

**FIREFIGHTERS'
RETIREMENT SYSTEM**

ACTUARIAL VALUATION AS OF
JUNE 30, 2010

G. S. CURRAN & COMPANY, LTD.

Actuarial Services

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

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

Gregory M. Curran, FCA, MAAA, ASA
Associate Actuary

December 8, 2010

Board of Trustees
Firefighters' Retirement System
3100 Brentwood Drive
Baton Rouge, LA 70809

Ladies and Gentlemen:

We are pleased to present our report on the actuarial valuation of the Firefighters' Retirement System for the fiscal year ending June 30, 2010. 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 Firefighters' Retirement System of the State of Louisiana. The primary purposes of the report are to determine the actuarially required contribution for the retirement system for the fiscal year ending June 30, 2011, to recommend the net direct employer contribution rate for fiscal 2012, and to provide information for the system's financial statements. This report was prepared exclusively for the Firefighters' Retirement System 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.

TABLE OF CONTENTS

<u>SUBJECT</u>	<u>PAGE</u>
Summary of Valuation Results.....	1
Comments on Data	2
Comments on Actuarial Methods and Assumptions	2
Changes in Plan Provisions	3
Asset Experience	4
Plan Demographics and Liability Experience	5
Funding Analysis and Recommendations	6
Cost of Living Increases	8
Graphs.....	9
Exhibit I - Analysis of Actuarially Required Contributions.....	14
Exhibit II - Present Value of Future Benefits	15
Exhibit III (Schedule A) - Market Value of Assets	16
Exhibit III (Schedule B) - Actuarial Value of Assets	17
Exhibit IV - Present Value of Future Contributions.....	18
Exhibit V (Schedule A) - Actuarial Accrued Liabilities.....	18
Exhibit V (Schedule B) - Change in Unfunded Actuarial Accrued Liability.....	18
Exhibit V (Schedule C) - Amortization of Unfunded Actuarial Accrued Liability	19
Exhibit VI - Analysis of Increase in Assets.....	20
Exhibit VII - Fund Balance.....	21
Exhibit VIII - Pension Benefit Obligation.....	21
Exhibit IX - Cost of Living Adjustments - Target Ratio	22
Exhibit X - Census Data	23
Exhibit XI - Year to Year Comparison.....	32
Summary of Principal Plan Provisions	34
Actuarial Assumptions.....	37
Glossary	43

SUMMARY OF VALUATION RESULTS FIREFIGHTERS' RETIREMENT SYSTEM

Valuation Date:	June 30, 2010	June 30, 2009
Census Summary:		
Active Contributing Members	3,989	3,882
Retired Members and Beneficiaries	1,749	1,688
DROP Participants	162	147
Terminated Due a Deferred Benefit	59	55
Terminated Due a Refund	442	407

Payroll (excludes DROP Participants):	\$ 189,542,210	\$ 178,913,097
Benefits in Payment:	\$ 56,056,554	\$ 53,031,851
Market Value of Assets:	\$ 971,775,080	\$ 865,547,030
Unfunded Actuarial Accrued Liability:	\$ 396,204,368	\$ 336,762,192
Actuarial Asset Value:	\$ 1,140,054,175	\$ 1,073,797,423
Actuarial Accrued Liability:	\$ 1,536,258,543	\$ 1,410,559,615

Ratio of Actuarial Value of Assets to Actuarial Accrued Liabilities:	74.21%	76.13%
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	FISCAL 2011	FISCAL 2010
Normal Cost as of July 1:	\$ 46,768,881	\$ 42,186,920
Amortization Cost (Credit) as of July 1:	\$ 35,214,367	\$ 28,687,470
Total Actuarially Required Contribution		
Inclusive of Estimated Administrative Costs:	\$ 85,926,974	\$ 74,350,552
Projected Employee Contributions (8%)	\$ 15,604,233	\$ 14,739,917
Expected Insurance Premium Taxes	\$ 21,624,265	\$ 21,306,059
Employer's Net Direct Actuarially Req'd Contributions	\$ 48,698,476	\$ 38,304,576
Actual Net Direct Employer Contribution Rate:	21.50%	14.00%
Actuarially Required Net Direct Employer Cont. Rate:	24.97%	20.79%

Minimum Recommended Net Direct Employer Cont. Rate -	Fiscal 2012: 25.25%	Fiscal 2011: 21.50%
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Employee Contribution Rate: 8.00% of payroll

Actuarial Cost Method: Individual Entry Age Normal with allocation of cost based on earnings. Unfunded Accrued Liability (exclusive of liability for mergers) as of June 30, 2002 amortized through June 30, 2029 with level dollar payments. Unfunded Accrued Liability resulting from merged systems amortized over thirty years.

Valuation Interest Rate: 7½% (Net of Investment Expense)

Exclusions from Census: None

Basis of Actuarial Asset Value: The actuarial value of assets is based on the market value of assets adjusted to phase in asset earnings above or below the assumed rate of return over a five-year period with limits set at 85% and 115% of the market value of assets. When the adjusted value falls outside of the limits, the actuarial value is set equal to the average of the limited and adjusted value.

Changes in Valuation Methods, Assumptions, and/or Amortization Periods: A change was made to the mortality assumption for actives and retirees. In addition, changes were made to the assumed rates of retirement, DROP entry, disability, and the assumed rate of post-DROP retirement.

Method of Recognizing Gains and Losses: Amortized over 20 years for fiscal 2010 and one less year each year thereafter, but not less than fifteen years.

COMMENTS ON DATA

For the valuation, the administrator of the system furnished a census on CD 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, sex, 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 3,989 active contributing members in the system of whom 1,776 have vested retirement benefits; in addition, there are 162 participants in the Deferred Retirement Option Plan (DROP); 1,749 former system members or their beneficiaries are receiving retirement benefits. An additional 501 members have contributions remaining on deposit with the system; of this number, 59 have vested rights for future retirement benefits. All individuals submitted were included in the valuation.

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

In addition to the statistical information provided on the system's participants, the system's 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 accounting staff. As indicated in the system's financial statements, the net market value of the system's assets was \$971,775,080 as of June 30, 2010. Net investment income for fiscal 2010 measured on a market value basis amounted to \$105,599,172. Contributions to the system for fiscal 2010 totaled \$63,684,234; benefits and expenses amounted to \$63,055,356.

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 Entry Age Normal actuarial cost method. Under the provisions of Louisiana R.S. 11:103 the funding excess for the plan which was determined to be \$239,425 as of June

30, 1989 was amortized over thirty years. Subsequent experience gains and losses were amortized over fifteen years. Contribution gains or losses arising from contributions in excess of or less than the required contributions are amortized over the same period as experience gains and losses. Further changes in the unfunded accrued liability generated by mergers of groups of firefighters into the system are amortized over thirty years. All non-merger amortization bases in existence on June 30, 2002, were combined, offset, and re-amortized through June 30, 2029, in accordance with R.S. 11:103(D). The aggregate value of the bases as of that date was \$175,578,584. Beginning with fiscal 2010, actuarial gains and losses, as well as contribution gains and losses, are amortized over a 20 year period. Each year thereafter, the amortization period will decrease by one year until attaining a 15 year amortization period. All changes in assumptions or the method of valuing assets are amortized over 15 years. All amortization payments are on a level dollar basis.

The current and prior year actuarial assumptions utilized for the report are outlined on pages thirty-seven through forty-two. In the aggregate the assumptions represent our "best estimate" of future long-term experience for the fund. An experience study was conducted to re-examine decrement experience for the fund over the last five years. Ratios of actual to expected decrements were calculated for disability, withdrawal, retirement, and DROP entry. The relatively small size of the Fund does not provide sufficient data to creditably build full tabular decrement rates at each age based on recent experience. In addition, the unique benefit structure makes the use of standard tables impractical. Thus, the newly developed rates are based on subjective adjustment to the existing tabular rates based on the experience of the five prior fiscal years. As a result of this analysis, prior retirement and DROP entry rates were increased, disability rates were reduced, and withdrawal rates were left unchanged. In the case of mortality, new mortality assumptions were set after reviewing the study performed on plan data for the period of 1999 through 2004, as well as, an updated study using data for the period of 2004 through 2009. Based upon the variance in the results of these studies, and giving consideration to the limited credibility of the data and the lack of an appropriately comparable base table, the projected mortality was set using the RP2000 Healthy Annuity Table set back one year for males and one year for females. A determination was made that these tables would produce liability values approximating the appropriate generational mortality tables. A review of salary increases over the most recent five years showed average salary increases above projected levels. Based upon the pattern of average salary increases at each service level, a set of smoothed salary growth rates was developed that better approximates actual plan experience. The aggregate effect of all changes in assumptions was to increase the fund's UAL by \$37,843,942 and to increase the interest-adjusted amortization payments on the system's UAL by \$4,134,977 or 2.12% of payroll, in fiscal 2011.

CHANGES IN PLAN PROVISIONS

The following changes in plan provisions were enacted during the 2010 Regular Session of the Louisiana Legislature:

Act 93 created a Funding Review Panel charged with meeting to collect information relative to the Municipal Employees' Retirement System, the Municipal Police Employees' Retirement System, and the Firefighters' Retirement System. The Funding Review Panel shall then submit a report by March 15, 2011 to the House and Senate committees on retirement and to the legislative auditor with recommendations for increasing the actuarial soundness of each system and providing affordable benefits to members of each system.

Act 634 added to the limited provisions of garnishment of retirement benefits and contribution refunds court-ordered restitution, fines, costs of incarceration, probation, or parole imposed on members, former members, or retirees as a result of a guilty plea or *nolo contendere* to the commission of a felony for misconduct associated with such person's service as an elected official or public employee for which credit in the fund was earned or accrued for felonies committed on or after July 1, 2010. The act does not impinge on the community property interest of a spouse or former spouse.

Act 874 makes certain changes to the Public Retirement System's Actuarial Committee. The act sets a deadline for determining the employee contribution rate of the first Monday in February. The act changes one of the members of the committee from the Legislative Actuary to the Legislative Auditor or his designee. The act also states that each agency represented by a member of the committee shall provide clerical staff as requested by any member of the committee in fulfillment of the duties of the committee. In addition, the act makes several technical changes to the statutes governing the committee.

Act 1004 provides for guidelines in asset allocation studies, investment policy, and selecting investments for all state and statewide retirement systems and calls for such systems to submit quarterly reports on investment results to the House and Senate Retirement Committees.

Act 1048 amended the state constitution to require that any public retirement system benefit provision having an actuarial cost must receive a two-thirds majority of the elected members of each house of the legislature in order to pass.

ASSET EXPERIENCE

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

	<u>Market Value</u>	<u>Actuarial Value</u>
2001	-2.9%	0.7%
2002	-3.7%	-3.0%
2003	5.4%	0.9%
2004	11.0%	8.0%
2005	10.4%	10.4%
2006	12.3%	9.9% *
2007	17.2%	11.6%
2008	- 5.0%	9.0%
2009	-20.8%	-4.9% **
2010	12.2%	6.1%

* Based on the actuarial value of assets and income and expense including the effect of a change in the method for calculating the actuarial value of assets under a 5-year smoothing of investment earnings above or below the assumed 7.5% rate of return subject to a corridor of 90% to 110% of the market value of assets. Returns for years 1998 through 2005 were based on a 2-year smoothing of recognized realized and unrealized capital gains (losses) on all securities.

** Includes the effect of a change in the method for calculating the actuarial value of assets. The actuarial value of assets is based on the market value of investment securities 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.

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. (Asset and income values for merger notes were excluded from calculations in order to provide a measurement of the return on the portion of the portfolio under management.) 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 2010, the fund earned \$23,718,764 of dividends, interest and other recurring income. In addition, the Fund had net realized and unrealized capital gains on investments of \$80,532,841 and additional income due to a prior period adjustment of \$8,164,656. Investment expenses amounted to \$6,817,089. The geometric mean of the market value rates of return measured over the last ten years was 3.0%.

The actuarial rate of return is presented for comparison to the assumed long-term rate of return of 7.5% used for the valuation. This rate is calculated based on the actuarial value of assets and all interest, dividends, and recognized capital gains as given in Exhibit VI. 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 gains or losses on investments relative to the valuation interest rate over a five-year period. Yields in excess of the 7.5% assumption will reduce future costs; yields below 7.5% will increase future costs. For fiscal 2010, the system experienced net actuarial investment earnings of \$14,930,089 below the actuarial assumed earnings rate of 7.5% which produced an actuarial loss and increased the interest-adjusted amortization payments on the system's UAL by \$1,445,902 or 0.74% of payroll, in fiscal 2011.

PLAN DEMOGRAPHICS AND LIABILITY EXPERIENCE

A reconciliation of the census for the system is given in Exhibit X. The average active contributing member is 37 years old with 11.13 years of service credit and an annual salary of \$47,516. The system's active contributing membership experienced an increase during fiscal 2010 of 107 members. The number of DROP participants increased by 15. Over the last five years active membership has increased by 457 members. 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. Over the same ten-year period the system showed an increase in the percentage of members with more than twenty years of service credit.

The average service retiree is 64 years old with a monthly benefit of \$3,096. The number of retirees and beneficiaries receiving benefits from the system increased by 61 during the fiscal year. Over the last five years, the number has increased by 315; during the same period, the annual benefits in payment increased by \$19,546,065. The changes in the makeup of the population, changes in assumptions, and changes in members' salaries increased the interest adjusted normal cost over the last year by \$4,750,677; the normal cost percentage increased by 1.12% of payroll.

Plan liability experience for fiscal 2010 was unfavorable. Salary increase rates at most durations were above projections. DROP entries were slightly above projections. Withdrawals were slightly below projections. These factors increased costs. Offsetting these increases, disabilities and retirements were slightly below projections and retiree deaths were above projections. Net plan liability losses totaled \$985,441. These losses increased the interest-adjusted amortization payments on the system's unfunded accrued liability by \$95,435, or 0.05% of payroll, in fiscal 2010.

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 payments on the unfunded actuarial accrued liability. The normal cost refers to the annual cost for active members allocated to each year by the particular cost method utilized. 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. In addition it may be increased or diminished by plan experience, changes in assumptions, or changes in benefits including COLA's. Contributions in excess of or less than the actuarially required amount can also decrease or increase the UAL balance. New entrants to the system can also increase or lower costs as a percent of payroll depending upon their demographic distribution. Finally, payroll growth affects plan costs since payments on the system's unfunded liability are on a fixed, level schedule. If payroll increases, these costs are reduced as a percentage of payroll.

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.

An explanation of the change in costs related to asset and liability gains and losses as well as changes in demographics and assumptions is given in prior sections of the report. In addition to these components, variances in contribution levels and payroll also affect costs. For fiscal 2010 contributions totaled \$11,264,571 less than required; the interest-adjusted amortization payment on the contribution shortfall for fiscal 2011 is \$1,090,916, or 0.56% of payroll. In addition, for fiscal 2011 the net effect of the change in payroll on amortization costs was to reduce such costs by 0.89% of payroll.

A reconciliation of the change in costs is given below. Values listed in dollars are interest adjusted for payment throughout the fiscal year. Percentages are based on the projected payroll for fiscal 2011 except for those items labeled fiscal 2010.

	Dollars	Percentage of Payroll
Normal Cost for Fiscal 2010	\$ 43,740,331	23.74%
Cost of Assumption, Demographic, and Salary Changes	\$ 4,750,678	<u>1.12%</u>
Normal Cost for Fiscal 2011	\$ 48,491,009	24.86%
UAL Payments for Fiscal 2010	\$ 29,743,803	16.14%
Change due to change in payroll	N/A	(0.89%)

Additional Amortization Expenses for Fiscal 2011:

Liability Assumption Loss (Gain)	\$ 4,134,977	2.12%
Asset Experience Loss (Gain)	\$ 1,445,902	0.74%
Contribution Loss (Gain)	\$ 1,090,916	0.56%
Liability Loss (Gain)	<u>\$ 95,435</u>	<u>0.05%</u>
Net Amortization Expense (Credit) for Fiscal 2011	\$ 6,767,230	3.47%
Estimated Administrative Cost for Fiscal 2011	\$ 924,933	0.47%
Total Normal Cost & Amortization Payments	\$ 85,926,974	44.05%

The derivation of the actuarially required contribution for the current fiscal year is given in Exhibit I. The normal cost for fiscal 2011 as of July 1, 2010 is \$46,768,881. The amortization payments on the system's unfunded actuarial accrued liability as of July 1, 2010 total \$35,214,367. The total actuarially required contribution is determined by adjusting the sum of these two values for interest (since payments are made throughout the fiscal year) and adding estimated administrative expenses. As given in line 11 of Exhibit I the total actuarially required contribution for fiscal 2011 is \$85,926,974. We project that employee contributions will total \$15,604,233 for the fiscal year. This leaves \$70,322,741 to be funded from direct employer contributions and insurance premium taxes. We estimate insurance premium taxes of \$21,624,265 will be paid to the system in fiscal 2011. Hence, the total actuarially required net direct employer contribution for fiscal 2011 amounts to \$48,698,476 or 24.97% of payroll.

Since actual employer contributions for fiscal 2011 are 21.50% of payroll, we estimate the effect of the contribution shortfall will be to increase required contributions in fiscal 2012 by 0.32% of payroll. Since the statutes require rounding the net direct employer contributions rate to the nearest 0.25%, we recommend a net direct employer contribution rate of 25.25% for fiscal 2012.

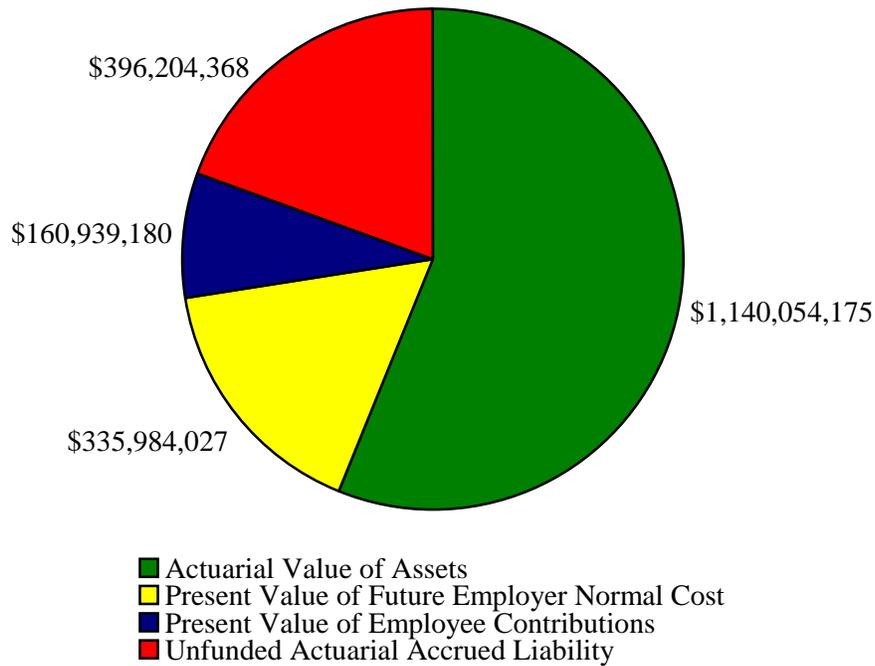
Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions, changes in economic or demographic assumptions, completion of 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 plan's costs to a change in two factors. First, we have determined that based on current assets and demographics, for each percentage under (over) the assumed rate of return on the actuarial value of assets, there will be a corresponding increase (reduction) in the actuarially required contribution as a percentage of projected payroll of 0.55%. In addition, we have determined that a 1% reduction in the valuation interest rate for the Fund would increase the actuarially required contribution rate for fiscal 2011 by 14.32%.

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 three years and will put upward pressure on costs as they are released into income unless they are offset by substantial asset or liability gains.

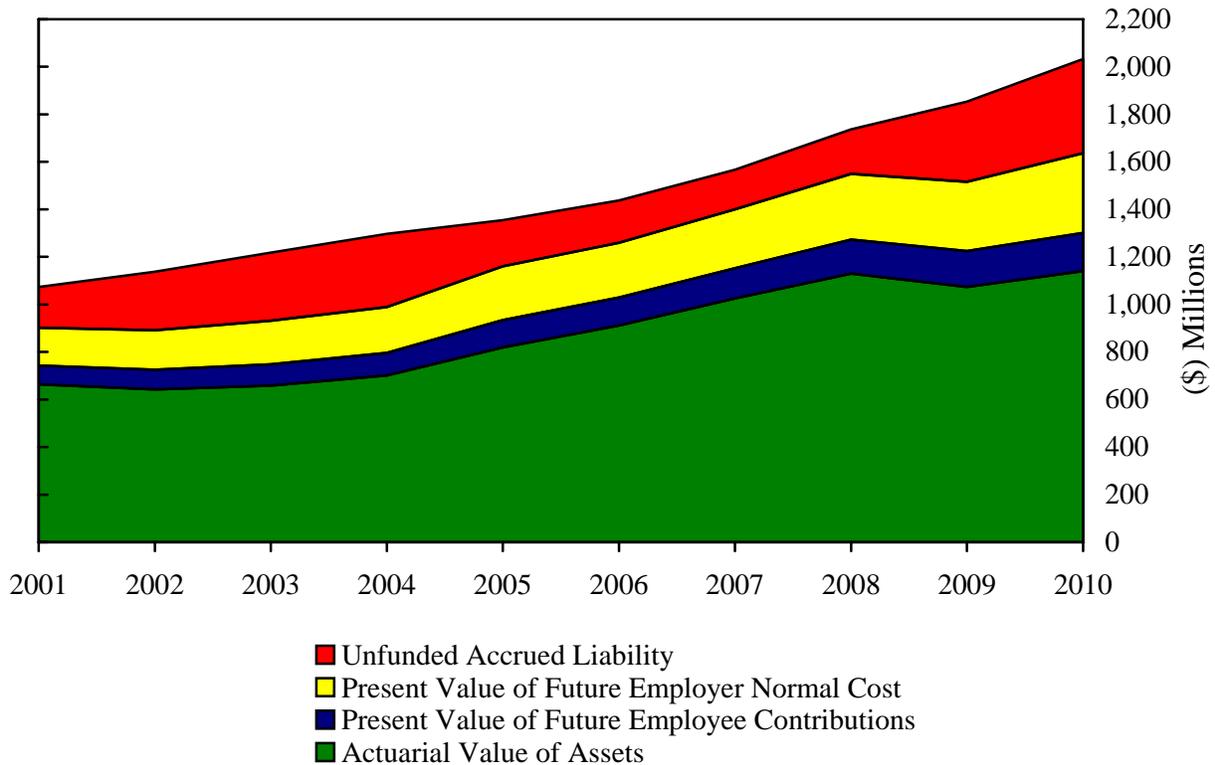
COST OF LIVING INCREASES

During fiscal 2010, the actual cost of living (as measured by the US Department of Labor CPI-U) increased by 1.05%. Cost of living provisions for the system are detailed in R.S. 11:2260A(7) and R.S. 11:246. The former statute allows the board to use interest earnings in excess of the normal requirements to grant annual cost of living increases of 3% of each retiree's current benefit. R.S. 11:246 provides cost of living increases to 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 2010 the plan has not met the necessary target ratio and does not have excess investment earnings. Therefore, the Fund is unable to grant COLAs to retirees at this time.

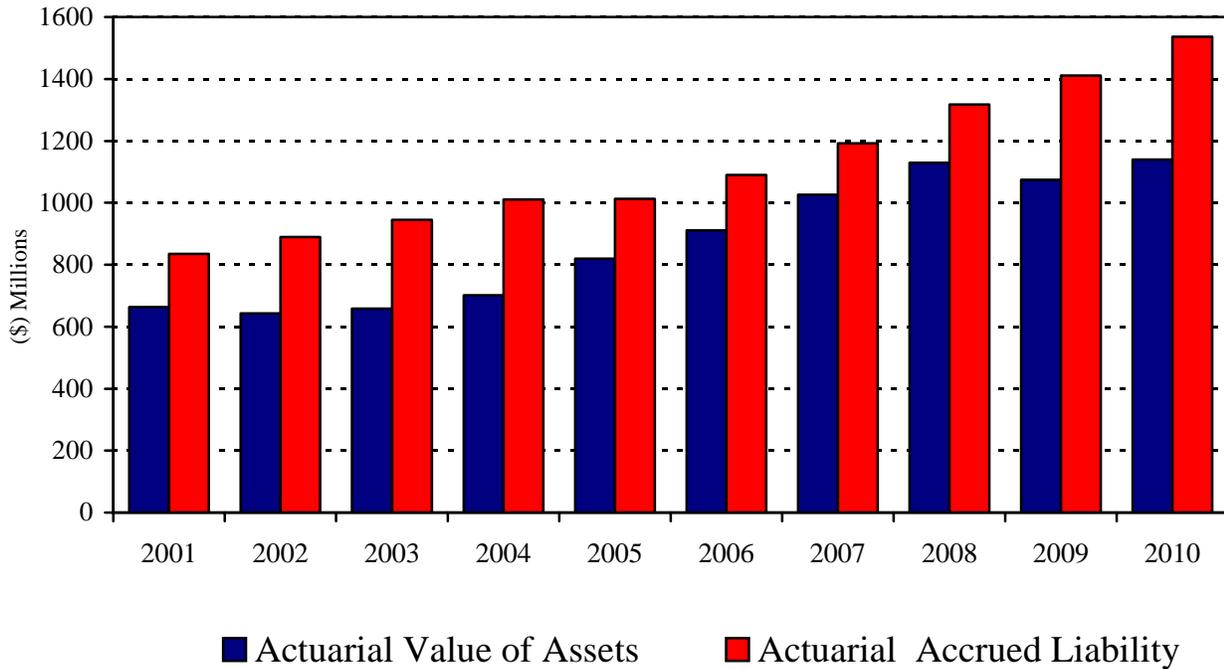
Components of Present Value of Future Benefits June 30, 2010



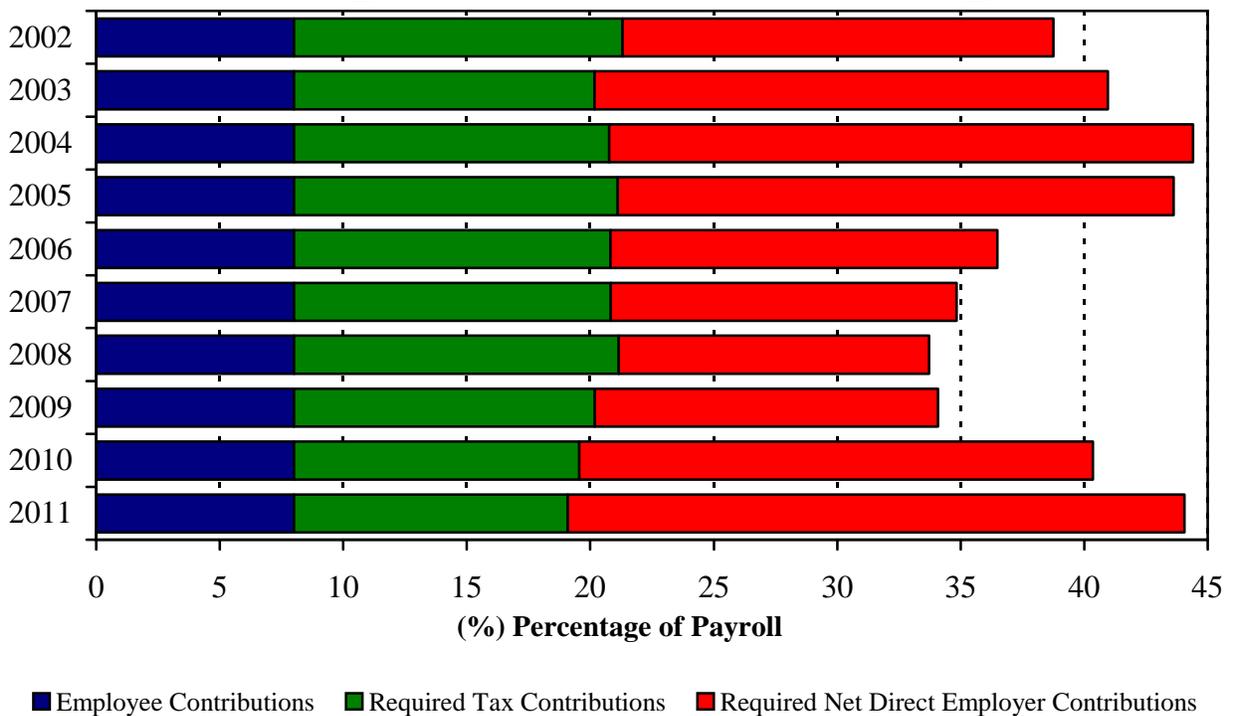
Components of Present Value of Future Benefits Historical



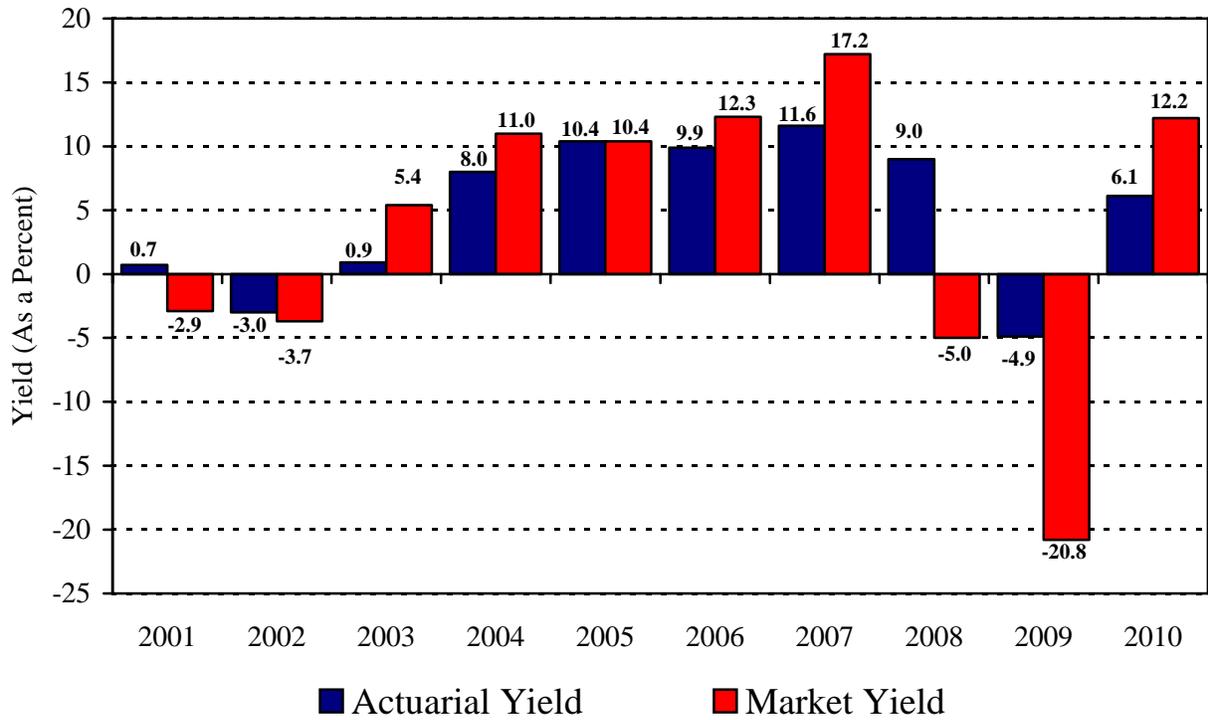
Actuarial Value of Assets vs. Actuarial Accrued Liability



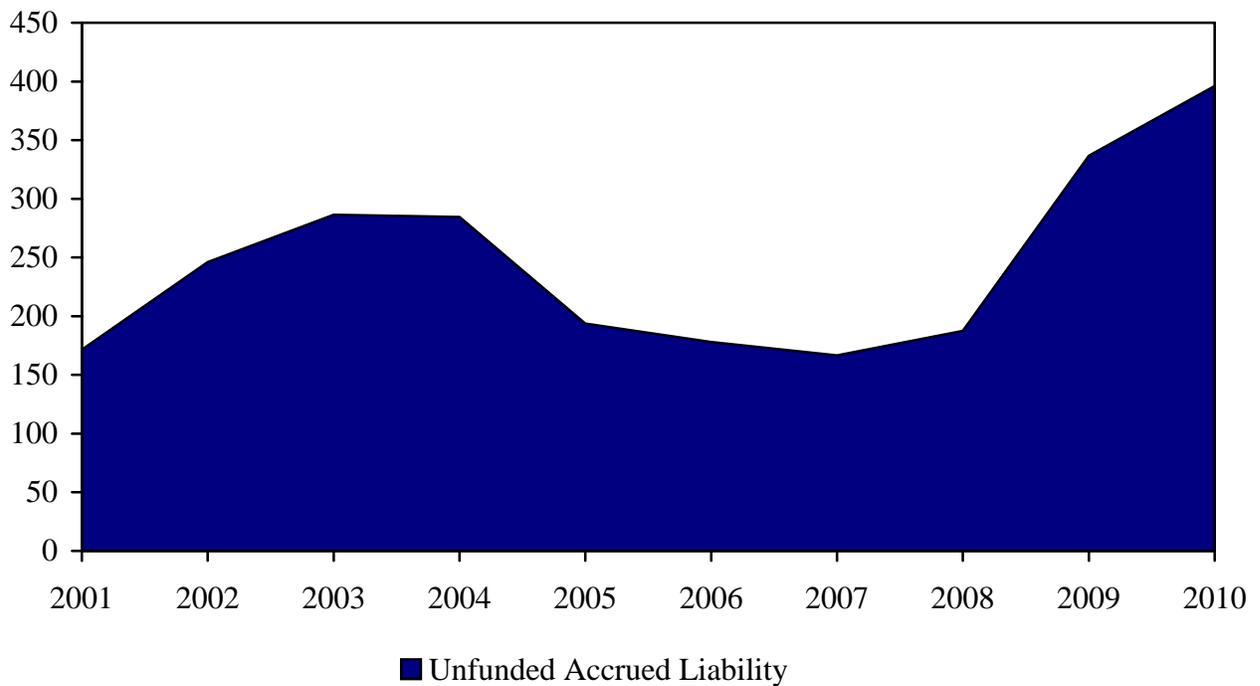
Components of Actuarial Funding



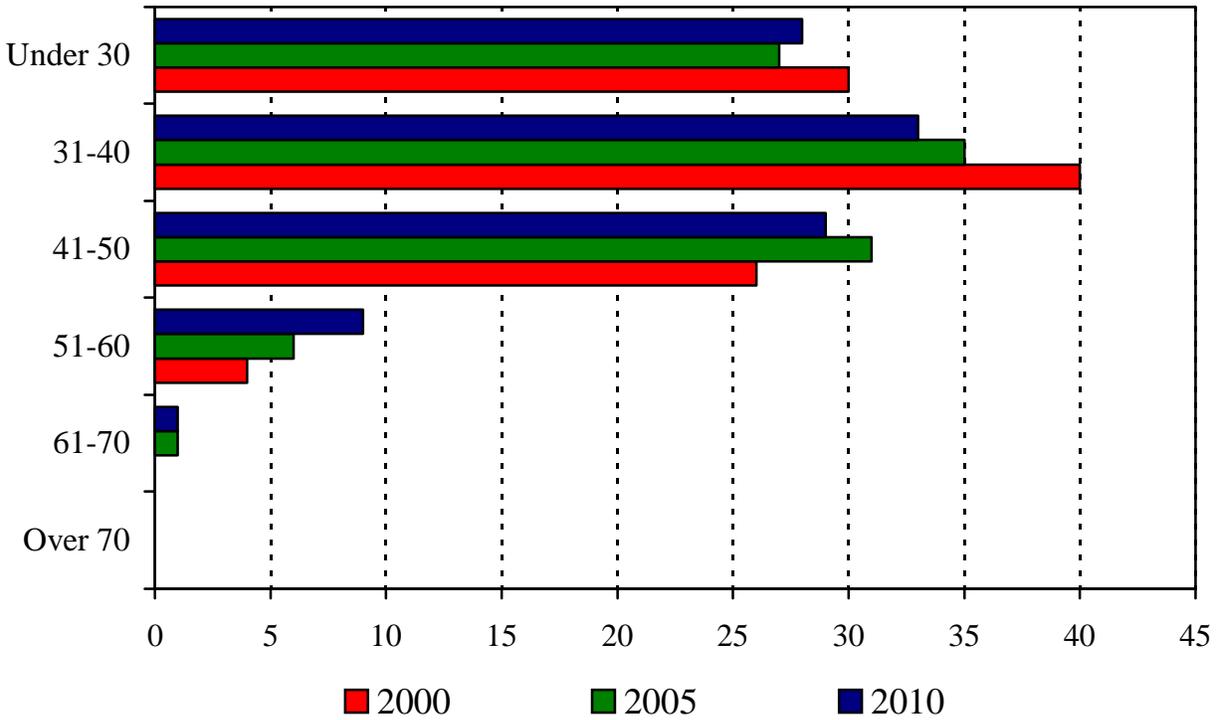
Historical Asset Yields



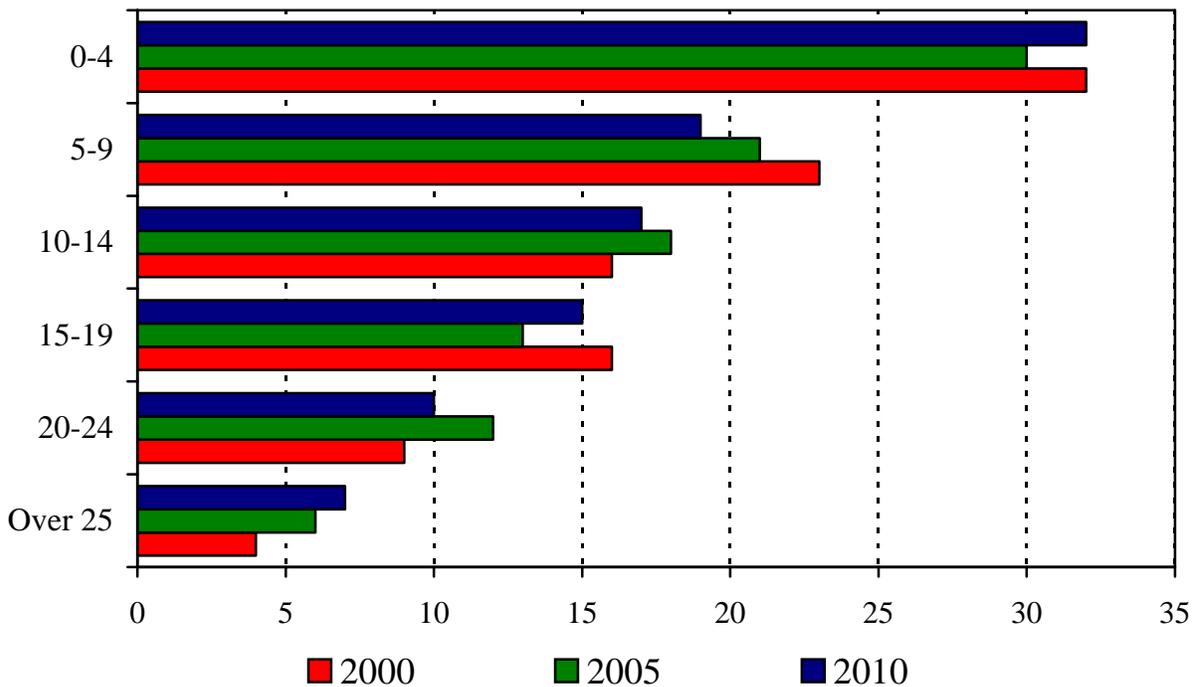
Unfunded Accrued Liability



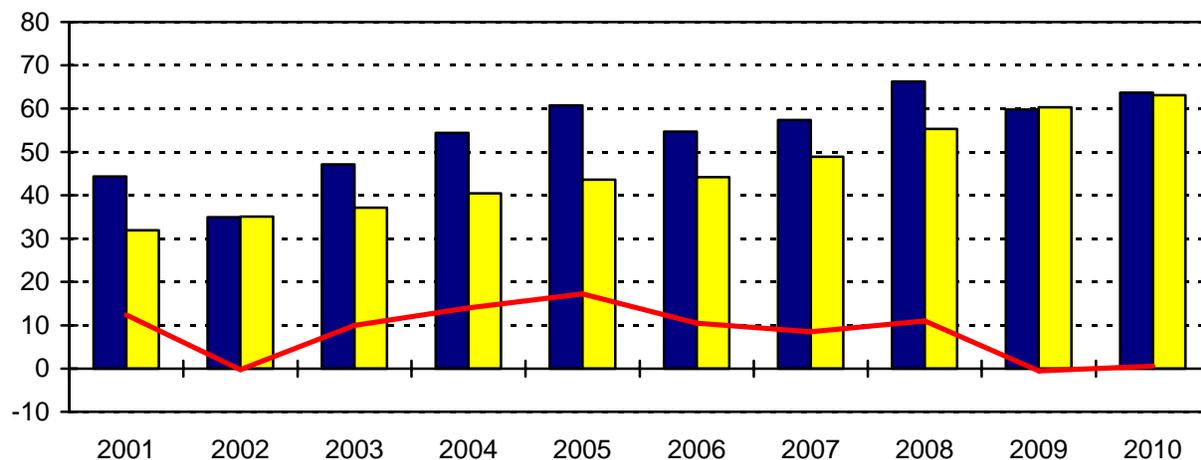
Active – Census By Age (as a percent)



Active – Census By Service (as a percent)

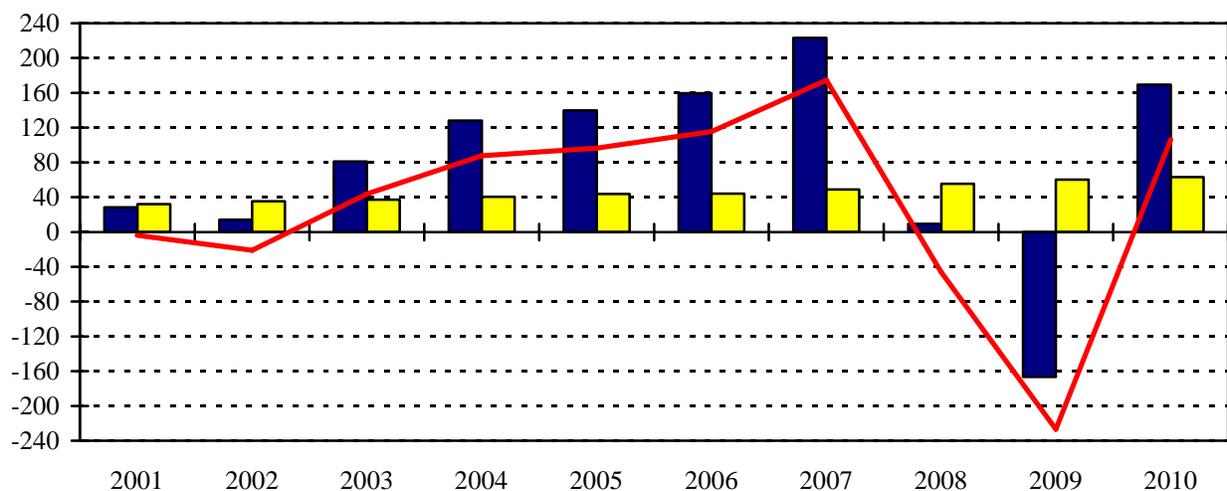


Net Non-Investment Income



	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Non-Investment Income (\$Mil) ■	44.3	34.9	47.1	54.4	60.8	54.7	57.4	66.3	59.8	63.7
Benefits and Expenses (\$Mil) ■	31.9	35.1	37.1	40.4	43.6	44.2	48.9	55.3	60.3	63.1
Net Non-Investment Income (\$Mil) —	12.4	-0.2	10.0	14.4	17.2	10.5	8.5	11.0	-0.5	0.6

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



	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total Income (\$Mil) ■	28.2	14.0	80.8	128.1	139.8	159.5	223.3	9.5	-166.6	169.3
Benefits and Expenses (\$Mil) ■	31.9	35.1	37.1	40.4	43.6	44.2	48.9	55.3	60.3	63.1
Net Change in MVA (\$Mil) —	-3.7	-21.1	43.7	87.7	96.2	115.3	174.4	-45.8	-226.9	106.2

EXHIBITS

EXHIBIT I
ANALYSIS OF ACTUARIALLY REQUIRED CONTRIBUTIONS

1.	Normal Cost of Retirement Benefits.....	\$ 41,729,784
2.	Normal Cost of Death Benefits.....	\$ 1,235,280
3.	Normal Cost of Disability Benefits.....	\$ 1,108,934
4.	Normal Cost of Deferred Retirement Benefits	\$ 1,408,718
5.	Normal Cost of Contribution Refunds.....	\$ 1,286,165
6.	TOTAL Normal Cost as of July 1, 2010 (1+2+3+4+5).....	\$ 46,768,881
7.	Amortization of Unfunded Accrued Liability of \$396,204,368	\$ 35,214,367
8.	TOTAL Normal Cost & Amortization Payments (6+7).....	\$ 81,983,248
9.	Normal Cost and Amortization Payments Interest Adjusted for Midyear Payment	\$ 85,002,041
10.	Estimated Administrative Cost for Fiscal 2011	\$ 924,933
11.	TOTAL Administrative and Interest Adjusted Actuarial Costs (9+10).....	\$ 85,926,974
12.	Projected Employee Contributions for Fiscal 2011	\$ 15,604,233
13.	GROSS Employer Actuarially Required Contribution to be funded by direct employer contributions and Insurance Premium Taxes for Fiscal 2011 (11 - 12)	\$ 70,322,741
14.	Expected Insurance Premium Taxes due in Fiscal 2011.....	\$ 21,624,265
15.	Net Direct Actuarially Required Employer Contributions for Fiscal 2011 (13-14)	\$ 48,698,476
16.	Projected Payroll For Contributing Members July 1, 2010 through June 30, 2011	\$ 195,052,911
17.	Employer's Net Direct Actuarially Required Contribution as a % of Projected Payroll for Fiscal 2011 (15 ÷ 16)	24.97%
18.	Actual Net Direct Employer Contribution Rate for Fiscal 2011.....	21.50%
19.	Contribution Gain (Loss) as a Percentage of Payroll (18 – 17).....	(3.47%)
20.	Adjustment to Following Year Payment for Contribution Gain (Loss).....	(0.32%)
21.	Recommended Net Direct Employer Contribution Rate for Fiscal 2012 (17 – 20) (Rounded to nearest 0.25%)	25.25%

EXHIBIT II
PRESENT VALUE OF FUTURE BENEFITS

Present Value of Future Benefits for Active Members:

Retirement Benefits.....	\$ 1,314,730,429
Survivor Benefits	20,946,291
Disability Benefits.....	16,373,753
Vested Deferred Termination Benefits	26,140,912
Contribution Refunds	9,127,028

TOTAL Present Value of Future Benefits for Active Members..... \$ 1,387,318,413

Present Value of Future Benefits for Terminated Members:

Terminated Vested Members Due Benefits at Retirement	\$ 8,261,348
Terminated Members with Reciprocals Due Benefits at Retirement.....	0
Terminated Members Due a Refund.....	1,506,936

TOTAL Present Value of Future Benefits for Terminated Members \$ 9,768,284

Present Value of Future Benefits for Retirees:

Regular Retirees.....	\$ 511,213,749
Disability Retirees	25,419,628
Survivors & Widows	42,146,516
Retiree DROP Account Balance.....	54,812,609
IBO Retirees' Account Balance.....	2,502,551

TOTAL Present Value of Future Benefits for Retirees & Survivors \$ 636,095,053

TOTAL Present Value of Future Benefits..... \$ 2,033,181,750

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

Current Assets:

Cash & Cash Equivalents in Banks.....	\$ 6,257,517
Contributions Receivable from Members.....	1,269,126
Contributions Receivable from Employers.....	2,221,082
Accrued Interest and Dividends on Investments	4,695,140
Receivable on Currency Contracts	7,363,627
Investments Receivables	5,895,291
Prepaid Expenses	135,790

TOTAL CURRENT ASSETS \$ 27,837,573

Property, Plant and Equipment (Net of accumulated depreciation) \$ 778,421

Investments:

Common Stock	\$ 266,552,694
Hedge Funds	204,035,370
Private Real Estate	101,288,024
Mutual Funds	95,439,751
Private Equity	82,550,449
Corporate Bonds	75,991,321
Cash & Cash Equivalents.....	49,206,580
Emerging Market Debt	33,744,971
Asset Backed Securities	26,451,454
U. S. Government Securities.....	16,871,356
Municipal Bonds	536,905

TOTAL INVESTMENTS \$ 952,668,875

MERGER NOTES \$ 3,811,681

TOTAL ASSETS \$ 985,096,550

Current Liabilities:

Payable on Currency Contracts.....	7,032,065
Investment Payables.....	5,725,062
Accounts Payable.....	564,343

TOTAL CURRENT LIABILITIES \$ 13,321,470

NET MARKET VALUE OF ASSETS \$ 971,775,080

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

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

Fiscal year 2010.....	\$ 40,659,988
Fiscal year 2009.....	(308,277,876)
Fiscal year 2008.....	(142,555,260)
Fiscal year 2007.....	93,344,557
Fiscal year 2006.....	<u>40,744,514</u>
Total for five years.....	\$ (276,084,077)

Deferral of excess (shortfall) of invested income:

Fiscal year 2010 (80%).....	\$ 32,527,990
Fiscal year 2009 (60%).....	(184,966,726)
Fiscal year 2008 (40%).....	(57,022,104)
Fiscal year 2007 (20%).....	18,668,911
Fiscal year 2006 (0%).....	<u>0</u>
Total deferred for year.....	\$ (190,791,929)

Market value of plan net assets, end of year..... \$ 971,775,080

Preliminary actuarial value of plan assets, end of year \$ 1,162,567,008

Actuarial value of assets corridor

85% of market value, end of year.....	\$ 826,008,818
115% of market value, end of year.....	\$ 1,117,541,342

Final actuarial value of plan net assets, end of year \$ 1,140,054,175

**EXHIBIT IV
PRESENT VALUE OF FUTURE CONTRIBUTIONS**

Employee Contributions to the Annuity Savings Fund	\$ 160,939,180
Employer Normal Contributions to the Pension Accumulation Fund.....	335,984,027
Employer Payments on the Unfunded Actuarial Accrued Liability	396,204,368
 TOTAL PRESENT VALUE OF FUTURE CONTRIBUTIONS	 \$ 893,127,575

**EXHIBIT V - SCHEDULE A
ACTUARIAL ACCRUED LIABILITIES**

LIABILITY FOR ACTIVE MEMBERS	
Accrued Liability for Retirement Benefits.....	\$ 870,593,322
Accrued Liability for Survivor Benefits	7,975,409
Accrued Liability for Disability Benefits.....	4,753,407
Accrued Liability for Vested Termination Benefits.....	11,326,747
Accrued Liability for Refunds of Contributions	(4,253,679)
TOTAL Actuarial Accrued Liability for Active Members	\$ 890,395,206
 LIABILITY FOR TERMINATED MEMBERS	 \$ 9,768,284
 LIABILITY FOR RETIREES AND SURVIVORS	 \$ 636,095,053
 TOTAL ACTUARIAL ACCRUED LIABILITY.....	 \$ 1,536,258,543
 ACTUARIAL VALUE OF ASSETS.....	 \$ 1,140,054,175
 UNFUNDED ACTUARIAL ACCRUED LIABILITY	 \$ 396,204,368

**EXHIBIT V - SCHEDULE B
CHANGE IN UNFUNDED ACTUARIAL ACCRUED LIABILITY**

Prior Year Unfunded Accrued Liability	\$ 336,762,192
Interest on Unfunded Accrued Liability	\$ 25,257,166
Normal Cost for Prior Year	42,186,920
Interest on the Normal Cost.....	3,164,019
Normal Cost for Merged Systems with Accrued Interest.....	0
Administrative Expenses	860,965
Interest on Expenses	31,703
TOTAL Increases to Unfunded Accrued Liability	\$ 71,500,773
 Required Contributions for Prior Year with interest	 \$ 77,082,640
Contribution Excess (Shortfall) with accrued interest.....	(11,264,571)
Cost of Living Adjustment Gains (Losses)	0
Merger Gains (Losses).....	0
Investment Gains (Losses).....	(14,930,089)
Liability Experience Gains (Losses).....	(985,441)
Liability Assumption Gains (Losses)	(37,843,942)
TOTAL Decreases to Unfunded Accrued Liability	\$ 12,058,597
 CURRENT YEAR UNFUNDED ACCRUED LIABILITY	 \$ 396,204,368

EXHIBIT V - SCHEDULE C
AMORTIZATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITY
JUNE 30, 2010

FISCAL YEAR	DESCRIPTION	AMORT. PERIOD	INITIAL BALANCE	YEARS REMAINING	REMAINING BALANCE	AMORT. PAYMENTS
1993	Merger Loss (Gain)	30	13,485,002	13	9,151,640	1,047,664
1995	Merger Loss (Gain)	30	41,779,611	15	30,884,472	3,254,713
1996	Merger Loss (Gain)	30	1,772,399	16	1,358,611	138,251
1997	Merger Loss (Gain)	30	890,324	17	705,177	69,533
1998	Merger Loss (Gain)	30	1,602,435	18	1,307,370	125,299
1999	Merger Loss (Gain)	30	14,104,876	19	11,821,395	1,104,183
2001	Merger Loss (Gain)	30	3,117,590	21	2,738,090	244,593
2002	Cumulative Non-Merger Bases	27	175,578,584	19	152,338,351	14,229,238
2003	Contribution Loss (Gain)	15	2,678,010	8	1,771,360	281,320
2003	Assumption Loss (Gain)	15	(3,248,077)	8	(2,148,429)	(341,205)
2003	Experience Loss (Gain)	15	44,477,780	8	29,419,674	4,672,310
2004	Contribution Loss (Gain)	15	2,129,874	9	1,536,733	224,102
2004	Experience Loss (Gain)	15	1,570,785	9	1,133,343	165,275
2005	Experience Loss (Gain)	15	(24,922,321)	10	(19,379,915)	(2,626,401)
2005	Assumption Loss (Gain)	15	(57,207,831)	10	(44,485,539)	(6,028,760)
2005	Contribution Loss (Gain)	15	(2,457,193)	10	(1,910,745)	(258,948)
2006	Experience Loss (Gain)	15	(30,043,731)	11	(24,898,567)	(3,166,113)
2006	Benefits/COLA Loss (Gain)	15	12,495,729	11	10,355,763	1,316,843
2006	Assumption Loss (Gain)	15	7,880,410	11	6,530,844	830,465
2006	Contribution Loss (Gain)	15	(3,044,474)	11	(2,523,090)	(320,837)
2007	Contribution Loss (Gain)	15	(3,684,696)	12	(3,228,930)	(388,306)
2007	Merger Loss (Gain)	30	1,065,812	27	1,032,512	83,948
2007	Experience Loss (Gain)	15	(19,348,466)	12	(16,955,221)	(2,039,009)
2007	Benefits/COLA Loss (Gain)	15	13,421,495	12	11,761,367	1,414,404
2008	Assumption Loss (Gain)	15	(138,425)	13	(127,428)	(14,588)
2008	Contribution Loss (Gain)	15	(4,399,499)	13	(4,049,976)	(463,634)
2008	Merger Loss (Gain)	30	1,556,324	28	1,525,092	122,582
2008	Experience Loss (Gain)	15	11,244,458	13	10,351,131	1,184,980
2008	Benefits/COLA Loss (Gain)	15	15,006,752	13	13,814,525	1,581,464
2009	Asset Assumption Loss (Gain)	15	(121,695,690)	14	(117,036,298)	(12,824,715)
2009	Asset Experience Loss (Gain)	20	261,874,151	19	255,826,903	23,895,637
2009	COLA Loss (Gain)	20	15,784,880	19	15,420,373	1,440,347
2009	Experience Loss (Gain)	20	(3,921,422)	19	(3,830,868)	(357,824)
2009	Contribution Loss (Gain)	20	993,536	19	970,593	90,659
2010	Liability Assumption Loss(Gain)	15	37,843,942	15	37,843,942	3,988,126
2010	Asset Experience Loss (Gain)	19	14,930,089	19	14,930,089	1,394,552
2010	Experience Loss (Gain)	19	985,441	19	985,441	92,046
2010	Contribution Loss (Gain)	19	11,264,571	19	11,264,571	1,052,173

TOTAL Unfunded Actuarial Accrued Liability \$ 396,204,368

TOTAL Fiscal 2010 Amortization Payments \$ 35,214,367

* Under the provisions of Act 620 of the 2003 Regular Legislative Session, all non-merger bases established on or before June 30, 2002 were combined, offset, and re-amortized through June 30, 2029.

EXHIBIT VI
ANALYSIS OF INCREASE IN ASSETS

Actuarial Value of Assets (June 30, 2009)		\$ 1,073,797,423
Income:		
Regular Member Contributions	\$ 15,330,125	
Regular Employer Contributions	26,844,397	
Insurance Premium Taxes	21,306,059	
Irregular Contributions	203,653	
Contributions from Mergers	0	
TOTAL CONTRIBUTIONS		\$ 63,684,234
Interest and Dividends	\$ 23,439,359	
Rent Income	28,391	
Interest from Merger Notes	251,014	
Net Appreciation of Fair Value of Investments	80,532,841	
Prior Period Adjustment	8,164,656	
Investment Expenses	(6,817,089)	
SUBTOTAL OF ALL MARKET INVESTMENT INCOME		\$ 105,599,172
TOTAL Income		\$ 169,283,406
Expenses:		
Retirement/Survivor Benefits/DROP Disbursements	\$ 56,737,180	
Refunds of Contributions	793,783	
Disability Benefits	4,663,428	
Administrative Expenses	860,965	
Funds Transferred to Another System	0	
TOTAL Expenses		\$ 63,055,356
Net Market Income for Fiscal 2010 (Income - Expenses)		\$ 106,228,050
Adjustment for Actuarial Smoothing		\$ (39,971,298)
Actuarial Value of Assets (June 30, 2010)		\$ 1,140,054,175

**EXHIBIT VII
FUND BALANCE**

Present Assets of the System Creditable to:

Annuity Savings Fund	\$ 124,383,280
Annuity Reserve Fund	578,779,893
Pension Accumulation Fund.....	194,522,592
Deferred Retirement Option Plan Account	71,586,764
Initial Benefit Option Plan Account	2,502,551
NET MARKET VALUE OF ASSETS.....	\$ 971,775,080
ADJUSTMENT FOR ACTUARIAL SMOOTHING	168,279,095
NET ACTUARIAL VALUE OF ASSETS	\$ 1,140,054,175

**EXHIBIT VIII
PENSION BENEFIT OBLIGATION**

Present Value of Credited Projected Payable to Current Employees	\$ 847,825,602
Present Value of Benefits Payable to Terminated Employees	9,768,284
Present Value of Benefits Payable to Current Retirees and Beneficiaries	636,095,053
TOTAL PENSION BENEFIT OBLIGATION	\$ 1,493,688,939
NET ACTUARIAL VALUE OF ASSETS	\$ 1,140,054,175
Ratio of Net Actuarial Value of Assets to Pension Benefit Obligation.....	76.32%

EXHIBIT IX
COST OF LIVING ADJUSTMENTS - TARGET RATIO

Actuarial Value of Assets Divided by PBO as of Fiscal 1986:		99.35%
Amortization of Unfunded Balance over 30 years:		0.52%
Adjustments in Funded Ratio Due to Mergers or Changes in Assumption(s):		
Changes for Fiscal 1987.....	(0.72%)	
Changes for Fiscal 1988.....	(3.24%)	
Changes for Fiscal 1989.....	(3.80%)	
Changes for Fiscal 1992.....	1.34%	
Changes for Fiscal 1993.....	(1.25%)	
Changes for Fiscal 1994.....	(0.03%)	
Changes for Fiscal 1995.....	(1.73%)	
Changes for Fiscal 1996.....	(16.29%)	
Changes for Fiscal 1997.....	(3.65%)	
Changes for Fiscal 1998.....	(0.27%)	
Changes for Fiscal 1999.....	(0.97%)	
Changes for Fiscal 2000.....	(2.97%)	
Changes for Fiscal 2001.....	(0.23%)	
Changes for Fiscal 2003.....	0.45%	
Changes for Fiscal 2005.....	4.16%	
Changes for Fiscal 2006.....	(0.71%)	
Changes for Fiscal 2007.....	(0.09%)	
Changes for Fiscal 2008.....	(0.01%)	
Changes for Fiscal 2009.....	8.88%	
Changes for Fiscal 2010.....	(2.00%)	
TOTAL Adjustments.....		(23.13%)
Amortization of Adjustments in Funded Ratio over 30 years:		
Changes for Fiscal 1987.....	0.55%	
Changes for Fiscal 1988.....	2.38%	
Changes for Fiscal 1989.....	2.66%	
Changes for Fiscal 1992.....	(0.80%)	
Changes for Fiscal 1993.....	0.71%	
Changes for Fiscal 1994.....	0.02%	
Changes for Fiscal 1995.....	0.87%	
Changes for Fiscal 1996.....	7.60%	
Changes for Fiscal 1997.....	1.58%	
Changes for Fiscal 1998.....	0.11%	
Changes for Fiscal 1999.....	0.36%	
Changes for Fiscal 2000.....	0.99%	
Changes for Fiscal 2001.....	0.07%	
Changes for Fiscal 2003.....	(0.11%)	
Changes for Fiscal 2005.....	(0.69%)	
Changes for Fiscal 2006.....	0.09%	
Changes for Fiscal 2007.....	0.01%	
Changes for Fiscal 2008.....	0.00%	
Changes for Fiscal 2009.....	(0.30%)	
Changes for Fiscal 2010.....	0.00%	
TOTAL Amortization of Adjustments		16.10%
Target Ratio for Current Fiscal Year		92.84%
Actuarial Value of Assets Divided by PBO as of Fiscal 2010		76.32%

**EXHIBIT X
CENSUS DATA**

	Active	Terminated with Funds on Deposit	DROP	Retired	Total
Number of members as of June 30, 2009	3,882	462	147	1,688	6,179
Additions to Census					
Initial membership	291	18			309
Death of another member			(1)	16	15
Omitted in error last year				(2)	(2)
Adjustment for multiple records		1			1
Change in Status during Year					
Actives terminating service	(68)	68			
Actives who retired	(36)			36	
Actives entering DROP	(75)		75		
Term. members rehired	20	(20)			
Term. members who retire		(4)		4	
Retirees who are rehired	1			(1)	
Refunded who are rehired	18	16			34
DROP participants retiring			(47)	47	
DROP returned to work	12		(12)		
Omitted in error last year					
Eliminated from Census					
Refund of contributions	(51)	(40)			(91)
Deaths	(5)			(34)	(39)
Included in error last year					
Suspended Benefits					
Adjustment for Multiple Records				(5)	(5)
Number of members as of June 30, 2010	3,989	501	162	1,749	6,401

ACTIVES CENSUS BY AGE:

Age	Number Male	Number Female	Total Number	Average Salary	Total Salary
16 - 20	47	0	47	27,866	1,309,710
21 - 25	448	13	461	33,197	15,303,904
26 - 30	609	34	643	37,350	24,016,297
31 - 35	615	25	640	42,962	27,495,968
36 - 40	626	43	669	48,642	32,541,809
41 - 45	577	36	613	53,728	32,935,205
46 - 50	493	43	536	58,555	31,385,225
51 - 55	242	26	268	63,607	17,046,701
56 - 60	85	6	91	68,077	6,194,996
61 - 65	15	2	17	62,014	1,054,232
66 - 70	3	0	3	60,758	182,274
71 - 75	1	0	1	75,889	75,889
TOTAL	3,761	228	3,989	47,516	189,542,210

THE ACTIVE CENSUS INCLUDES 1,776 ACTIVES WITH VESTED BENEFITS, INCLUDING 52 ACTIVE FORMER DROP PARTICIPANTS. THE 162 CURRENT DROP PARTICIPANTS ARE EXCLUDED.

DROP PARTICIPANTS:

Age	Number Male	Number Female	Total Number	Average Benefit	Total Benefit
41 - 45	1	0	1	31,762	31,762
46 - 50	32	2	34	62,115	2,111,896
51 - 55	93	0	93	53,826	5,005,804
56 - 60	27	1	28	61,342	1,717,566
61 - 65	5	0	5	58,470	292,352
66 - 70	1	0	1	27,884	27,884
TOTAL	159	3	162	56,712	9,187,264

TERMINATED MEMBERS DUE A DEFERRED RETIREMENT BENEFIT:

Age	Number Male	Number Female	Total Number	Average Benefit	Total Benefit
36 - 40	10	0	10	22,121	221,207
41 - 45	22	1	23	22,689	521,843
46 - 50	16	1	17	23,265	395,507
51 - 55	8	1	9	21,040	189,363
TOTAL	56	3	59	22,507	1,327,920

TERMINATED MEMBERS DUE A REFUND OF CONTRIBUTIONS:

Contributions Ranging		Number	Total Contributions
From	To		
0	- 99	63	2,277
100	- 499	113	29,778
500	- 999	51	35,980
1000	- 1999	62	88,443
2000	- 4999	68	212,346
5000	- 9999	40	280,319
10000	- 19999	29	446,601
20000	- 99999	16	411,192
TOTAL		442	1,506,936

REGULAR RETIREES:

Age	Number Male	Number Female	Total Number	Average Benefit	Total Benefit
46 - 50	63	2	65	43,675	2,838,892
51 - 55	170	6	176	41,568	7,315,985
56 - 60	275	8	283	41,233	11,668,898
61 - 65	301	5	306	37,330	11,423,000
66 - 70	192	2	194	36,573	7,095,203
71 - 75	130	2	132	32,193	4,249,460
76 - 80	67	0	67	26,947	1,805,475
81 - 85	68	0	68	24,888	1,692,400
86 - 90	14	0	14	29,419	411,859
91 - 99	1	0	1	23,817	23,817
TOTAL	1,281	25	1,306	37,155	48,524,989

DISABILITY RETIREES:

Age	Number Male	Number Female	Total Number	Average Benefit	Total Benefit
31 - 35	1	0	1	14,719	14,719
36 - 40	6	0	6	17,973	107,835
41 - 45	13	2	15	19,163	287,448
46 - 50	26	2	28	24,822	695,009
51 - 55	16	3	19	19,409	368,777
56 - 60	26	2	28	18,983	531,532
61 - 65	15	0	15	20,389	305,842
66 - 70	8	0	8	14,555	116,439
71 - 75	9	0	9	13,043	117,391
76 - 80	7	0	7	16,370	114,588
81 - 85	2	0	2	9,342	18,684
TOTAL	129	9	138	19,408	2,678,264

SURVIVORS:

Age	Number Male	Number Female	Total Number	Average Benefit	Total Benefit
0 - 25	9	10	19	5,897	112,039
26 - 30	0	1	1	13,521	13,521
31 - 35	1	1	2	13,947	27,893
36 - 40	1	8	9	23,436	210,920
41 - 45	0	3	3	20,718	62,155
46 - 50	0	11	11	17,931	197,246
51 - 55	0	13	13	22,761	295,897
56 - 60	1	24	25	19,541	488,526
61 - 65	1	23	24	16,482	395,557
66 - 70	0	22	22	19,931	438,477
71 - 75	0	38	38	20,554	781,070
76 - 80	0	61	61	13,419	818,583
81 - 85	1	48	49	13,171	645,370
86 - 90	0	20	20	14,396	287,927
91 - 99	0	8	8	9,765	78,120
TOTAL	14	291	305	15,912	4,853,301

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	39	8											47
21 - 25	111	99	137	69	29	16							461
26 - 30	85	73	90	89	69	222	15						643
31 - 35	37	33	35	49	31	246	194	15					640
36 - 40	16	16	33	28	15	128	246	183	4				669
41 - 45	12	11	12	9	9	70	116	232	133	9			613
46 - 50	5	8	11	5	8	32	62	96	176	128	5		536
51 - 55	1	1		2	1	29	25	47	66	73	23		268
56 - 60						6	11	14	14	15	31		91
61 - 65							4	5		1	7		17
66 - 70									2		1		3
71 & Over											1		1
Totals	306	249	318	251	162	749	673	592	395	226	68		3989

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	27,534	29,487											27,866
21 - 25	28,255	30,938	35,346	36,518	38,496	39,133							33,197
26 - 30	28,510	32,755	35,663	37,603	39,097	41,571	47,933						37,350
31 - 35	28,552	32,956	36,840	39,897	38,003	43,024	49,055	55,268					42,962
36 - 40	31,247	33,630	36,169	38,436	38,239	43,845	50,585	56,655	59,098				48,642
41 - 45	34,844	33,424	37,072	39,042	35,488	43,950	52,469	56,792	60,727	68,714			53,728
46 - 50	32,679	40,318	36,564	31,288	44,755	44,864	52,375	56,593	62,469	66,482	72,486		58,555
51 - 55	43,494	34,780		72,989	48,847	49,448	52,588	58,099	63,032	73,519	76,835		63,607
56 - 60						66,289	48,301	57,179	61,881	72,830	80,860		68,077
61 - 65							47,067	49,177	54,524	54,069	80,859		62,014
66 - 70										73,227	75,889		60,758
71 & Over													75,889
Average	28,807	32,291	35,793	38,053	38,840	43,251	50,591	56,727	61,882	69,211	78,698		47,516

TERMINATED MEMBERS DUE A DEFERRED RETIREMENT BENEFIT:

Attained Ages	Years Until Retirement Eligibility										Total	
	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29		30&Over
0 - 35												0
36 - 40							1	9				10
41 - 45						1	22					23
46 - 50		1	2			14						17
51 - 55	1	2	1	1	4							9
56 & Over												0
Totals	1	3	3	1	4	15	23	9	0	0	0	59

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

Attained Ages	Years Until Retirement Eligibility										Average Benefit	
	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29		30&Over
0 - 35												0
36 - 40							41,265	19,994				22,121
41 - 45						37,991	21,993					22,689
46 - 50		47,817	32,750			20,156						23,265
51 - 55	23,337	20,700	38,423	19,228	16,744							21,040
56 & Over												0
Average	23,337	29,739	34,641	19,228	16,744	21,345	22,831	19,994	0	0	0	22,507

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	13	16	16	14	2	4							65
51 - 55	38	29	22	32	18	35	2						176
56 - 60	17	21	21	30	25	129	26	13	1				283
61 - 65	7	6	11	4	11	108	126	17	14	1	1		306
66 - 70	2		4	1	5	29	73	50	13	15	2		194
71 - 75				1		5	28	36	22	14	14		132
76 - 80						2	2	7	16	19	21		67
81 - 85						2		2	12	16	36		68
86 - 90							1	1	2	5	5		14
91 & Over									1	1	1		1
Totals	77	72	74	82	61	314	258	126	84	79	79		1306

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	40,926	48,743	45,165	39,562	41,990	41,620							43,675
51 - 55	43,460	42,992	41,726	38,557	38,387	43,266	30,345						41,568
56 - 60	41,509	44,895	45,230	41,178	45,305	41,619	38,251	24,575	19,822				41,233
61 - 65	47,539	46,201	37,684	41,165	38,873	39,589	36,769	29,078	25,827	24,068	17,759		37,330
66 - 70	25,948		40,393	44,783	28,302	41,238	41,333	35,106	24,541	23,415	28,320		36,573
71 - 75				23,944		29,614	41,034	37,389	32,289	23,372	16,343		32,193
76 - 80						12,483	39,396	36,535	36,413	27,053	16,636		26,947
81 - 85						9,562		48,178	40,773	32,071	15,959		24,888
86 - 90							26,346	15,734	49,396	34,684	19,513		29,418
91 & Over									23,817				23,817
Average	42,518	45,092	42,791	39,712	40,601	40,488	38,603	33,992	32,270	26,758	16,767		37,155

DISABILITY RETIREES:

Attained Ages	Completed Years Since Retirement											Total			
	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30&Over				
0 - 30															0
31 - 35						1									1
36 - 40		2		1		2									6
41 - 45	1	1	2		2	7	1	1							15
46 - 50	2		3	2	5	11	2	2	1						28
51 - 55	1				1	7	5	2	3						19
56 - 60				1		3	7	3	9	4					28
61 - 65						1	2	5	5	1	1				15
66 - 70						2	2	1	2	1	2				8
71 - 75						2				1	6				9
76 - 80							1		2	1	3				7
81 - 85						1					1				2
86 & Over															0
Totals	5	3	5	4	8	37	18	14	22	8	14	8	14	14	138

AVERAGE ANNUAL BENEFITS PAYABLE TO DISABILITY RETIREES:

Attained Ages	Completed Years Since Retirement											Average Benefit			
	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30&Over				
0 - 30															0
31 - 35						14,719									14,719
36 - 40						10,189									17,972
41 - 45	33,119	15,419	21,854	23,499	22,750	16,947	17,811	13,113	13,670						19,163
46 - 50	26,515	22,175	33,487	18,989	26,480	25,750	16,166	10,900	13,670						24,822
51 - 55	36,562				33,918	21,778	14,972	19,032	14,011						19,409
56 - 60	27,460			22,200		25,189	20,758	15,021	19,466	15,391					18,983
61 - 65						27,447	18,507	20,688	21,797	18,869					20,389
66 - 70						11,761		17,378	21,975	21,250					14,555
71 - 75						9,192			17,516	20,887					13,043
76 - 80							33,466			17,510					16,370
81 - 85							5,154			13,530					9,342
86 & Over															0
Average	32,044	17,671	28,834	20,919	26,477	19,986	18,933	17,061	19,039	17,510	10,521	10,521	10,521	10,521	19,408

SURVIVING BENEFICIARIES OF FORMER MEMBERS:

Completed Years Since Retirement

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 - 20	3	1	4	4		3	2	2					19
21 - 25													0
26 - 30			1										1
31 - 35			1										2
36 - 40	1		1	2		2	1	1	1				9
41 - 45			1										3
46 - 50	1		2	1		2	3	2					11
51 - 55	1		1			3	6	4	5	2			13
56 - 60			1		2	5	4	4	5	2	1		25
61 - 65			1		1	2	4	4	3	3	1		24
66 - 70			1		1	2	5	3	2	4	4		22
71 - 75					1	4	3	5	8	5	13		38
76 - 80						2	2	5	8	10	34		61
81 - 85						1		3	5	7	34		49
86 - 90						1		3	2	5	12		20
91 & Over									2	1	7		8
Totals	6	1	12	7	4	26	37	33	34	39	106		305

AVERAGE ANNUAL BENEFITS PAYABLE TO SURVIVORS OF FORMER MEMBERS:

Completed Years Since Retirement

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 - 20	4,431	2,745	5,426	8,537		8,693	3,079	3,956					5,897
21 - 25			13,521										0
26 - 30			26,141										13,521
31 - 35			20,244	25,050		18,612	14,312	10,878					13,947
36 - 40	63,851		47,145			2,698	2,698	12,313	1,752				23,436
41 - 45			15,061	26,947		21,367	22,109	11,835					20,718
46 - 50	17,723		30,904			24,003	23,750	28,998					17,931
51 - 55	36,492					19,687	18,071	27,370	9,388				22,761
56 - 60			27,189			15,479	17,883	18,677	20,873	18,206			19,541
61 - 65						45,565	24,898	29,865	19,610	9,235			11,294
66 - 70						23,245	24,898	28,579	19,796	7,695			8,694
71 - 75						17,721	47,603	28,579	27,126	16,620			9,567
76 - 80						2,898	11,207	23,702	17,809	10,700			20,554
81 - 85								11,028	24,279	10,326			13,171
86 - 90						2,898			18,251	11,257			14,396
91 & Over									28,186	13,721			9,765
Average	21,893	2,745	18,081	15,885	25,104	15,805	20,211	20,996	20,563	16,721	10,262		15,912

EXHIBIT XI YEAR-TO-YEAR COMPARISON

	Fiscal 2010	Fiscal 2009	Fiscal 2008	Fiscal 2007
Number of Active Contributing Members	3,989	3,882	3,821	3,632
Number of Retirees & Survivors	1,749	1,688	1,631	1,555
DROP Participants	162	147	130	134
Number Terminated Due Deferred Benefits	59	55	55	54
Number of Terminated Due Refund	442	407	350	298
Active Lives Payroll (excludes DROP participants)	\$ 189,542,210	\$ 178,913,097	\$ 169,401,716	\$ 150,960,665
Retiree Benefits in Payment	\$ 56,056,554	\$ 53,031,851	\$ 48,416,581	\$ 43,972,738
Market Value of Assets	\$ 971,775,080	\$ 865,547,030	\$1,092,459,674	\$1,138,227,081
Ratio of Actuarial Value of Assets to Actuarial Accrued Liability	74.21%	76.13%	85.78%	86.02%
Actuarial Accrued Liability	\$1,536,258,543	\$1,410,559,615	\$1,317,161,382	\$1,192,323,327
Actuarial Value of Assets	\$1,140,054,175	\$1,073,797,423	\$1,129,809,421	\$1,025,656,019
UAL (Funding Excess)	\$ 396,204,368	\$ 336,762,192	\$ 187,351,961	\$ 166,667,308
P.V. of Future Employer Normal Contributions	\$ 335,984,027	\$ 292,585,945	\$ 277,566,364	\$ 247,631,617
P.V. of Future Employee Contributions	\$ 160,939,180	\$ 150,094,699	\$ 142,412,175	\$ 126,968,955
Present Value of Future Benefits	\$2,033,181,750	\$1,853,240,259	\$1,737,139,921	\$1,566,923,899

	Fiscal 2011	Fiscal 2010	Fiscal 2009	Fiscal 2008
Employee Contribution Rate	8.00%	8.00%	8.00%	8.00%
Required Tax Contributions as a Percentage of Projected Payroll	11.09%	11.56%	12.20%	13.16%
Actuarially Required Employer Contribution As a Percentage of Projected Payroll	24.97%	20.79%	13.89%	12.56%
Actual Employer Contribution Rate	21.50%	14.00%	12.50%	13.75%

Fiscal 2006	Fiscal 2005	Fiscal 2004	Fiscal 2003	Fiscal 2002	Fiscal 2001
3,534	3,532	3,431	3,360	3,322	3,257
1,477	1,434	1,379	1,315	1,278	1,230
111	103	114	120	145	156
52	45	42	36	30	25
249	189	181	143	133	118
\$ 140,175,740	\$ 134,313,739	\$ 128,144,746	\$ 121,012,780	\$ 114,422,827	\$ 107,667,223
\$ 39,649,619	\$ 36,510,489	\$ 34,076,169	\$ 31,542,638	\$ 29,610,698	\$ 27,934,986
\$ 963,805,222	\$ 848,499,924	\$ 752,274,788	\$ 664,570,797	\$ 620,860,572	\$ 641,929,807
83.66%	80.88%	71.84%	69.69%	72.33%	79.45%
\$1,089,280,137	\$1,012,901,863	\$1,010,016,864	\$ 944,688,430	\$ 888,963,640	\$ 834,986,462
\$ 911,329,622	\$ 819,240,156	\$ 725,615,787	\$ 658,376,086	\$ 642,947,201	\$ 663,377,250
\$ 177,950,515	\$ 193,661,707	\$ 284,401,078	\$ 286,312,344	\$ 246,016,439	\$ 171,609,212
\$ 230,234,335	\$ 226,307,495	\$ 192,151,099	\$ 182,925,316	\$ 166,298,912	\$ 159,311,329
\$ 118,092,552	\$ 114,703,708	\$ 94,736,659	\$ 90,145,420	\$ 82,398,183	\$ 79,024,405
\$1,437,607,024	\$1,353,913,066	\$1,296,904,623	\$1,217,759,166	\$1,137,660,735	\$1,073,322,196

Fiscal 2007	Fiscal 2006	Fiscal 2005	Fiscal 2004	Fiscal 2003	Fiscal 2002
8.00%	8.00%	8.00%	8.00%	8.00%	8.00%
12.83%	12.82%	13.11%	12.77%	12.17%	13.31%
14.01%	15.66%	22.51%	23.64%	20.78%	17.44%
15.50%	18.00%	24.00%	21.00%	18.25%	9.00%

SUMMARY OF PRINCIPAL PLAN PROVISIONS

The Firefighters' Retirement System was established as of January 1, 1980, for the purpose of providing retirement allowances and other benefits as described under R.S. 11:2256 - 11:2259. The following summary of plan provisions is for general informational purposes only and does not constitute a guarantee of benefits.

MEMBERSHIP - All full time firefighters or any person in a position as defined in the municipal fire and police civil service system who is employed by a fire department of any municipality, parish, or fire protection district of the State of Louisiana, except Orleans, and East Baton Rouge Parishes, who earns at least three hundred seventy-five dollars per month excluding state supplemental pay are required to be members of this retirement system. Employees of the system are eligible, at their option to become members of the system. Persons must be under the age of fifty to be eligible for system membership unless they become members through merger.

CONTRIBUTION RATES - The fund is financed by employee and employer contributions together with funds from dedicated insurance premium taxes as allocated by the Public Retirement Systems' Actuarial Committee in accordance with RS 22:1419A(3). Employee contributions are eight percent (8%) of earnable compensation. Net direct employer contributions are nine percent (9%) of earnable compensation unless the funds allocated from dedicated taxes are insufficient to provide the actuarially required contributions or the actuarially required contributions are less than 9%.

CONTRIBUTION REFUNDS - Upon withdrawal from service, members not entitled to a retirement allowance may receive a refund of accumulated contributions. Refunds are payable ninety days after the effective date of withdrawal from service.

RETIREMENT BENEFITS - Members with twelve years of creditable service may retire at age fifty-five; members with twenty years of service may retire at age fifty; members with twenty-five years of service may retire regardless of age, provided that they have been a member of this system for at least one year. 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 one hundred percent of his average final compensation.

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 designated beneficiary will continue to receive the same reduced benefit.

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

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

A member may also elect to receive an actuarially reduced benefit which provides for an automatic 2 ½% 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.

Initial Benefit Option – This option is available only to regular retirees who have not participated in the Deferred Retirement Option Plan. Under this option members may receive an initial benefit plus a reduced monthly retirement allowance which, when combined, equal the actuarially equivalent amount of the maximum retirement allowance. The initial benefit may not exceed an amount equal to thirty-six payments of the member's maximum retirement allowance. The initial benefit can be paid either as a lump-sum payment or placed in an account called an "initial benefit account" with interest credited thereto and monthly payments made from the account.

DISABILITY BENEFITS - Any member who has been officially certified as totally disabled solely as the result of injuries sustained in the performance of his official duties, or for any cause, provided the member has a least five years of creditable service and provided that the disability was incurred while the member was an active contributing member, is entitled to disability benefits. Any member under the age of fifty who becomes totally disabled will receive a disability benefit equal to 60% of final compensation for an injury received in the line of duty; or 75% of his accrued retirement benefit with a minimum of 25% of average salary for any injury received, even though not in the line of duty. Any member age fifty or older who becomes totally disabled from an injury sustained in the line of duty is entitled to a disability benefit equal to the greater of 60% of final compensation or his accrued retirement benefit. Any member age fifty or older who becomes totally disabled as a result of any injury, even though not in the line of duty, is entitled to a disability benefit equal to his accrued retirement benefit with a minimum of 25% of average salary. The surviving spouse of a member who was on disability retirement at the time of death receives a benefit of \$200 per month. When the member takes disability retirement, he may in addition take an actuarially reduced benefit in which case the member's surviving spouse receives 50% of the disability benefit being paid immediately prior to the death of the disability retiree. The retirement system may reduce benefits paid to a disability retiree who is also receiving workers compensation payments.

SURVIVOR BENEFITS - Benefits are payable to survivors of a deceased member who dies and is not eligible for retirement as follows. If any member is killed in the line of duty and leaves a surviving eligible spouse, the spouse is entitled to an annual benefit equal to two-thirds of the deceased member's final compensation. If any member dies from a cause not in the line of duty, the surviving spouse is entitled to an annual benefit equal to 3% of the deceased member's average final compensation multiplied by his total years of creditable service; however, in no event is the annual benefit less than 40% nor more than 60% of the deceased member's average final compensation. Children of the deceased member who are under the age of eighteen years are entitled to the greater of \$200 per month or 10% of average final compensation (not to exceed 100% of average final compensation) until reaching the age of eighteen or until the age of twenty-two if enrolled full-time in an institution of higher learning, unless the surviving child is physically handicapped or mentally retarded in which case the benefit is payable regardless of age. If a deceased member dies leaving no surviving spouse, but at least one minor child, each child is entitled to receive forty percent of the deceased's average final compensation, not to exceed an aggregate of sixty percent of average final compensation.

DEFERRED RETIREMENT OPTION PLAN - In lieu of terminating employment and accepting a service retirement allowance, any member of the system who has at least twenty years of creditable

service and who is eligible to receive a service retirement allowance may elect to participate in the deferred retirement option plan for up to thirty-six months and defer the receipt of benefits. Upon commencement of participation in the plan, membership in the system terminates and neither the employee nor employer contributions are payable. Compensation and creditable service will remain as they existed on the effective date of commencement of participation in the plan. The monthly retirement benefits that would have been payable, had the member elected to cease employment and receive a service retirement allowance, are paid into the deferred retirement option plan account. Upon termination of employment at the end of the specified period of participation, a participant in the program may receive, at his option, a lump sum payment from the account equal to the payments to the account, or a true annuity based upon his account, or he may elect any other method of payment if approved by the board of trustees. The monthly benefits that were being paid into the fund during the period of participation will begin to be paid to the retiree. If employment is not terminated at the end of the thirty-six months, payments into the account cease and the member resumes active contributing membership in the system. If the participant dies during the period of participation in the program, a lump sum payment equal to his account balance is paid to his named beneficiary or, if none, to his estate; in addition, normal survivor benefits are payable to survivors of retirees.

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 up to 3% of their current benefit, and all retired members and widows who are sixty-five years of age and older a 2% increase in their original benefit. In order for the board to grant either of these increases the system must meet certain criteria detailed in the statute 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.

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:	 Individual Entry Age Normal With Allocation of Cost Based on Earnings. Entry and Attained Ages Calculated on an Age Near Birthday Basis.
 VALUATION INTEREST RATE:	 7.5% (Net of investment expense)
 ACTUARIAL ASSET VALUES:	 All 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.
 ACTIVE MEMBER, ANNUITANT, AND BENEFICIARY MORTALITY:	 RP 2000 Combined Healthy Table set back 1 years for males and 1 year for females
 RETIREE COST OF LIVING INCREASES:	 The present value of future retirement benefits is based on benefits currently being paid by the system and includes previously granted cost of living increases. The present values do not include provisions for potential future increases not yet authorized by the Board of Trustees.

ANNUAL SALARY INCREASE RATE: Salary increases include 3.25% inflation and merit increases. The gross rates including inflation and merit increases are as follows:

Years of Service	Salary Growth Rate
1 – 2	15.000%
3 – 14	6.500%
15 & over	5.500%

RETIREMENT RATES: The table of these rates is included later in the report. These rates apply only to those individuals eligible to retire.

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

DROP ENTRY RATES: The table of these rates is included later in the report. These rates apply only to those individuals eligible to participate.

DROP PARTICIPATION PERIOD: All DROP participants are assumed to participate for 3 years and retire at the end of this participation period.

RETIREMENT RATES FOR ACTIVE FORMER DROP PARTICIPANTS: Retirement rates for active former DROP participants are as follows:

Ages	Retirement Rates
74 & Under	0.20
75 & Over	1.00

DISABILITY RATES: 55% of the disability rates used for the 21st valuation of the Railroad Retirement System for individuals with 10-19 years of service. The table of these rates is included later in the report. 20% of total disabilities are assumed to be in the line of duty.

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

<u>Service</u>	<u>Factor</u>	<u>Service</u>	<u>Factor</u>
<1	0.100	7	0.020
1	0.060	8	0.020
2	0.060	9	0.020
3	0.060	10	0.020
4	0.035	11	0.020
5	0.035	>11	0.010
6	0.035		

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

MARRIAGE STATISTICS: 80% of the members are assumed to be married; husbands are assumed to be three years older than wives.

SERVICE RELATED DEATH: 20% of Total Deaths

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

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

ACTUARIAL TABLES AND RATES

Age	Active Male Mortality	Active Female Mortality	Retired Male Mortality	Retired Female Mortality	Retirement Rates	DROP Entry Rates	Disability Rates
18	0.00030	0.00018	0.00030	0.00018	0.00000	0.00000	0.00083
19	0.00032	0.00019	0.00032	0.00019	0.00000	0.00000	0.00083
20	0.00033	0.00019	0.00033	0.00019	0.00000	0.00000	0.00083
21	0.00035	0.00019	0.00035	0.00019	0.00000	0.00000	0.00083
22	0.00036	0.00019	0.00036	0.00019	0.00000	0.00000	0.00083
23	0.00037	0.00019	0.00037	0.00019	0.00000	0.00000	0.00083
24	0.00037	0.00020	0.00037	0.00020	0.00000	0.00000	0.00083
25	0.00038	0.00020	0.00038	0.00020	0.00000	0.00000	0.00083
26	0.00038	0.00021	0.00038	0.00021	0.00000	0.00000	0.00083
27	0.00038	0.00021	0.00038	0.00021	0.00000	0.00000	0.00083
28	0.00038	0.00022	0.00038	0.00022	0.00000	0.00000	0.00083
29	0.00039	0.00024	0.00039	0.00024	0.00000	0.00000	0.00083
30	0.00041	0.00025	0.00041	0.00025	0.00000	0.00000	0.00083
31	0.00044	0.00026	0.00044	0.00026	0.00000	0.00000	0.00083
32	0.00050	0.00031	0.00050	0.00031	0.00000	0.00000	0.00083
33	0.00056	0.00035	0.00056	0.00035	0.00000	0.00000	0.00083
34	0.00063	0.00039	0.00063	0.00039	0.00000	0.00000	0.00083
35	0.00070	0.00044	0.00070	0.00044	0.00000	0.00000	0.00094
36	0.00077	0.00047	0.00077	0.00047	0.00000	0.00000	0.00105
37	0.00084	0.00051	0.00084	0.00051	0.00000	0.00000	0.00116
38	0.00090	0.00055	0.00090	0.00055	0.00000	0.00000	0.00132
39	0.00096	0.00060	0.00096	0.00060	0.00000	0.00000	0.00149
40	0.00102	0.00065	0.00102	0.00065	0.00000	0.00000	0.00171
41	0.00108	0.00071	0.00108	0.00071	0.08000	0.15000	0.00193
42	0.00114	0.00077	0.00114	0.00077	0.08000	0.15000	0.00215
43	0.00122	0.00085	0.00122	0.00085	0.08000	0.15000	0.00242
44	0.00130	0.00094	0.00130	0.00094	0.08000	0.15000	0.00275
45	0.00140	0.00103	0.00140	0.00103	0.08000	0.15000	0.00314
46	0.00151	0.00112	0.00151	0.00112	0.08000	0.15000	0.00358
47	0.00151	0.00112	0.00162	0.00122	0.08000	0.15000	0.00402
48	0.00173	0.00133	0.00173	0.00133	0.08000	0.15000	0.00457
49	0.00186	0.00143	0.00186	0.00143	0.08000	0.15000	0.00517
50	0.00200	0.00155	0.00200	0.00155	0.08000	0.15000	0.00589
51	0.00214	0.00168	0.00535	0.00234	0.04000	0.15000	0.00671
52	0.00229	0.00181	0.00553	0.00246	0.04000	0.25000	0.00759
53	0.00245	0.00197	0.00564	0.00265	0.04000	0.25000	0.00864
54	0.00262	0.00213	0.00572	0.00290	0.04000	0.25000	0.00979
55	0.00281	0.00232	0.00580	0.00319	0.14000	0.25000	0.01111
56	0.00303	0.00253	0.00590	0.00353	0.14000	0.25000	0.01265
57	0.00331	0.00276	0.00612	0.00393	0.14000	0.25000	0.01436
58	0.00363	0.00301	0.00644	0.00438	0.14000	0.11000	0.01628
59	0.00400	0.00329	0.00690	0.00492	0.14000	0.11000	0.01854
60	0.00441	0.00360	0.00749	0.00553	0.14000	0.11000	0.02684
61	0.00488	0.00393	0.00820	0.00620	0.14000	0.11000	0.02684
62	0.00538	0.00429	0.00900	0.00692	0.14000	0.38000	0.02684
63	0.00592	0.00466	0.00991	0.00769	0.14000	0.38000	0.02684
64	0.00647	0.00504	0.01095	0.00851	0.50000	0.38000	0.02684
65	0.00703	0.00543	0.01212	0.00939	0.50000	0.38000	0.02684

PRIOR YEAR'S ACTUARIAL ASSUMPTIONS

ACTIVE MEMBER, ANNUITANT, AND BENEFICIARY MORTALITY:	1994 Uninsured Pensioner Mortality Table Utilized for Pre- Retirement and Post-Retirement Mortality								
ANNUAL SALARY INCREASE RATE:	Salary increases include 3.25% inflation and merit increases. The gross rates including inflation and merit increases are as follows: <table><thead><tr><th>Years of Service</th><th>Salary Growth Rate</th></tr></thead><tbody><tr><td>1 – 2</td><td>14.700%</td></tr><tr><td>3 – 14</td><td>6.300%</td></tr><tr><td>15 & over</td><td>5.300%</td></tr></tbody></table>	Years of Service	Salary Growth Rate	1 – 2	14.700%	3 – 14	6.300%	15 & over	5.300%
Years of Service	Salary Growth Rate								
1 – 2	14.700%								
3 – 14	6.300%								
15 & over	5.300%								
RETIREMENT RATES FOR ACTIVE FORMER DROP PARTICIPANTS:	Retirement rates for active former DROP participants are as follows: <table><thead><tr><th>Ages</th><th>Retirement Rates</th></tr></thead><tbody><tr><td>74 & Under</td><td>0.25</td></tr><tr><td>75 & Over</td><td>1.00</td></tr></tbody></table>	Ages	Retirement Rates	74 & Under	0.25	75 & Over	1.00		
Ages	Retirement Rates								
74 & Under	0.25								
75 & Over	1.00								
DISABILITY RATES:	70% of the disability rates used for the 21 st valuation of the Railroad Retirement System for individuals with 10-19 years of service. The table of these rates is included later in the report. 20% of total disabilities are assumed to be in the line of duty.								

Note: All assumptions not listed above, or changed within the published table of rates, remained unchanged

PRIOR YEAR - ACTUARIAL TABLES AND RATES

Age	Male Mortality Rates	Female Mortality Rates	Retirement Rates	DROP Entry Rates	Disability Rates
18	0.00050	0.00029	0.00000	0.00000	0.00105
19	0.00052	0.00030	0.00000	0.00000	0.00105
20	0.00054	0.00031	0.00000	0.00000	0.00105
21	0.00057	0.00031	0.00000	0.00000	0.00105
22	0.00060	0.00031	0.00000	0.00000	0.00105
23	0.00063	0.00031	0.00000	0.00000	0.00105
24	0.00067	0.00031	0.00000	0.00000	0.00105
25	0.00071	0.00031	0.00000	0.00000	0.00105
26	0.00075	0.00032	0.00000	0.00000	0.00105
27	0.00078	0.00032	0.00000	0.00000	0.00105
28	0.00081	0.00034	0.00000	0.00000	0.00105
29	0.00084	0.00036	0.00000	0.00000	0.00105
30	0.00086	0.00038	0.00000	0.00000	0.00105
31	0.00088	0.00040	0.00000	0.00000	0.00105
32	0.00090	0.00043	0.00000	0.00000	0.00105
33	0.00091	0.00045	0.00000	0.00000	0.00105
34	0.00091	0.00048	0.00000	0.00000	0.00105
35	0.00091	0.00051	0.00000	0.00000	0.00119
36	0.00093	0.00055	0.00000	0.00000	0.00133
37	0.00096	0.00059	0.00000	0.00000	0.00147
38	0.00101	0.00064	0.00000	0.00000	0.00168
39	0.00107	0.00070	0.00000	0.00000	0.00189
40	0.00115	0.00076	0.00000	0.00000	0.00217
41	0.00124	0.00083	0.06500	0.14000	0.00245
42	0.00135	0.00089	0.06500	0.14000	0.00273
43	0.00145	0.00094	0.06500	0.14000	0.00308
44	0.00157	0.00099	0.06500	0.14000	0.00350
45	0.00170	0.00105	0.06500	0.14000	0.00399
46	0.00185	0.00111	0.06500	0.14000	0.00455
47	0.00204	0.00120	0.06500	0.14000	0.00511
48	0.00226	0.00130	0.06500	0.14000	0.00581
49	0.00250	0.00141	0.06500	0.14000	0.00658
50	0.00277	0.00154	0.06500	0.14000	0.00749
51	0.00309	0.00169	0.03500	0.14000	0.00854
52	0.00345	0.00186	0.03500	0.23000	0.00966
53	0.00385	0.00205	0.03500	0.23000	0.01099
54	0.00428	0.00224	0.03500	0.23000	0.01246
55	0.00476	0.00247	0.12000	0.23000	0.01414
56	0.00532	0.00276	0.12000	0.23000	0.01610
57	0.00600	0.00314	0.12000	0.23000	0.01827
58	0.00677	0.00361	0.12000	0.10000	0.02072
59	0.00762	0.00415	0.12000	0.10000	0.02359
60	0.00858	0.00477	0.12000	0.10000	0.03416
61	0.00966	0.00548	0.12000	0.10000	0.03416
62	0.01091	0.00627	0.12000	0.35000	0.03416
63	0.01233	0.00718	0.12000	0.35000	0.03416
64	0.01391	0.00819	0.50000	0.35000	0.03416
65	0.01563	0.00929	0.50000	0.35000	0.03416

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: