FISCAL 2015	FISCAL 2014
Employers' Normal Cost (July 1):	\$ 102,738,673	\$ 113,645,226
Amortization Cost (July 1):	\$ 8,239,824	\$ 8,007,520
Interest Adjusted Actuarially Required Contributions		
Including Estimated Administrative Costs:	\$ 116,756,942	\$ 127,873,128
Projected Ad Valorem and Revenue Sharing	\$ 19,951,646	\$ 19,202,539
Projected Insurance Premium Taxes	\$ 17,704,000	\$ 16,628,926
Net Direct Employer Actuarially Required Contributions	\$ 79,101,296	\$ 92,041,663
Actuarially Required Net Direct Employer Contribution Rate	12.07%	14.33%
Actual Net Direct Employer Contribution Rate:	14.25%	14.50% †

Minimum Recommended Net Employer Contribution Rate: Fiscal 2016: 11.75% **Fiscal 2015: 14.25%**

Employee Contribution Rate: 10.25%

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: 7.7% (Net of Investment Expense)

Census Exclusions: 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: The valuation interest rate was lowered from 7.8% to 7.7% beginning June 30, 2014.

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

† Employee Contribution Rate increased to 10.25% as of July 1, 2013 lowering Employer Rate from 14.75% to 14.50% for fiscal 2014 (Direct employer contribution rate set after adjustment of this amount for withdrawal of remaining funds in the Funding Deposit Account)

COMMENTS ON DATA

For the valuation, the administrative staff of the system furnished a census on electronic media 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 IX, there are 14,575 active members in the system of whom 4,635 members have vested retirement benefits; 4,510 former members or their beneficiaries are receiving retirement benefits. An additional 5,512 terminated members have contributions remaining on deposit with the system; of this number, 362 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. For this valuation, the number of such records with imputed data is de minimis. 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, L.L.P. As indicated in the system's audit report, the net market value of system's assets was \$2,733,132,117 as of June 30, 2014. Net investment income for fiscal 2014 measured on a market value basis amounted to \$410,664,372. Contributions to the system for the fiscal year totaled \$199,182,591; benefits and expenses amounted to \$148,977,970.

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, reduce future normal costs, as an offset to direct employer contributions, or to provide funding for a cost of living increase.

The current year actuarial assumptions utilized for this report (excluding mortality) are based on the results of an actuarial experience study for the period July 1, 2006 – June 30, 2010, unless otherwise specified in this report. In cases where benefit structures were changed after the study period, assumptions were based on estimates of future experience. In the case of mortality, assumptions were set after reviewing the study performed on plan data for the period of 1999 through 2004, as well as an update study using data for the period 2004 through 2009. Based on this result of these studies, a projected mortality table was created using the liability duration of the plan for the projection period. The resulting projected mortality table was compared to several standard tables and the RP 2000 Healthy Annuitant Table (set back one year) was selected for non-disabled annuitants and beneficiaries. The RP2000 Employee Table (set back one year) was selected for active lives. A determination was made that these tables would produce liability values approximating generational mortality tables. The RP2000 Disability Table was selected for disabled annuitants.

In determining the valuation interest rate, consideration was given to several factors. First, we considered consensus estimates of rates of return, standard deviations, and correlation coefficients for asset classes derived from various asset consulting firms. These factors were used to derive forward estimates of the Fund's portfolio. The salary increase rate of 6.00% is based on forward estimates of future increases in pay resulting from three sources; inflation, merit, and productivity. An inflation rate of 3.00% was implicit in both the assumed rate of return and rate of salary increases.

Although the board of trustees has authority to grant ad hoc Cost of Living Increases (COLAs) under limited circumstances, these COLAs have not been shown to have a historical pattern, the amounts of the COLAs have not been relative to a defined cost-of-living or inflation index, and there is no

evidence to conclude that COLAs will be granted on a predictable basis in the future. Therefore, for purposes of determining the present value of benefits, these COLAs were deemed not to be substantively automatic and the present value of benefits excludes COLAs not previously granted by the board of trustees.

The current year actuarial assumptions utilized for the report are outlined on pages thirty-six through thirty-nine. With the exception of a change in valuation interest rate from 7.8% to 7.7%, the assumptions used in this valuation were the same as the prior year.

All assumptions are based on estimates 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. The net effect of the changes in plan assumptions on the normal cost accrual rate was an increase of 0.8579%.

CHANGES IN PLAN PROVISIONS

The following changes to the system were enacted during the 2014 Regular Session of the Louisiana Legislature.

Act 679 changed the term of office of the President of the Board of Trustees and replaced the position of Secretary-Treasurer with that of Vice-President along with setting the term of such office.

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>
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%
2012	-0.2%		2.3%
2013	12.9%		5.5%
2014	17.9%		11.6%

* 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 earnings above or below the assumed rate of return over a five year period, subject to a limit of 90% to 110% of the market value of assets.

** Includes effect of change in asset valuation method. Effective with 2009 fiscal year, 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 with 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 2014, the fund earned \$34,287,047 of dividends, interest and other recurring income. Net income was increased by realized and unrealized capital gains of \$386,457,997. Investment expenses reduced income by \$10,080,672. The geometric mean of the market value rates of return measured over the last ten years was 6.4%. For the last twenty years, the geometric mean returns was 6.8%.

The actuarial rate of return is presented for comparison to the assumed long-term rate of return. As of June 30, 2012, the valuation interest rate was 8.0%. In response to a review of the assumed long term rate of return performed in the course of the development of the 2012 valuation, a recommendation was made to lower the valuation interest rate from 8.0% to 7.5%. The Board of Trustees approved a plan to reduce the valuation interest rate over five years by reducing the assumption by 0.10% each year from fiscal 2013 through fiscal 2017. The assumed rate of return for fiscal 2015 is 7.7%. 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 smoothing earnings above or below the valuation interest rate over a five-year period, subject to constraints as outlined in the section in the report describing actuarial assumptions. (Since the valuation interest rate was changed effective June 30, 2014, smoothing was based on a valuation interest rate of 7.8% for fiscal 2014, 7.9% for fiscal 2013, and 8.0% for all prior years.) The difference between rates of return on an actuarial and market value basis results from the smoothing of gains or losses on investments relative to the valuation interest rate over the five-year period. Yields in excess of the valuation interest rate assumption will reduce future costs; yields below the assumption will increase future costs. For fiscal 2014, the system experienced net actuarial investment earnings of \$85,636,190 more than the actuarial assumed earnings rate of 7.8% applicable for fiscal 2014. These excess earnings produced an actuarial gain, which decreased the normal cost accrual rate by 1.4249%.

DEMOGRAPHICS AND LIABILITY EXPERIENCE

A reconciliation of the census for the system is given in Exhibit IX. The average active member is 44 years old with 9.4 years of service and an average salary of \$43,536. The system's active contributing membership increased during the fiscal year by 16 members. The plan has experienced an increase in the active plan population of 179 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 and a corresponding increase in all other service groups.

The average service retiree is 68 years old with a monthly benefit of \$2,321. The retired population increased by 217 during the last fiscal year. Over the last five years the number of retirees increased by 1,141. During this same period, annual benefits in payment increased by \$42,605,589 (i.e. by 60%).

Plan liability experience for fiscal 2014 was favorable. Salary increases and disabilities were below projected levels and retiree deaths were above projected levels. These factors tend to reduce costs.

Partially offsetting these factors were withdrawals below expected levels. Retirements were near projected levels. Overall, plan liability experience decreased the normal cost accrual rate by 0.7295%.

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 2015 as of July 1, 2014 is \$102,738,673. The amortization payment on the fund's frozen unfunded actuarial accrued liability as of July 1, 2014, is \$8,239,824. 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 2015 is \$116,756,942. 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 2015 is \$79,101,296 or 12.07% of projected payroll.

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:

Employer's Normal Cost Accrual Rate – Fiscal 2014	19.2051%
Factors Increasing the Normal Cost Accrual Rate:	
Assumption Loss	0.8579%
Factors Decreasing the Normal Cost Accrual Rate:	
Asset Experience Gain	1.4249%
New Members	0.8773%
Liability Experience Gain	0.7295%
Contribution Gain	0.0148%
Employer's Normal Cost Accrual Rate – Fiscal 2015	17.0165%

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 2015, the net effect of the change in payroll on amortization costs was to increase such costs by 0.02% 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 will increase by 0.16% of payroll in fiscal 2015.

Although the actuarially required net direct employer contribution rate for fiscal 2015 is 12.07%; the actual employer contribution rate for fiscal 2015 is 14.25% of payroll. Since the contribution rate for fiscal 2015 was 14.25%, any surplus in employer contributions collected in the fiscal year will decrease the Fund's normal cost accrual rate. We estimate this surplus will result in a decrease of 0.22% to the normal cost accrual rate in fiscal 2016. 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 11.75% for fiscal 2016.

The balance in the Funding Deposit Account is \$0 as of June 30, 2014. This is a result of the decision of the Board of Trustees to use the remaining balance in the Funding Deposit Account to reduce employer contributions during fiscal 2014.

Under the provisions of R. S. 11:105, in any fiscal year in which the net direct employer contribution rate would otherwise decrease, the Board of Trustees may maintain the net direct employer contribution rate for the preceding year. Should the net direct employer contribution rate be held at a level above the minimum recommended employer contribution rate, 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 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 0.42%. We have also determined that a 1% reduction in the valuation interest rate would increase the actuarially required contribution rate for fiscal 2015 by 8.88% of payroll.

In addition to calculating the actuarially required contribution to the fund, we have also calculated the ratio of the system's assets to liabilities. When the market value of assets is divided by the entry age normal accrued liability for the fund the result is 87.34% as of June 30, 2014. This value in isolation does not give a measure of the ability of the fund to pay benefits in the future or indicate that future contributions are likely to be greater or less than current contributions. In addition, the ratio cannot be used to compare the relative strength of different retirement systems. However, the trend of this ratio over time can give some insight into the financial health of the plan. Even in this regard, caution is warranted since market fluctuations in asset values and changes in plan assumptions can distort the underlying trends in this value.

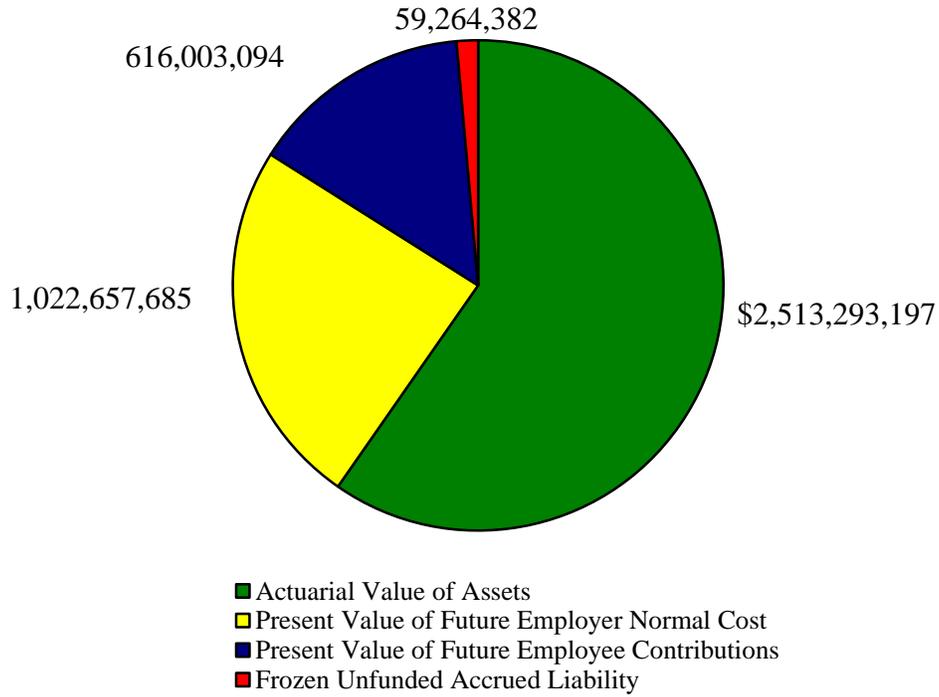
COST OF LIVING INCREASES

During fiscal 2014, the actual cost of living (as measured by the US Department of Labor CPI-U) increased by 2.07%. Cost of living provisions for the system are detailed in R.S. 11:2178 and R.S. 11:246. R.S. 11:2178 details the provisions applicable to system retirees subject to certain limitations relative to the age and elapsed time since retirement. The permissible COLA is based on the members' current benefit and is subject to various percentage and dollar minimums and maximums. R.S. 11:246 provides cost of living increases for retirees and beneficiaries age 65 and over equal to 2% of the benefit 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.

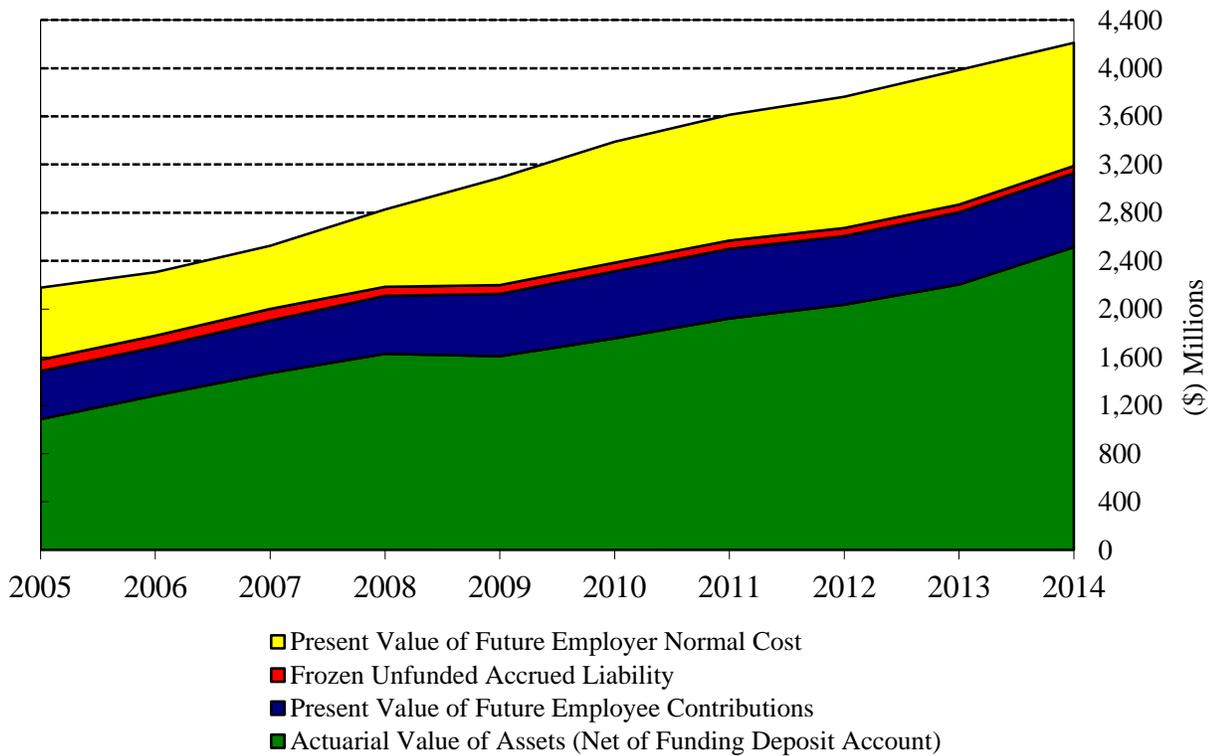
R.S. 11:243 sets forth the funding criteria necessary in order to grant cost of living adjustments to regular retirees and beneficiaries (who are neither the surviving spouse nor children of the retiree.) The criteria for the fund to qualify as eligible to grant any such increase is as follows: a funded ratio of at least 70% if the system has not granted a benefit increase to retirees, survivors, or beneficiaries in any of the three most recent fiscal years; a funded ratio of at least 80% if the system has not granted such an increase in any of the two most recent fiscal years; or a funded ratio of at least 90% if the system has not granted such an increase in the most recent fiscal year. The funded ratio at any fiscal year end is the ratio of the actuarial value of assets to the actuarial accrued liability under the funding method prescribed by the legislative auditor (currently the Projected Unit Credit Method for this system.)

The results in this valuation indicate that the ratio of the actuarial value of assets to the Projected Unit Credit Accrued Liability is 86.24%. Since the system has not paid a COLA in the prior two years and the “excess interest” earnings exceed the present value of any of the available COLA’s, the board may grant a cost of living increase for this fiscal year.

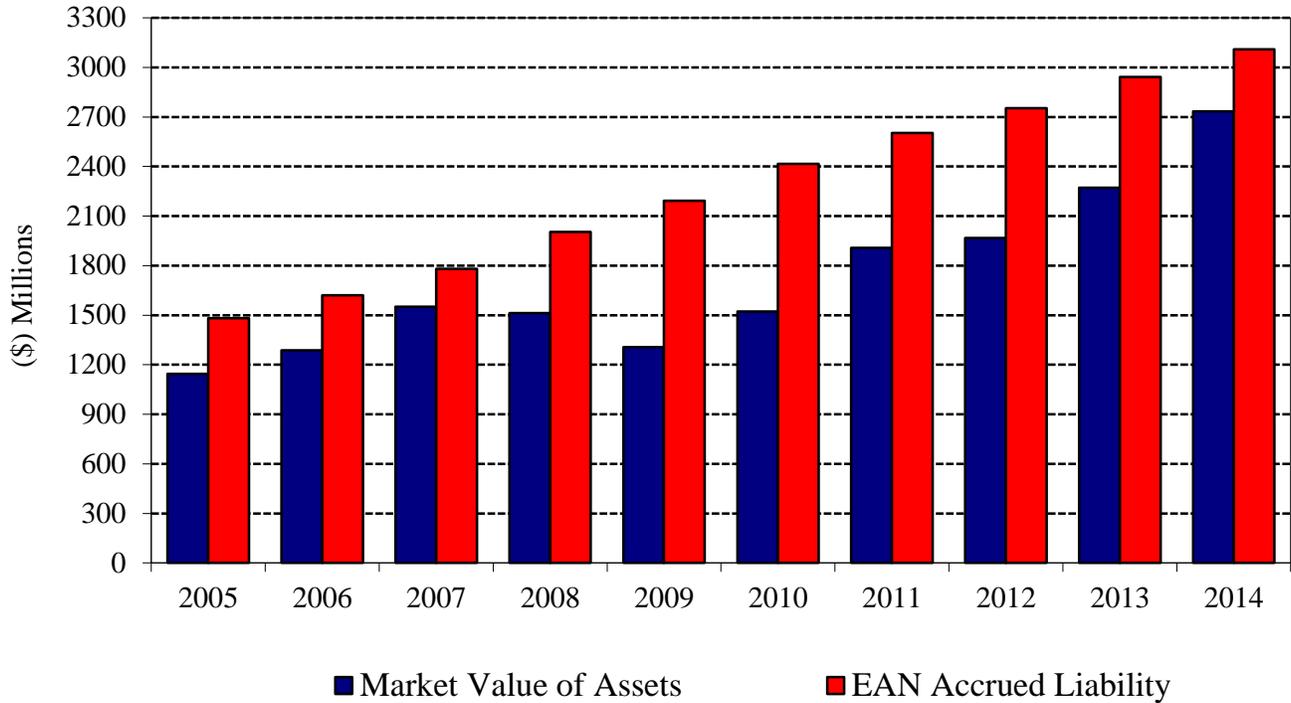
Components of Present Value of Future Benefits June 30, 2014



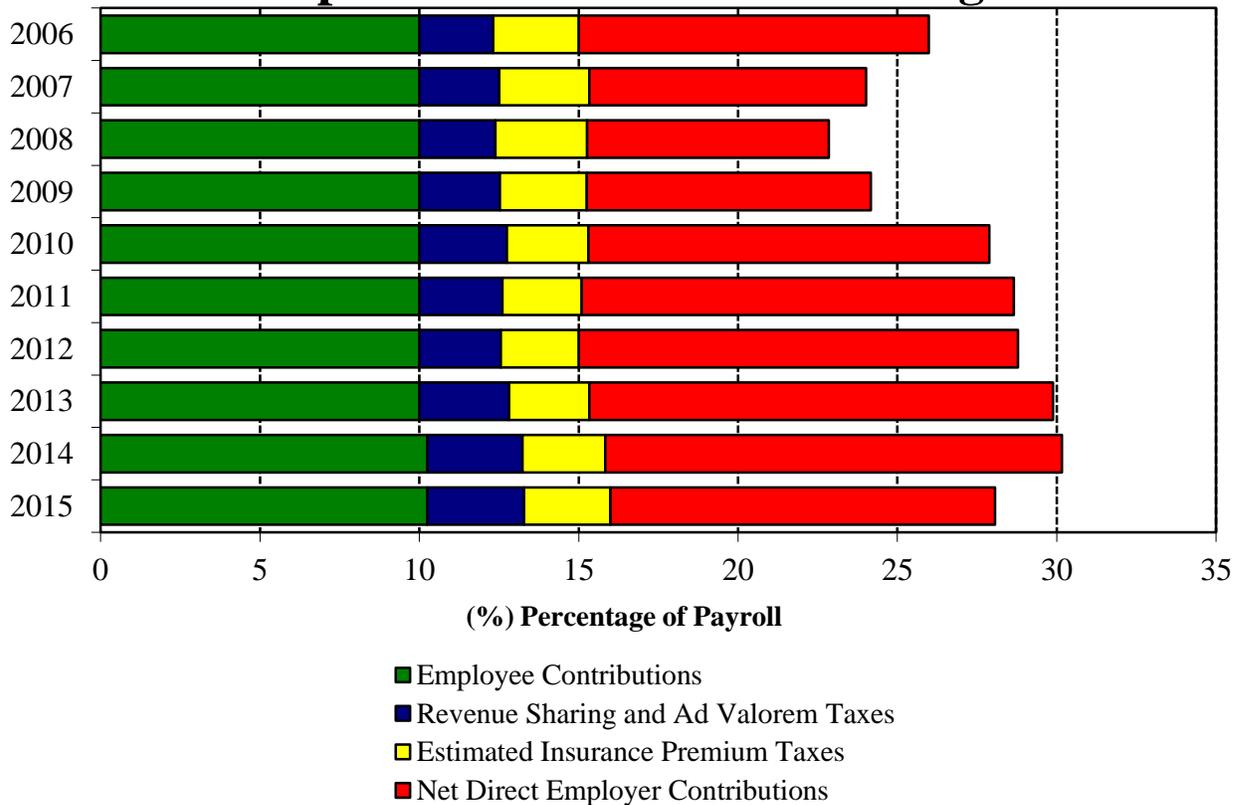
Components of Present Value of Future Benefits



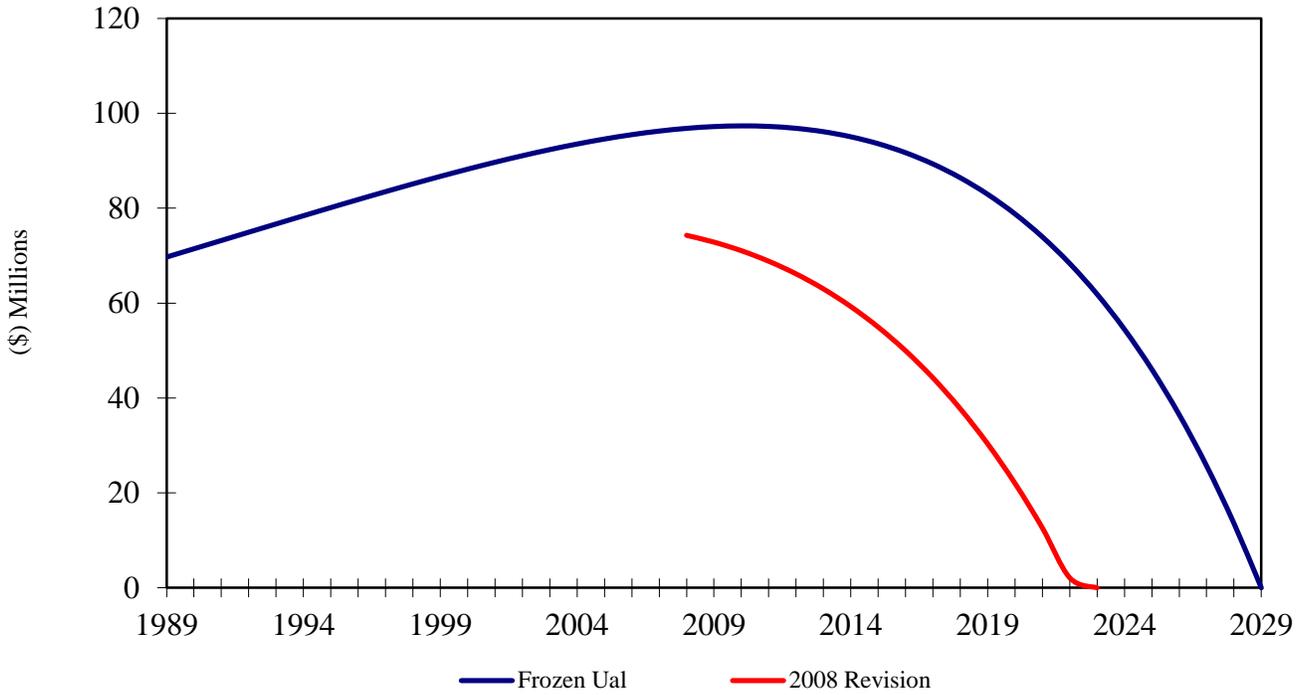
Market Value of Assets vs. EAN Accrued Liability



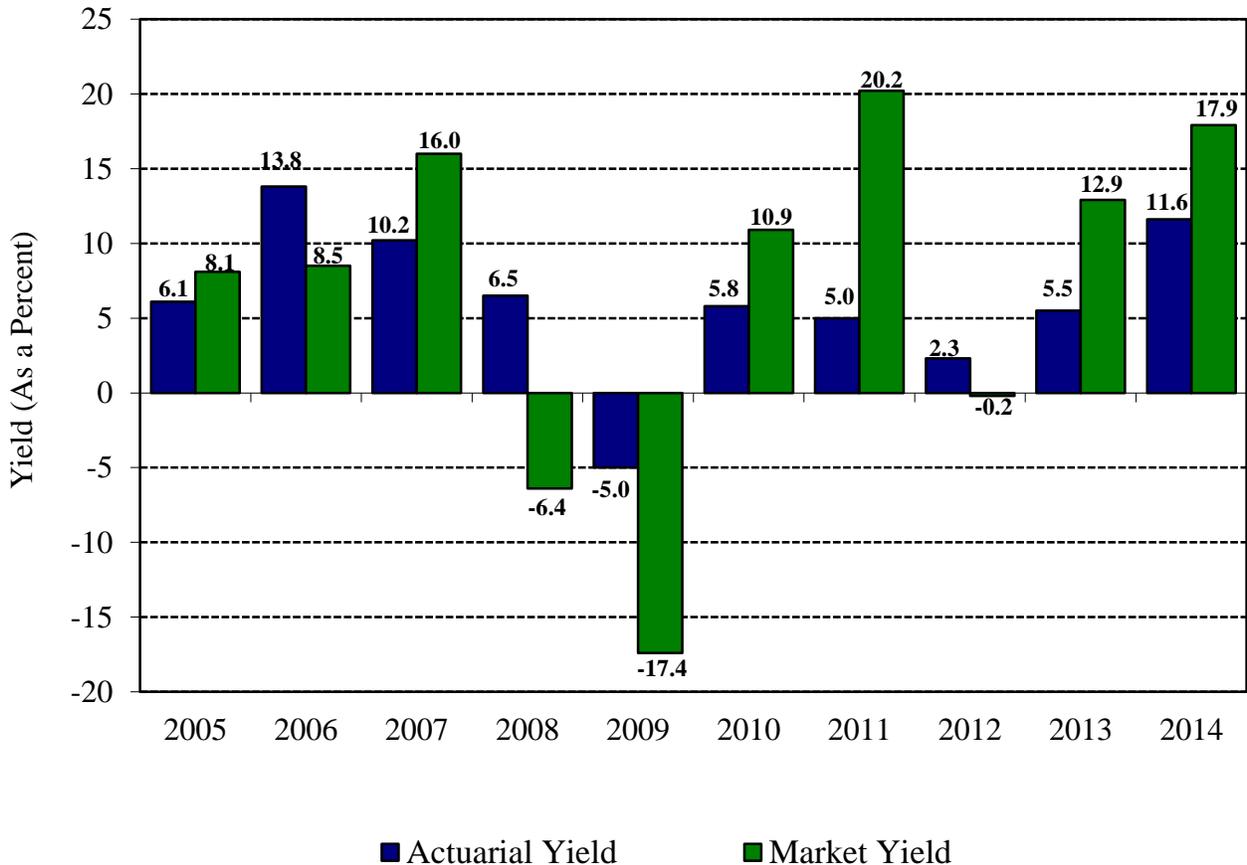
Components of Actuarial Funding



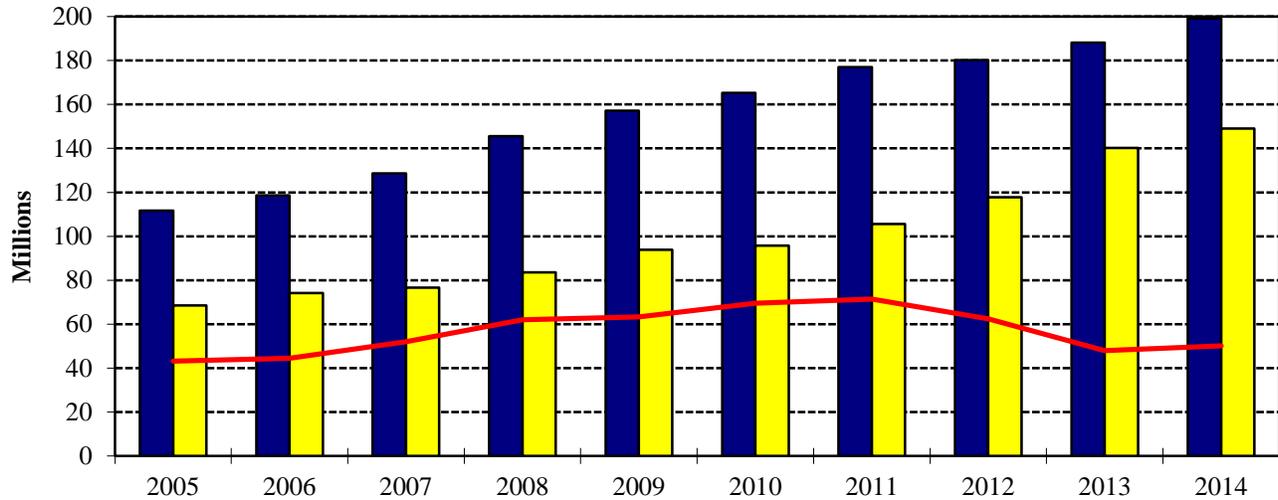
Frozen Unfunded Actuarial Accrued Liability



Historical Asset Yields

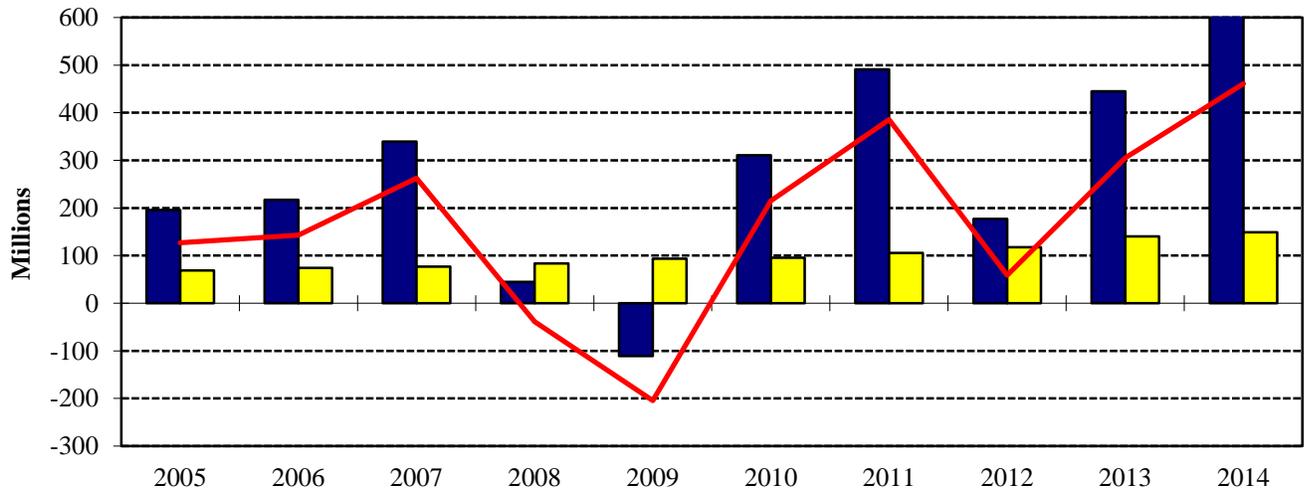


Net Non-Investment Income



		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Non-Investment Income (\$Mil)	■	111.7	118.7	128.6	145.7	157.1	165.3	177.0	180.2	188.1	199.2
Benefits and Expenses (\$Mil)	■	68.5	74.2	76.6	83.6	93.8	95.8	105.6	117.8	140.2	149.0
Net Non-Investment Income (\$Mil)	—	43.2	44.5	52.0	62.1	63.3	69.5	71.4	62.4	47.9	50.2

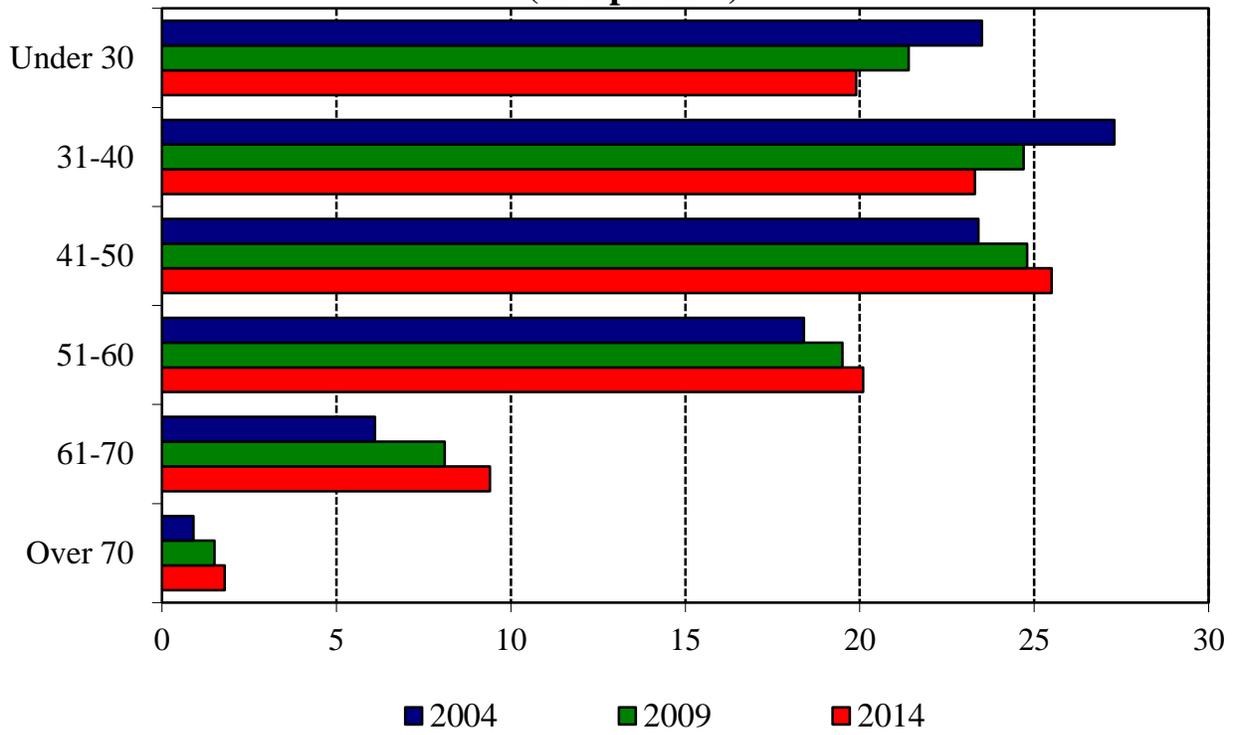
Total Income vs. Expenses



(Based on Market Value of Assets)

		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Total Income (\$Mil)	■	195.5	217.5	339.3	44.6	-111.0	311.0	491.3	176.9	445.4	609.8
Benefits and Expenses (\$Mil)	■	68.5	74.2	76.6	83.6	93.8	95.8	105.6	117.8	140.2	149.0
Net Change in MVA (\$Mil)	—	127.0	143.3	262.7	-39.0	-204.8	215.2	385.7	59.1	305.2	460.8

Active – Census By Age (as a percent)



Active – Census By Service (as a percent)

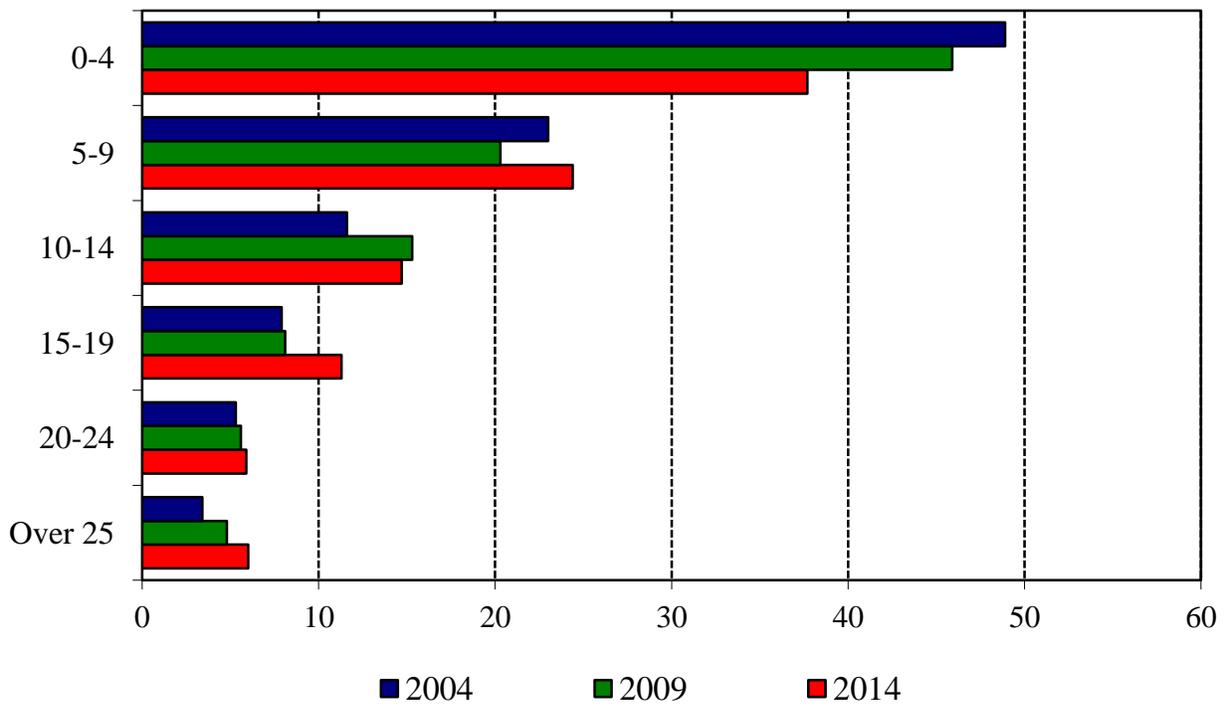


EXHIBIT I
ANALYSIS OF ACTUARIALLY REQUIRED CONTRIBUTIONS

1.	Present Value of Future Benefits	\$	4,211,218,358
2.	Funding Deposit Account Credit Balance	\$	0
3.	Unfunded Actuarial Accrued Liability	\$	59,264,382
4.	Actuarial Value of Assets	\$	2,513,293,197
5.	Present Value of Future Employee Contributions	\$	616,003,094
6.	Present Value of Future Employer Normal Costs (1+2-3-4-5).....	\$	1,022,657,685
7.	Present Value of Future Salaries	\$	6,009,794,980
8.	Employer Normal Cost Accrual Rate (6÷7)		17.016515%
9.	Projected Fiscal 2015 Salary for Current Membership.....	\$	603,758,601
10.	Employer Normal Cost as of July 1, 2014 (8 × 9).....	\$	102,738,673
11.	Amortization Payment on remaining frozen Unfunded Accrued Liability with Payments increasing at 3.50% per year	\$	8,239,824
12.	TOTAL Employer Normal Cost and Amortization Payment (10 + 11)	\$	110,978,497
13.	Normal Cost Adjusted for Midyear Payment	\$	115,171,942
14.	Estimated Administrative Cost for Fiscal 2015	\$	1,585,000
15.	GROSS Employer Actuarially Required Contribution for Fiscal 2015 (13 + 14)	\$	116,756,942
16.	Projected Ad Valorem Tax Contributions for Fiscal 2015	\$	19,530,217
17.	Projected Revenue Sharing Funds for Fiscal 2015	\$	421,429
18.	GROSS Employer Actuarially Required Contribution to be funded by direct employer contributions and Insurance Premium Taxes for Fiscal 2015 (15 - 16 - 17).....	\$	96,805,296
19.	Estimated Insurance Premium Taxes due for Fiscal 2015.....	\$	17,704,000
20.	Employer's Net Direct Actuarially Required Contribution (18 – 19)	\$	79,101,296
21.	Projected Payroll for Fiscal 2015.....	\$	655,245,456
22.	Employers' Minimum Net Direct Actuarially Required Contribution as a % of Projected Payroll for Fiscal 2015 (20 ÷ 21)		12.07%
23.	Employer Contribution Rate for Fiscal 2015.....		14.25%
24.	Contribution Shortfall (Excess) as a Percentage of Payroll (22 – 23)		(2.18%)
25.	Increase (Reduction) to Following Year Payment for Contribution Shortfall (Excess).....		(0.22%)
26.	Minimum Recommended Net Direct Employer Contribution Rate for Fiscal 2016 (22+25, Rounded to nearest 0.25%)		11.75%

EXHIBIT II
PRESENT VALUE OF FUTURE BENEFITS

PRESENT VALUE OF FUTURE BENEFITS FOR ACTIVE MEMBERS:

Retirement Benefits	\$ 2,664,557,087
Survivor Benefits.....	90,867,290
Disability Benefits.....	80,038,794
Vested Termination Benefits.....	75,352,495
Refunds of Contributions	85,292,758

TOTAL Present Value of Future Benefits for Active Members..... \$ 2,996,108,424

PRESENT VALUE OF FUTURE BENEFITS FOR TERMINATED MEMBERS:

Terminated Vested Members Due Benefits at Retirement.....	\$ 48,118,340
Terminated Members with Reciprocals	
Due Benefits at Retirement	1,483,633
Terminated Members Due a Refund	15,975,920

TOTAL Present Value of Future Benefits for Terminated Members..... \$ 65,577,893

PRESENT VALUE OF FUTURE BENEFITS FOR RETIREES:

Regular Retirees

Maximum.....	\$ 276,838,667
Option 1	103,317,421
Option 2	401,308,701
Option 3	145,294,498
Option 4	1,967,583
Option 5	44,732,700

TOTAL Regular Retirees..... \$ 973,459,570

Disability Retirees..... 31,547,302

Survivors & Widows..... 115,030,390

Annuities Certain Payable to Retirees..... 19,191,112

DROP and Back-DROP Account Balances 10,303,667

TOTAL Present Value of Future Benefits for Retirees & Survivors..... \$ 1,149,532,041

TOTAL Present Value of Future Benefits..... \$ 4,211,218,358

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

CURRENT ASSETS:

Cash in Banks	\$ 11,383,759
Contributions and Taxes Receivable.....	9,406,998
Accrued Interest and Dividends.....	4,762,861
Investments Receivable	58,030,667
Prepaid Expenses	12,133
Other Current Assets.....	1,117,263

TOTAL CURRENT ASSETS..... \$ 84,713,681

Property Plant & Equipment..... \$ 2,436,468

INVESTMENTS:

Cash Equivalents.....	\$ 144,033,147
Equities	1,794,440,729
Fixed Income	596,964,047
Alternative Investments	209,003,686
Collateral for Securities Lending	20,253,961

TOTAL INVESTMENTS..... \$ 2,764,695,570

TOTAL ASSETS

\$ 2,851,845,719

CURRENT LIABILITIES:

Accounts Payable	\$ 2,539,997
Benefits Payable.....	49,913
Refunds Payable.....	566,613
Investments Payable.....	78,792,387
Securities Lending Obligations	20,427,942
Other Post-Employment Benefits	132,377
Other Current Liabilities	16,204,373

TOTAL CURRENT LIABILITIES..... \$ 118,713,602

MARKET VALUE OF ASSETS..... \$ 2,733,132,117

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

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

Fiscal year 2014.....	\$ 231,506,629
Fiscal year 2013.....	100,065,241
Fiscal year 2012.....	(158,417,021)
Fiscal year 2011.....	189,806,398
Fiscal year 2010.....	<u>38,459,312</u>
Total for five years	\$ 401,420,559

Deferral of excess (shortfall) of invested income:

Fiscal year 2014 (80%).....	\$ 185,205,303
Fiscal year 2013 (60%).....	60,039,145
Fiscal year 2012 (40%).....	(63,366,808)
Fiscal year 2011 (20%).....	37,961,280
Fiscal year 2010 (0%).....	<u>0</u>
Total deferred for year	\$ 219,838,920

Market value of plan net assets, end of year..... \$ 2,733,132,117

Preliminary actuarial value of plan assets, end of year \$ 2,513,293,197

Actuarial value of assets corridor

85% of market value, end of year.....	\$ 2,323,162,299
115% of market value, end of year.....	\$ 3,143,101,935

Final actuarial value of plan net assets, end of year \$ 2,513,293,197

EXHIBIT IV
PRESENT VALUE OF FUTURE CONTRIBUTIONS

Employee Contributions to the Annuity Savings Fund	\$ 616,003,094
Employer Normal Contributions to the Pension Accumulation Fund.....	1,022,657,685
Employer Amortization Payments to the Pension Accumulation Fund	59,264,382
Funding Deposit Account Credit Balance	0
TOTAL PRESENT VALUE OF FUTURE CONTRIBUTIONS	\$ 1,697,925,161

EXHIBIT V
CHANGE IN FROZEN UNFUNDED ACTUARIAL ACCRUED LIABILITY

Prior Year Frozen Unfunded Accrued Liability	\$ 62,983,756
Interest on Frozen Unfunded Accrued Liability	\$ 4,912,733
Employer Normal Cost for Prior Year.....	113,645,226
Interest on the Normal Cost.....	8,864,328
Administrative Expenses	1,648,196
Interest on Administrative Expenses	63,073
Credit to Funding Deposit Account.....	0
TOTAL Interest Adjusted Actuarially Required Contributions	\$ 129,133,556
Direct Employer Contributions.....	\$ 89,359,583
Interest on Employer Contributions.....	3,419,594
Ad Valorem Taxes and Revenue Sharing.....	18,992,085
Interest on Ad Valorem Taxes and Revenue Sharing Funds.....	726,785
Insurance Premium Taxes.....	16,628,926
Interest on Insurance Premium Taxes.....	636,352
Contribution Shortfall.....	(822,998)
Interest on Contribution Shortfall.....	(64,194)
Withdrawal from Funding Deposit Account	3,689,049
Interest on Withdrawal	287,748
TOTAL Interest Adjusted Employer Contributions	\$ 132,852,930
NET Change in Frozen Unfunded Accrued Liability.....	\$ (3,719,374)
CURRENT YEAR FROZEN UNFUNDED ACCRUED LIABILITY	\$ 59,264,382

EXHIBIT VI
ANALYSIS OF INCREASE IN ASSETS

Actuarial Value of Assets (June 30, 2013)		\$ 2,203,646,722
INCOME:		
Member Contributions	\$ 65,974,932	
Employer Contributions	89,359,583	
Ad Valorem Taxes and Revenue Sharing	18,992,085	
Insurance Premium Taxes	16,628,926	
Transfers From Other Systems.....	8,226,782	
Other	283	
Total Contributions		\$ 199,182,591
Net Appreciation (Depreciation) of Investments.....	\$ 386,457,997	
Interest & Dividends	34,282,306	
Commission Recapture Income	4,741	
Investment Expense	(10,080,672)	
Net Investment Income		\$ 410,664,372
TOTAL Income		\$ 609,846,963
EXPENSES:		
Retirement Benefits	\$ 113,383,457	
DROP Disbursements	14,220,711	
Refunds of Contributions.....	18,387,817	
Transfers to Other Systems.....	1,337,789	
Administrative Expenses	1,648,196	
TOTAL Expenses		\$ 148,977,970
Net Market Value Income for Fiscal 2014 (Income - Expenses)		\$ 460,868,993
Unadjusted Fund Balance as of June 30, 2014 (Fund Balance Previous Year + Net Income).....		\$ 2,664,515,715
Adjustment for Actuarial Smoothing.....		\$ (151,222,518)
Actuarial Value of Assets: (June 30, 2014).....		\$ 2,513,293,197

EXHIBIT VII
PENSION BENEFIT OBLIGATION

Present Value of Credited Projected Benefits Payable to Current Employees.....	\$ 1,699,300,815
Present Value of Benefits Payable to Terminated Employees	65,577,893
Present Value of Benefits Payable to Current Retirees and Beneficiaries	1,149,532,041
 TOTAL PENSION BENEFIT OBLIGATION.....	 \$ 2,914,410,749
NET ACTUARIAL VALUE OF ASSETS.....	\$ 2,513,293,197
 Ratio of Net Actuarial Value of Assets to Pension Benefit Obligation.....	 86.24%

EXHIBIT VIII
ENTRY AGE NORMAL ACCRUED LIABILITIES

Accrued Liability for Active Employees	\$ 1,914,022,701
Accrued Liability for Terminated Employees	65,577,893
Accrued Liability for Current Retirees and Beneficiaries	1,149,532,041
 TOTAL ENTRY AGE NORMAL ACCRUED LIABILITY	 \$ 3,129,132,635
MARKET VALUE OF ASSETS.....	\$ 2,733,132,117
 Ratio of Net Market Value of Assets to Entry Age Normal Accrued Liability	 87.34%

**EXHIBIT IX
CENSUS DATA**

	Active	Terminated with Funds on Deposit	Retired	Total
Number of members as of June 30, 2013	14,559	5,412	4,293	24,264
Additions to Census				
Initial membership	1,565	152		1,717
Omitted in error last year			4	4
Death of another member			62	62
Adjustment for multiple records	3			3
Change in Status during Year				
Actives terminating service	(411)	411		
Actives who retired	(301)		301	
Actives entering DROP				
Term. members rehired	101	(101)		
Term. members who retire		(24)	24	
Retirees who are rehired	4		(4)	
Refunded who are rehired	88	15		103
DROP participants retiring				
DROP returned to work				
Omitted in error last year				
Eliminated from Census				
Refund of contributions	(1,002)	(348)		(1,350)
Deaths	(31)	(5)	(160)	(196)
Included in error last year				
Adjustment for multiple records			(10)	(10)
Number of members as of June 30, 2014	14,575	5,512	4,510	24,597

ACTIVES CENSUS BY AGE:

Age	Number Male	Number Female	Total Number	Average Salary	Total Salary
16 - 20	65	22	87	26,969	2,346,291
21 - 25	742	345	1,087	31,290	34,012,094
26 - 30	1,150	571	1,721	38,037	65,461,277
31 - 35	1,158	613	1,771	41,887	74,181,747
36 - 40	1,059	573	1,632	45,093	73,592,457
41 - 45	1,183	679	1,862	46,726	87,004,406
46 - 50	1,179	669	1,848	48,533	89,689,789
51 - 55	993	676	1,669	48,378	80,742,605
56 - 60	755	508	1,263	46,325	58,509,014
61 - 65	610	322	932	44,752	41,708,429
66 - 70	313	132	445	41,699	18,555,857
71 - 75	134	31	165	34,667	5,719,975
76 - 80	61	14	75	32,830	2,462,267
81 - 85	12	2	14	27,142	379,982
86 - 90	2	1	3	39,850	119,549
91 - 95	1	0	1	50,380	50,380
TOTAL	9,417	5,158	14,575	43,535	634,536,119

THE ACTIVE CENSUS INCLUDES 4,635 ACTIVES WITH VESTED BENEFITS, INCLUDING 0 DROP PARTICIPANTS AND 4 ACTIVE FORMER DROP PARTICIPANTS.

TERMINATED MEMBERS DUE A DEFERRED RETIREMENT BENEFIT:

Age	Number Male	Number Female	Total Number	Average Benefit	Total Benefit
31 - 35	6	5	11	18,306	201,361
36 - 40	17	7	24	21,321	511,712
41 - 45	59	15	74	21,915	1,621,702
46 - 50	89	26	115	21,777	2,504,367
51 - 55	87	25	112	18,926	2,119,701
56 - 60	5	2	7	23,774	166,419
61 - 65	10	1	11	18,928	208,212
66 - 70	2	2	4	8,878	35,513
71 - 75	1	0	1	993	993
76 - 80	1	0	1	1,881	1,881
81 - 85	1	0	1	399	399
86 - 90	1	0	1	2,081	2,081
TOTAL	279	83	362	20,371	7,374,341

TERMINATED MEMBERS DUE A REFUND OF CONTRIBUTIONS:

Contributions Ranging From To	Number	Total Contributions
0 - 99	1,298	54,846
100 - 499	1,468	375,972
500 - 999	618	446,835
1000 - 1999	487	695,094
2000 - 4999	530	1,694,796
5000 - 9999	283	2,009,669
10000 - 19999	258	3,690,948
20000 - 99999	208	5,958,299
TOTAL	5,150	14,926,459

REGULAR RETIREES:

Age	Number Male	Number Female	Total Number	Average Benefit	Total Benefit
46 - 50	5	0	5	42,718	213,589
51 - 55	62	39	101	42,619	4,304,557
56 - 60	357	175	532	36,740	19,545,767
61 - 65	526	264	790	32,028	25,302,293
66 - 70	586	221	807	27,202	21,951,613
71 - 75	457	162	619	22,829	14,131,084
76 - 80	258	100	358	18,798	6,729,518
81 - 85	138	45	183	18,398	3,366,820
86 - 90	58	22	80	19,338	1,547,055
91 - 99	12	15	27	17,150	463,049
TOTAL	2,459	1,043	3,502	27,857	97,555,345

DISABILITY RETIREES:

Age	Number Male	Number Female	Total Number	Average Benefit	Total Benefit
31 - 35	1	2	3	11,071	33,214
36 - 40	1	1	2	23,004	46,008
41 - 45	8	3	11	15,811	173,924
46 - 50	20	9	29	19,222	557,451
51 - 55	22	11	33	23,790	785,064
56 - 60	19	15	34	18,619	633,044
61 - 65	29	7	36	13,395	482,230
66 - 70	15	3	18	12,028	216,510
71 - 75	14	4	18	11,077	199,384
76 - 80	7	1	8	11,294	90,355
81 - 85	2	3	5	13,902	69,512
86 - 90	3	0	3	10,394	31,183
TOTAL	141	59	200	16,589	3,317,879

SURVIVORS:

Age	Number Male	Number Female	Total Number	Average Benefit	Total Benefit
0 - 25	8	31	39	6,440	251,147
26 - 30	0	4	4	6,802	27,207
31 - 35	0	5	5	11,488	57,438
36 - 40	2	12	14	19,638	274,929
41 - 45	1	14	15	20,947	314,203
46 - 50	1	12	13	22,731	295,507
51 - 55	4	44	48	17,766	852,756
56 - 60	4	49	53	22,165	1,174,768
61 - 65	4	93	97	20,402	1,978,954
66 - 70	4	111	115	18,592	2,138,098
71 - 75	10	105	115	15,683	1,803,544
76 - 80	2	110	112	13,876	1,554,158
81 - 85	1	80	81	15,113	1,224,175
86 - 90	1	64	65	14,441	938,643
91 - 99	2	30	32	11,375	363,988
TOTAL	44	764	808	16,398	13,249,515

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	69	18												87
21 - 25	460	305	174	70	43	35								1,087
26 - 30	298	266	220	174	181	555	27							1,721
31 - 35	206	147	135	108	106	711	330	28						1,771
36 - 40	127	131	80	84	95	414	403	291	7					1,632
41 - 45	148	121	87	67	77	398	330	411	207	16				1,862
46 - 50	100	107	70	60	70	389	272	307	272	187	14			1,848
51 - 55	92	109	76	51	52	321	235	236	161	212	124			1,669
56 - 60	73	89	52	49	46	264	229	168	111	86	96			1,263
61 - 65	39	69	54	34	41	254	182	117	66	44	32			932
66 - 70	11	35	22	21	15	137	84	55	26	25	14			445
71 & Over	6	24	8	15	9	83	53	29	12	12	7			258
Totals	1629	1421	978	733	735	3561	2145	1642	862	582	287			14575

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	27,189	26,126												26,969
21 - 25	28,391	30,611	34,394	37,650	38,135	38,744								31,290
26 - 30	30,691	33,235	36,182	38,726	40,774	43,482	46,810							38,037
31 - 35	33,880	32,817	37,681	39,257	41,270	43,901	48,476	52,383						41,887
36 - 40	33,045	32,850	37,952	38,789	39,376	44,485	50,797	54,199	56,755	61,545				45,093
41 - 45	31,190	31,570	37,840	38,608	40,119	43,222	49,024	55,075	60,867	61,545				46,726
46 - 50	30,269	29,820	38,377	36,379	39,453	41,992	50,741	54,113	60,201	62,444	74,330			48,533
51 - 55	29,467	31,725	38,554	36,412	37,561	41,042	44,895	50,902	58,597	65,493	70,782			48,378
56 - 60	29,327	32,118	37,606	34,578	35,101	41,489	44,069	48,135	60,075	61,245	74,772			46,325
61 - 65	29,794	42,862	40,706	31,783	34,280	40,241	45,160	48,096	51,917	63,120	82,292			44,752
66 - 70	36,955	31,105	40,137	28,887	30,744	36,450	45,067	44,899	53,840	57,231	73,613			41,699
71 & Over	30,058	23,814	35,253	28,580	24,102	29,244	36,406	40,415	40,784	46,018	68,890			33,846
Average	30,388	32,174	37,111	37,256	38,963	42,243	47,687	52,287	58,921	62,842	73,665			43,536

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									11			11
36 - 40								23	1			24
41 - 45							74					74
46 - 50						111	4					115
51 - 55	18	20	18	21	31	4						112
56 - 60	5	1			1							7
61 - 65	11											11
66 - 70	4											4
71 - 75	1											1
76 - 80	1											1
81 - 85	1											1
86 - 90	1											1
91 & Over												0
Totals	42	21	18	21	32	115	78	23	12	0	0	362

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									18,306			18,306
36 - 40								21,575	15,476			21,321
41 - 45							21,915					21,915
46 - 50						22,271	8,082					21,777
51 - 55	18,184	19,910	20,317	20,616	17,730	11,474						18,926
56 - 60	31,677	494			7,541							23,774
61 - 65	18,928											18,928
66 - 70	8,878											8,878
71 - 75	993											993
76 - 80	1,881											1,881
81 - 85	399											399
86 - 90	2,081											2,081
91 & Over												0
Average	17,495	18,986	20,317	20,616	17,412	21,895	21,206	21,575	18,070	0	0	20,371

SERVICE 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 - 50	3	1				1						5
51 - 55	36	28	13	8	3	108	2	1				101
56 - 60	93	137	79	48	52	351	60	2				532
61 - 65	81	97	77	70	43	241	227	32	2			790
66 - 70	54	95	51	62	19	196	167	103	15	1		807
71 - 75	29	50	25	14	6	44	90	80	60	24		619
76 - 80	16	13	16	9	5	19	27	38	39	38	7	358
81 - 85	1	3	2	4	5	5	4	11	14	21	24	183
86 - 90			1		1				3	12	11	80
91 & Over												27
Totals	313	424	264	236	181	969	577	267	133	96	42	3502

AVERAGE ANNUAL BENEFITS PAYABLE TO SERVICE 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 - 50	39,827	83,286				10,823						42,718
51 - 55	40,768	52,786	40,881	35,148	32,188	37,678						42,619
56 - 60	37,739	40,932	36,164	36,812	28,829	34,945	21,476	14,598				36,740
61 - 65	32,599	37,800	30,829	32,424	33,382	30,745	29,817	17,697				32,028
66 - 70	24,327	33,997	27,840	28,803	33,101	27,542	24,419	17,562	18,324			27,202
71 - 75	21,745	25,731	21,350	25,279	22,782	26,019	21,248	18,225	23,106	21,504		22,829
76 - 80	19,262	19,086	17,726	19,507	30,628	26,435	21,719	15,955	13,032	14,752		18,798
81 - 85	5,856	17,035	16,823	13,222	7,990	16,620	27,955	17,472	18,664	15,682	17,867	18,398
86 - 90			6,489			23,416	20,918	19,392	21,699	22,492	14,599	19,338
91 & Over						17,486			10,267	21,055	14,737	17,150
Average	31,935	36,913	30,453	31,571	30,150	28,937	23,772	17,389	16,749	17,672	15,180	27,857

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												0
31 - 35					1	2						3
36 - 40	1					1						2
41 - 45		4	1			4	1					11
46 - 50		7	4			7	4	1				29
51 - 55	3	3	4	3		10	6	2	2	1		33
56 - 60		2	1	5		8	11	2	3	1		34
61 - 65	2			1		7	7	11	3	3	1	36
66 - 70			1			3	1	6	4	4		18
71 - 75						2	1	4	5	4	1	18
76 - 80						1	1			1		8
81 - 85										2	3	5
86 - 90						1				1	1	3
91 & Over												0
Totals	6	17	11	9	8	46	31	28	17	16	11	200

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												0
31 - 35					11,776	10,719						11,071
36 - 40	27,787					18,221						23,004
41 - 45		21,502	22,880			12,110	9,358	7,239				15,811
46 - 50		27,100	18,587	17,176		20,260	10,710	6,350				19,222
51 - 55	30,746	37,484	23,421		16,953	26,902	15,311	12,822	11,536	9,475		23,790
56 - 60		33,273	17,666	11,422	33,807	22,980	20,557	14,220	9,483	12,906		18,619
61 - 65	17,458			11,983	16,262	14,661	14,460	11,839	11,289	12,450	13,770	13,395
66 - 70			15,193			13,673	11,932	13,006	11,155	8,569		12,028
71 - 75		21,161				9,207	9,105	8,754	9,143	15,046	9,787	11,077
76 - 80						9,269		5,820		11,897	12,674	11,294
81 - 85										16,532	12,149	13,902
86 - 90						6,063				14,020	11,100	10,394
91 & Over												0
Average	25,823	27,992	20,343	13,402	19,809	18,700	15,885	11,314	10,337	12,788	12,225	16,589

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	5	6	2	2	7	11	2					35
21 - 25	1	1				2	1					4
26 - 30		1				1	2					4
31 - 35		1				1	2	1				5
36 - 40	2	1		1	1	5	3	1				14
41 - 45	1		2			5	4	2				15
46 - 50	1	1	1	1	2	2	3	1		1	1	13
51 - 55	1	5	4	1	2	16	6	12	3	1	1	48
56 - 60	4	3	4	4	2	12	15	4	3	2	1	53
61 - 65	3	2	3	5	3	23	22	12	10	10	4	97
66 - 70	3	4	2	3	2	24	35	30	2	5	5	115
71 - 75	1	1		5	3	19	26	29	18	9	4	115
76 - 80	1	1	1	1	1	4	16	31	26	21	11	112
81 - 85						5	5	11	15	19	24	81
86 - 90								2	9	15	39	65
91 & Over							1	2	2	8	19	32
Totals	23	26	15	23	23	130	143	138	88	91	108	808

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	9,925	7,472	5,858	5,176	5,835	5,937	4,879					6,641
21 - 25	6,132					3,742	5,099					4,679
26 - 30		14,227				3,742	4,619					6,802
31 - 35		18,609				25,196	4,619	4,396				11,488
36 - 40	43,286	27,269		15,117	22,069	18,751	6,605	10,336				19,638
41 - 45	79,020		20,540			20,744	14,060	14,549			5,044	20,947
46 - 50	20,440	45,685	20,588	34,615	37,889	19,692	12,509	14,969		6,520		22,731
51 - 55	27,520	20,876	32,673	36,394	21,299	21,855	16,452	10,442	11,363	28,595	5,487	17,766
56 - 60	28,164	25,141	32,673	34,076	17,678	26,658	17,590	9,193	10,692	15,877		22,165
61 - 65	21,782	41,097	23,956	34,995	26,678	25,159	20,466	14,796	14,658	11,359	9,484	20,402
66 - 70	17,442	25,718	55,437	21,105	7,213	23,232	19,880	13,597	16,703	11,725	8,187	18,492
71 - 75	17,477	21,934		12,984	15,555	23,859	16,220	12,746	14,183	12,966	8,967	15,683
76 - 80	3,226	9,609	5,231	41,917	17,267	8,732	16,531	14,724	12,360	14,372	10,940	13,876
81 - 85						36,402	18,952	8,616	18,242	16,707	9,962	15,113
86 - 90								52,747	19,343	15,512	10,933	14,441
91 & Over							6,654	17,129	18,606	14,739	8,840	11,375
Average	22.624	21.040	26.137	25.126	16.306	21.651	17.085	13.529	14.861	14.567	9.991	16.398

EXHIBIT X YEAR-TO-YEAR COMPARISON

	Fiscal 2014	Fiscal 2013	Fiscal 2012	Fiscal 2011
Number of Active Members	14,575	14,559	14,231	14,754
Number of Retirees & Survivors	4,510	4,293	3,922	3,716
Number of Terminated Due Deferred Benefits	362	343	350	323
Number Terminated Due Refunds	5,150	5,069	5,056	4,743
Active Lives Payroll	\$ 634,536,119	\$ 622,720,506	\$ 611,139,881	\$ 623,084,570
Retiree Benefits in Payment	\$ 114,122,739	\$ 105,832,204	\$ 90,894,373	\$ 83,741,250
Market Value of Assets	\$ 2,733,132,117	\$ 2,272,263,124	\$1,967,024,952	\$ 1,907,946,452
EAN Accrued Liability	\$ 3,129,132,635	\$2,942,457,560	\$ 2,752,868,402	\$2,603,584,473
Ratio of MVA to EAN Accrued Liability	87.34%	77.22%	71.45%	73.28%
Actuarial Value of Assets	\$ 2,513,293,197	\$ 2,203,646,722	\$2,042,809,526	\$1,935,179,988
Frozen Unfunded Actuarial Accrued Liability	\$ 59,264,382	\$ 62,983,756	\$ 66,156,793	\$ 68,826,417
Present Value of Future Employer Normal Cost	\$ 1,022,657,685	\$ 1,125,270,083	\$1,089,982,874	\$1,044,434,589
Present Value of Future Employee Contrib.	\$ 616,003,094	\$ 600,569,823	\$ 570,327,767	\$ 578,341,253
Funding Deposit Account Balance	\$ 0	\$ 3,689,049	\$ 6,448,956	\$ 13,680,020
Present Value of Future Benefits	\$ 4,211,218,358	\$ 3,998,781,335	\$3,762,828,004	\$3,613,102,227

	Fiscal 2015	Fiscal 2014	Fiscal 2013	Fiscal 2012
Employee Contribution Rate	10.25%	10.25%	10.00%	10.00%
Estimated Ad Valorem Taxes and Revenue Sharing Funds as a % of payroll	3.04%	2.99%	2.82%	2.56%
Estimated Insurance Taxes as a % of Payroll	2.70%	2.59%	2.51%	2.44%
Actuarially Required Net Direct Employer Contributions as a % of Projected Payroll	12.07%	14.33%	14.55%	13.78%
Actual Employer Contribution Rate	14.25%	14.50%	§ 13.75% *	13.75% ‡

† 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

* 13.25% paid directly by employers with additional 0.50% allocated from the Funding Deposit Account

§ 13.89% paid directly by employers with additional 0.61% allocated from the Funding Deposit Account

Fiscal 2010	Fiscal 2009	Fiscal 2008	Fiscal 2007	Fiscal 2006	Fiscal 2005
14,711	14,396	14,038	13,530	12,835	13,863
3,510	3,369	3,140	2,995	2,859	2,693
325	306	328	340	329	279
4,727	4,435	4,156	3,939	3,722	3,152
\$ 603,250,449	\$ 577,078,980	\$ 537,082,456	\$ 481,418,484	\$ 436,370,158	\$ 432,019,757
\$ 76,379,208	\$ 71,517,150	\$ 64,309,775	\$ 55,471,909	\$ 50,612,587	\$ 45,968,384
\$ 1,522,233,162	\$ 1,306,974,663	\$ 1,511,820,016	\$ 1,550,829,081	\$ 1,288,100,175	\$ 1,144,751,928
\$2,415,074,197	\$ 2,192,263,534	\$ 2,003,918,104	\$ 1,780,867,852	\$ 1,620,279,244	\$ 1,481,537,562
63.03%	59.62%	75.44%	87.08%	79.50%	77.27%
\$1,773,450,705	\$1,608,228,363	\$1,628,303,910	\$ 1,468,646,528	\$ 1,282,638,484	\$ 1,085,515,384
\$ 71,042,296	\$ 72,846,699	\$ 74,278,468	\$ 96,251,088	\$ 95,495,221	\$ 94,579,805
\$1,003,967,230	\$ 890,632,040	\$ 641,924,601	\$ 524,216,581	\$ 527,090,828	\$ 598,357,461
\$ 557,530,584	\$ 517,818,601	\$ 482,053,768	\$ 436,275,292	\$ 400,151,989	\$ 399,070,734
\$ 17,151,710	\$ 15,881,213	\$ 0	\$ 0	\$ 0	\$ 0
\$3,388,839,105	\$3,073,644,490	\$2,826,560,747	\$2,525,389,489	\$ 2,305,740,522	\$2,177,523,384

Fiscal 2011	Fiscal 2010	Fiscal 2009	Fiscal 2008	Fiscal 2007	Fiscal 2006
10.00%	10.00%	10.00%	10.00%	10.00%	10.00%
2.61%	2.75%	2.53%	2.39%	2.47%	2.32%
2.48%	2.55%	2.72%	2.87%	2.77%	2.68%
13.56%	12.58%	8.92%	7.59%	8.69%	10.99%
12.75% †	11.00%	11.00%	11.00%	11.00%	10.75%

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, including minimum salary levels, are also eligible to become members of the retirement system.

CONTRIBUTION RATES – Under the provisions of R.S. 11:62, 11:82 and 11:103, 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% or more than 10.25% of earnable compensation. 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. Any excess funds resulting from additional contributions will be credited to the Funding Deposit Account defined in R.S. 11:2175.1. 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. 22:1476A(3).

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 and prior to July 1, 2013, final average compensation is based on the average monthly earnings during the highest sixty consecutive months or joined months if service was interrupted.

For a member whose first employment making him eligible for membership in the system began on or after July 1, 2013, final average compensation is based on the average monthly earnings during the highest sixty 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 115% of the preceding twelve month period.

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-three, 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.

COST OF LIVING INCREASES – Under the provisions of R.S. 11:241, 11:246, and 11: 2178, the board of trustees is authorized to grant retired members and widows of members who have retired an annual cost of living increase of up to 2½% of their current benefit, not to exceed five percent of the average monthly benefit in payment to service retirees at the end of the preceding 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:	7.7%
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% (3.00% inflation; 3.00% 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 elect benefits which have a present value of ½% less than the maximum possible present value based on a comparison to available back DROP benefits and regular retirement benefits.

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	>28	0.010

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.

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	Active Male Mortality Rates	Active Female Mortality Rates	Retired Male Mortality Rates	Retired Female Mortality Rates	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	0.00214	0.00168	0.07000	0.00183
52	0.00229	0.00181	0.00229	0.00181	0.07000	0.00207
53	0.00245	0.00197	0.00245	0.00197	0.07000	0.00236
54	0.00262	0.00213	0.00262	0.00213	0.07000	0.00267
55	0.00281	0.00232	0.00281	0.00232	0.15000	0.00303
56	0.00303	0.00253	0.00303	0.00253	0.15000	0.00345
57	0.00331	0.00276	0.00331	0.00276	0.15000	0.00392
58	0.00363	0.00301	0.00363	0.00301	0.15000	0.00444
59	0.00400	0.00329	0.00400	0.00329	0.15000	0.00505
60	0.00441	0.00360	0.00441	0.00360	0.15000	0.00732
61	0.00488	0.00393	0.00488	0.00393	0.15000	0.00732
62	0.00538	0.00429	0.00538	0.00429	0.15000	0.00732
63	0.00592	0.00466	0.00592	0.00466	0.15000	0.00732
64	0.00647	0.00504	0.00647	0.00504	0.15000	0.00732
65	0.00703	0.00543	0.00703	0.00543	0.24000	0.00732
66	0.00757	0.00582	0.00757	0.00582	0.24000	0.00732
67	0.00810	0.00621	0.00810	0.00621	0.24000	0.00732
68	0.00860	0.00658	0.00860	0.00658	0.24000	0.00732
69	0.00907	0.00695	0.00907	0.00695	0.24000	0.00732
70	0.00951	0.00729	0.00951	0.00729	0.24000	0.00732
71	0.00992	0.00761	0.00992	0.00761	0.24000	0.00732
72	0.02457	0.01858	0.02457	0.01858	0.24000	0.00732
73	0.02728	0.02067	0.02728	0.02067	0.24000	0.00732
74	0.03039	0.02297	0.03039	0.02297	0.24000	0.00732
75	0.03390	0.02546	0.03390	0.02546	0.24000	0.00732

PRIOR YEAR ASSUMPTIONS

VALUATION INTEREST RATE: 7.8%

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