FIREFIGHTERS' RETIREMENT SYSTEM

ACTUARIAL VALUATION AS OF
JUNE 30, 2009

G. S. CURRAN & COMPANY, LTD.
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December 4, 2009

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, 2009. 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, 2010, to recommend the net direct employer contribution rate for fiscal 2011, 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.

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SUMMARY OF VALUATION RESULTS
FIREFIGHTERS' RETIREMENT SYSTEM

		June 30, 2009	June 30, 2008
Valuation Date:		June 30, 2009	June 30, 2008
Census Summary:	Active Contributing Members	3,882	3,821
	Retired Members and Beneficiaries	1,688	1,631
	DROP Participants	147	130
	Terminated Due a Deferred Benefit	55	55
	Terminated Due a Refund	407	350
Payroll (excludes DROP Participants):		$ 178,913,097	$ 169,401,716
Benefits in Payment:		$ 53,031,851	$ 48,416,581
Market Value of Assets:		$ 865,547,030	$ 1,092,459,674
Unfunded Actuarial Accrued Liability:		$ 336,762,192	$ 187,351,961
Actuarial Asset Value:		$ 1,073,797,423	$ 1,129,809,421
Actuarial Accrued Liability:		$ 1,410,559,615	$ 1,317,161,382
Ratio of Actuarial Value of Assets to Actuarial Accrued Liabilities:		76.13%	85.78%

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	FISCAL 2010	FISCAL 2009
Normal Cost as of July 1:	$ 42,186,920	$ 39,982,649
Amortization Cost (Credit) as of July 1:	$ 28,687,470	$ 16,443,367
Total Actuarially Required Contribution Inclusive of Estimated Administrative Costs:	$ 74,350,552	$ 59,424,024
Projected Employee Contributions (8%)	$ 14,739,917	$ 13,946,489
Expected Insurance Premium Taxes	$ 21,306,059	$ 21,265,547
Employer's Net Direct Actuarially Req'd Contributions	$ 38,304,576	$ 24,211,988
Actual Net Direct Employer Contribution Rate:	14.00%	12.50%
Actuarially Required Net Direct Employer Cont. Rate:	20.79%	13.89%

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Minimum Recommended Net Direct Employer Cont. Rate - Fiscal 2011: 21.50% Fiscal 2010: 14.00%

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: Change in the method of calculating the actuarial value of assets from five year phase in of earning above or below the assumed rate of return subject to limits of 90% to 110% of the market value of assets to the above described method.

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 3,882 active contributing members in the system of whom 1,735 have vested retirement benefits; in addition, there are 147 participants in the Deferred Retirement Option Plan (DROP); 1,688 former system members or their beneficiaries are receiving retirement benefits. An additional 462 members have contributions remaining on deposit with the system; of this number, 55 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 $865,547,030 as of June 30, 2009. Net investment income for fiscal 2009 measured on a market value basis amounted to a loss of $226,363,617. Contributions to the system for fiscal 2009 totaled $59,780,498; benefits and expenses amounted to $60,329,525.

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 actuarial assumptions utilized for the report are outlined on pages thirty-seven through forty. In the aggregate the assumptions represent our "best estimate" of future long-term experience for the fund. All calculations, recommendations, and conclusions are based on the assumptions specified. To the extent that prospective experience differs from that assumed, adjustments will be required to contribution levels. Such differences will be revealed in future actuarial valuations. All assumptions were the same as those used for the prior year.

The method used to calculate the Actuarial Value of Assets was changed. In the prior year, the actuarial value of assets was determined by smoothing all earnings above or below the assumed rate of return over a five year period with the resulting value constrained to a corridor of no less than 90% of the market value of assets and no more than 110% of the market value of assets. For this valuation, the corridor was expanded to a range of 85% to 115% of the market value of assets; the actuarial value of assets was then set equal to the average of the applicable corridor limit and the smoothed value if the smoothed value fell outside of the corridor. The change in the method of calculating the actuarial value of assets increased the actuarial value of assets for fiscal 2009 and thereby decreased the unfunded accrued liability by $121,695,690. This amounted to a reduction in the annual interest adjusted payment required on the unfunded accrued liability of $13,296,948, or 7.22% of payroll.

CHANGES IN PLAN PROVISIONS

The following changes in plan provisions were enacted during the 2009 Regular Session of the Louisiana Legislature:

Act 270 provides that a member of a state or statewide retirement system, upon applying for retirement, may irrevocably elect a retirement payment option whereby his benefit is actuarially reduced, but he receives a 2.5% compounded increase in his benefit annually on each retirement anniversary date. This increase is also available to DROP participants and applied to the monthly benefit allowance. The adjustment is only payable to retirees who are 55 and older. The adjustment is not based on any other COLAs the system may grant. Any additional COLA granted by the system will be based on the retiree’s monthly benefit as it exists when such COLA is granted. Spousal beneficiaries also receive the COLA upon the retiree’s death if the retiree chose to have his benefits paid to his spouse upon his death.

Act 422 provides that for each fiscal year beginning on or after July 1, 2009, payments for actuarial gains and losses must be calculated as level dollar amounts over a 20 year period from the fiscal year of occurrence. For actuarial gains and losses accruing on or after July 1, 2010, the amortization period will decrease by one year each fiscal year until attaining a 15 year amortization period. Such gains and losses will include any increases in actuarial liability resulting from the governing authority granting cost-of-living increases.

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.

	Market Value	Actuarial Value
2000	3.5%	5.5%
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% **

* 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 2009, the fund earned $15,400,489 of dividends, interest and other recurring income. In addition, the Fund had net realized and unrealized capital losses on investments of $238,233,057. Investment expenses amounted to $3,531,049. The geometric mean of the market value rates of return measured over the last ten years was 2.2%.

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 2009, the system experienced net actuarial investment earnings of $261,874,151 below the actuarial assumed earnings rate of 7.5% (without adjusting for the change in method used to determine the actuarial value of assets), when measured on the prior actuarial funding method. This deficiency in earnings produced an actuarial loss, which increased the interest-adjusted amortization payments on the system's UAL by $24,775,524 or 13.45% of payroll, in fiscal 2010.

PLAN DEMOGRAPHICS AND LIABILITY EXPERIENCE

A reconciliation of the census for the system is given in Exhibit X. The average active contributing member is 41 years old with 11.24 years of service credit and an annual salary of $46,088. The system's active contributing membership experienced an increase during fiscal 2009 of 61 members. The number of DROP participants increased by 17. Over the last five years active membership has increased by 451 members. A review of the active census by age indicates that over the last ten years the population in the thirty-one to 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 $3,063. The number of retirees and beneficiaries receiving benefits from the system increased by 57 during the fiscal year. Over the last five years, the number has increased by 309; during the same period, the annual benefits in payment increased by $18,955,682. The changes in the makeup of the population along with changes in their salary increased the interest adjusted normal cost over the last year by $2,285,437; the normal cost percentage decreased by 0.05% of payroll.

Plan liability experience for fiscal 2009 was favorable. Salary increase rates at most durations were near projections. DROP entries were slightly above projections. Withdrawals were slightly below projections. Both of these factors increased costs. Offsetting these increases, disabilities and retirements were slightly below projections and retiree deaths were above projections. Net plan liability gains totaled $3,921,422. These gains decreased the interest-adjusted amortization payments on the system's unfunded accrued liability by $371,000, or 0.20% of payroll, in fiscal 2010. In addition to the general liability losses, an additional loss of $15,784,880 was generated by a COLA granted in fiscal 2009. The interest-adjusted amortization payment for the COLA liability was $1,493,384 or 0.81% of projected payroll.

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 2009 contributions totaled $993,536 less than required; the interest-adjusted amortization payment on the contribution shortfall for fiscal 2010 is $93,997 or 0.05% of payroll. In addition, for fiscal 2010 the net effect of the change in payroll on amortization costs was to reduce such costs by 0.52% 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 2010 except for those items labeled fiscal 2009.

	Dollars	Percentage of Payroll
Normal Cost for Fiscal 2009	$ 41,454,893	23.78%
Cost of Demographic and Salary Changes	$ 2,285,437	(0.05%)
Normal Cost for Fiscal 2010	$ 43,740,330	23.73%
UAL Payments for Fiscal 2009	$ 17,048,845	9.78%
Change due to change in payroll	N/A	(0.52%)
Additional Amortization Expenses for Fiscal 2010:		
Asset Assumption Loss (Gain)	$ (13,296,948)	(7.22%)
Asset Experience Loss (Gain)	$ 24,775,524	13.45%
COLA Loss (Gain)	$ 1,493,384	0.81%
Contribution Loss (Gain)	$ 93,997	0.05%
Liability Loss (Gain)	$ (371,000)	(0.20%)
Net Amortization Expense (Credit) for Fiscal 2010	$ 12,694,957	6.89%
Estimated Administrative Cost for Fiscal 2010	$ 866,420	0.47%
Total Normal Cost & Amortization Payments	$ 74,350,552	40.35%

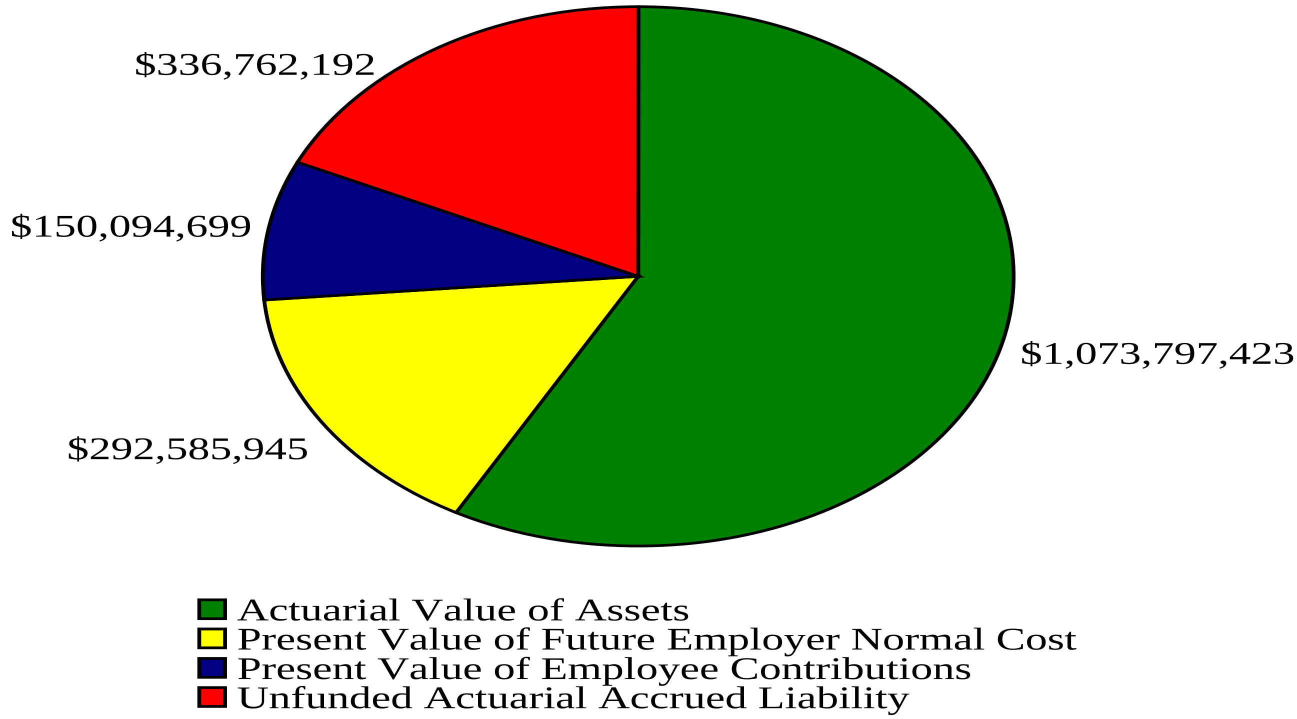
The derivation of the actuarially required contribution for the current fiscal year is given in Exhibit I. The normal cost for fiscal 2010 as of July 1, 2009 is $42,186,920. The amortization payments on the system's unfunded actuarial accrued liability as of July 1, 2009 total $28,687,470. The total 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 2010 is $74,350,552. We project that employee contributions will total $14,739,917 for the fiscal year. This leaves $59,610,635 to be funded from direct employer contributions and insurance premium taxes. We estimate insurance premium taxes of 21,306,059 will be paid to the system in fiscal 2010. Hence, the total actuarially required net direct employer contribution for fiscal 2010 amounts to $38,304,576 or 20.79% of payroll.

Since actual employer contributions for fiscal 2010 are 14.00% of payroll, we estimate the effect of the contribution shortfall will be to increase required contributions in fiscal 2011 by 0.63% 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 21.50% for fiscal 2011.

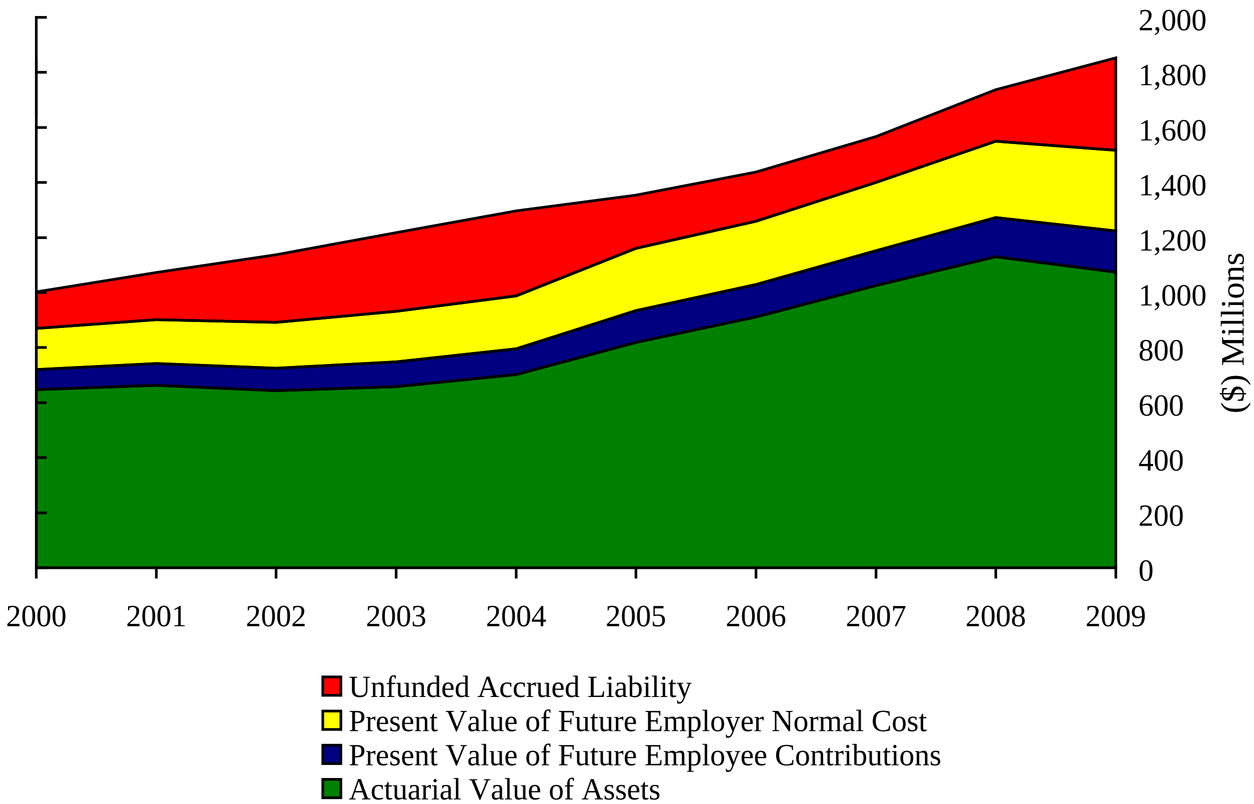
COST OF LIVING INCREASES

During fiscal 2009 the actual cost of living (as measured by the US Department of Labor CPI-U) decreased by 1.43%. 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 2009 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.

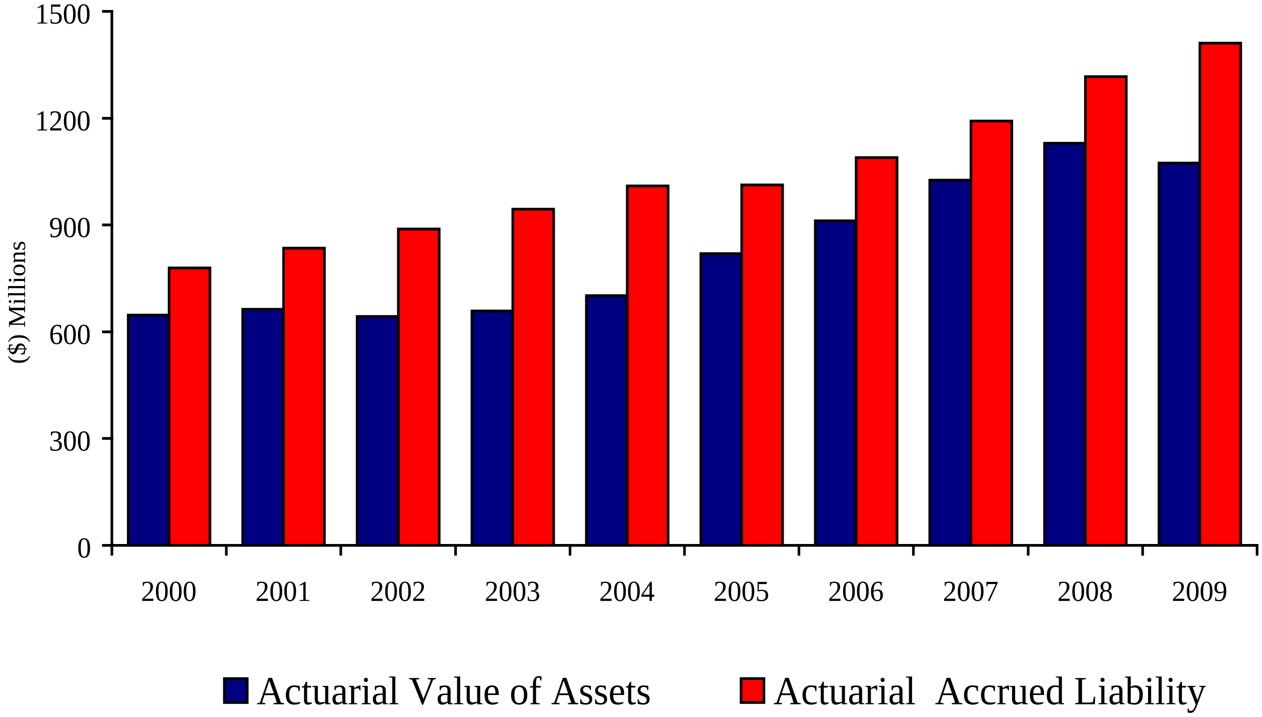
Components of Present Value of Future Benefits
June 30, 2009



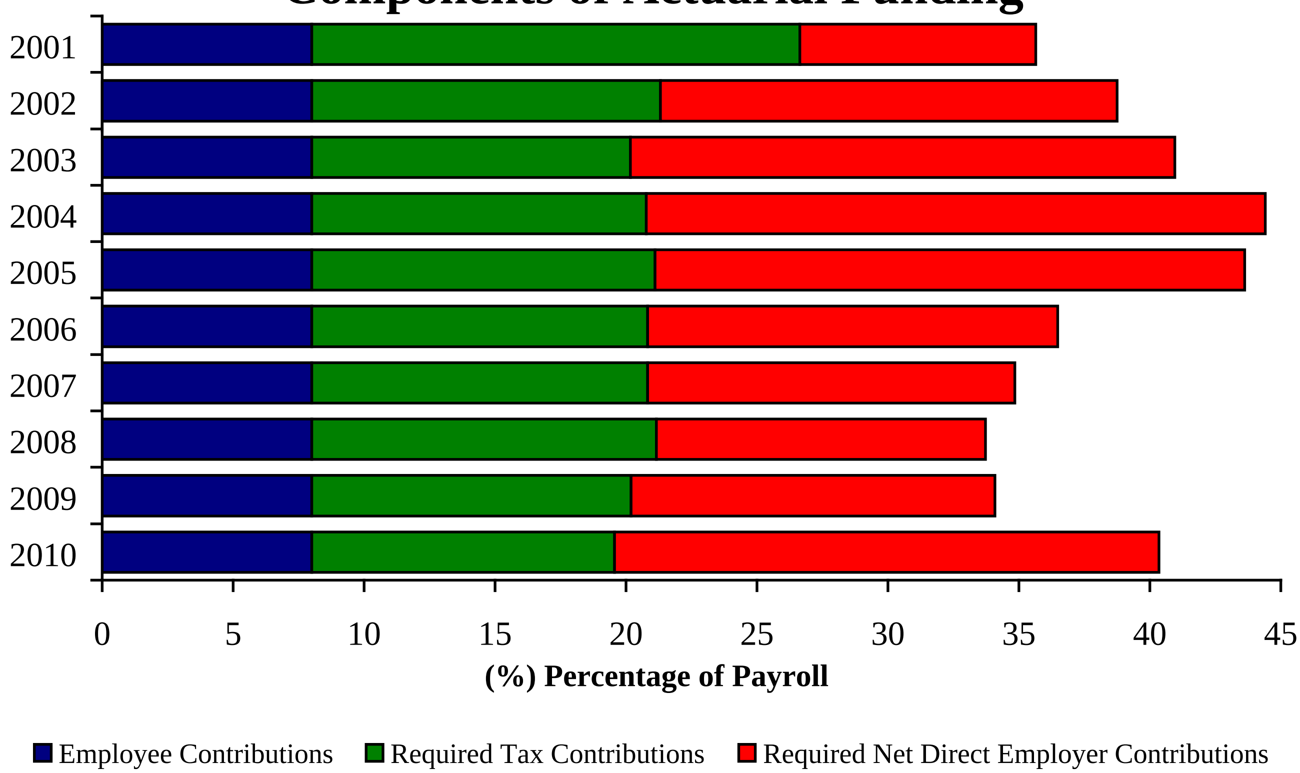
Components of Present Value of Future Benefits
Historical



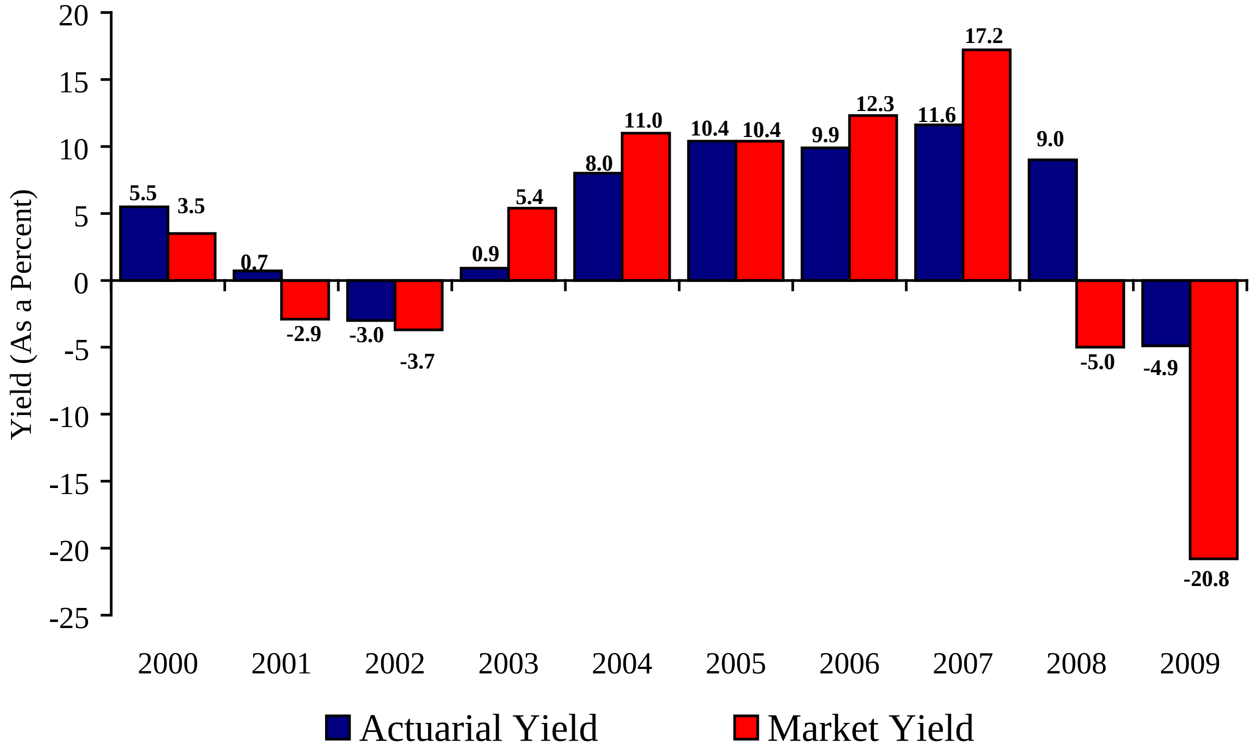
Actuarial Value of Assets vs. Actuarial Accrued Liability



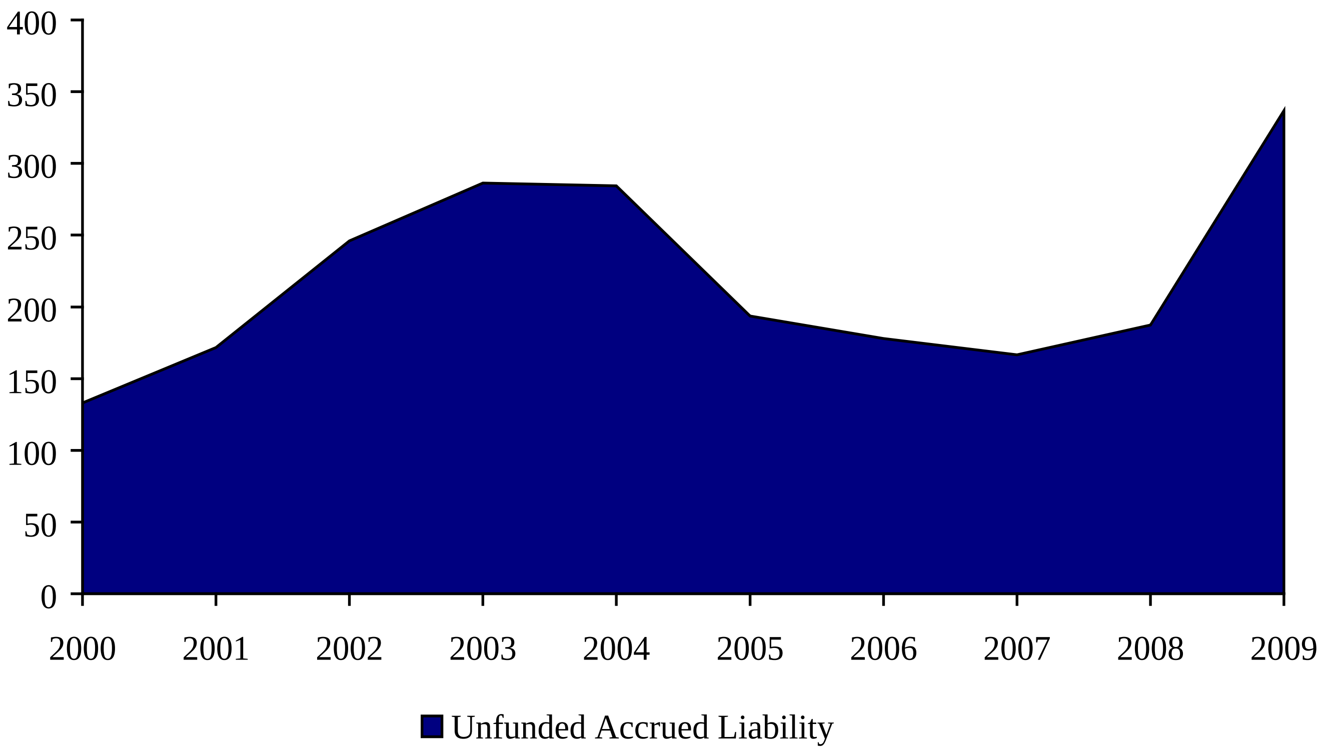
Components of Actuarial Funding



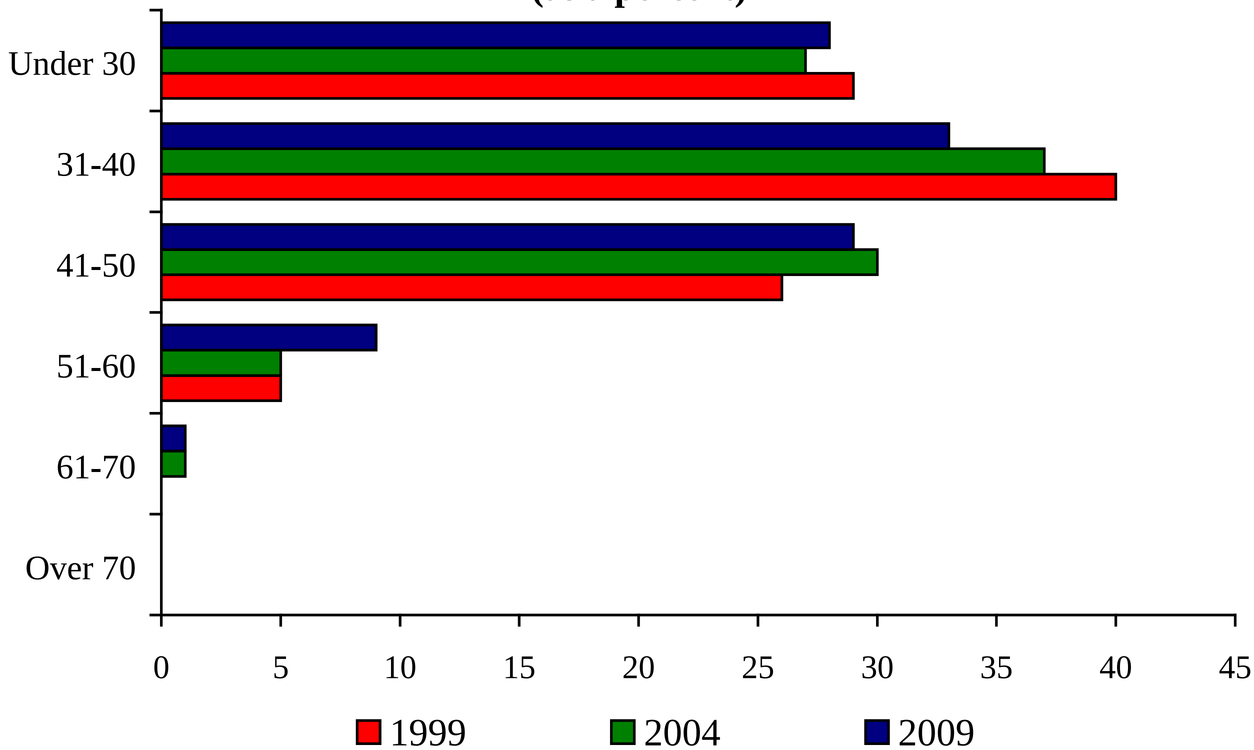
Historical Asset Yields



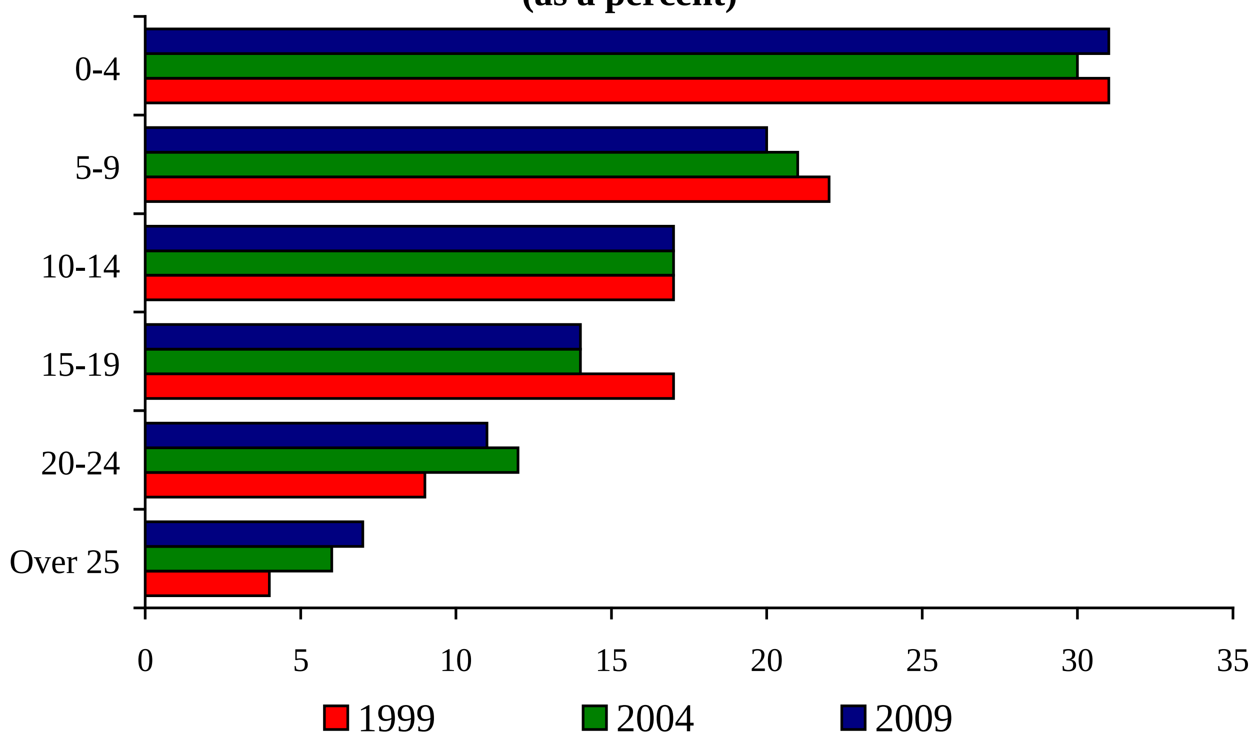
Unfunded Accrued Liability



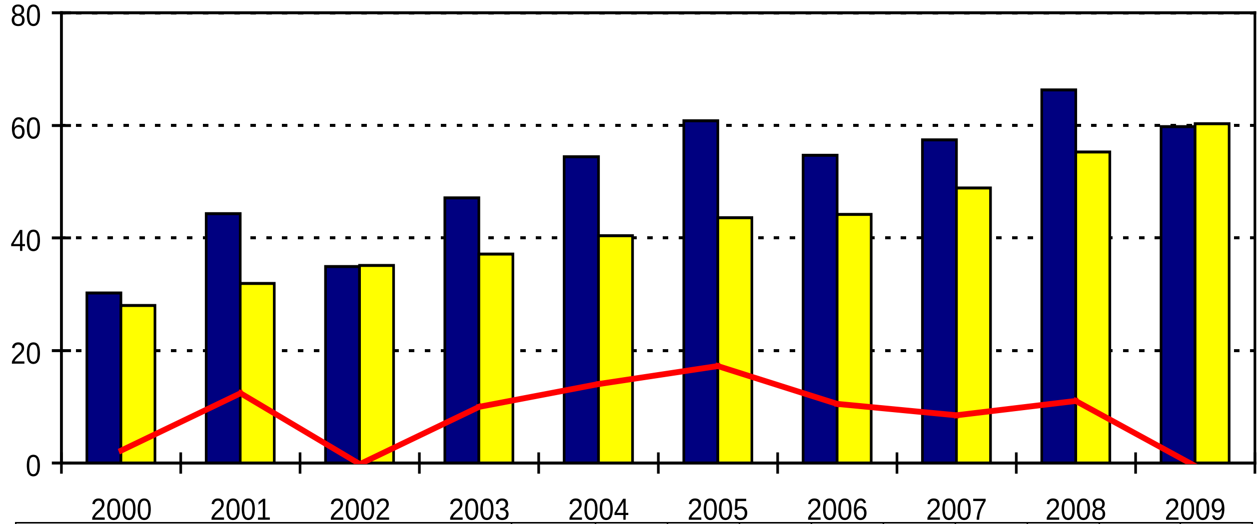
Active – Census By Age
(as a percent)



Active – Census By Service
(as a percent)



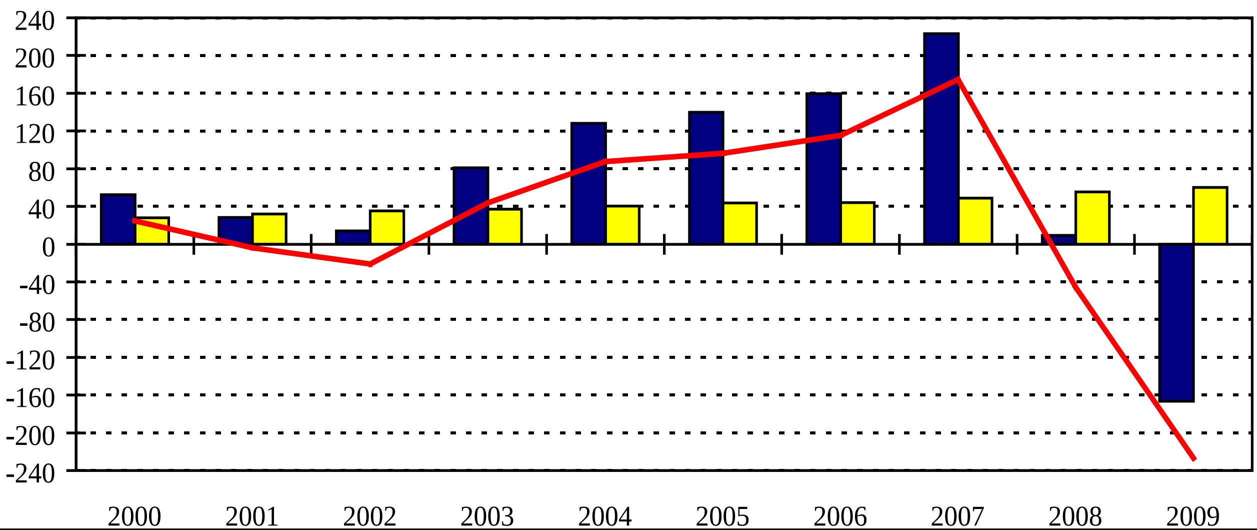
Net Non-Investment Income



	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Non-Investment Income ($Mil)	30.2	44.3	34.9	47.1	54.4	60.8	54.7	57.4	66.3	59.8
Benefits and Expenses ($Mil)	28.0	31.9	35.1	37.1	40.4	43.6	44.2	48.9	55.3	60.3
Net Non-Investment Income ($Mil)	2.2	12.4	-0.2	10.0	14.4	17.2	10.5	8.5	11.0	-0.5

Total Income vs. Expenses

(Based on Market Value of Assets)



	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Total Income ($Mil)	52.6	28.2	14.0	80.8	128.1	139.8	159.5	223.3	9.5	-166.6
Benefits and Expenses ($Mil)	28.0	31.9	35.1	37.1	40.4	43.6	44.2	48.9	55.3	60.3
Net Change in MVA ($Mil)	24.6	-3.7	-21.1	43.7	87.7	96.2	115.3	174.4	-45.8	-226.9

EXHIBITS

EXHIBIT I
ANALYSIS OF ACTUARIALLY REQUIRED CONTRIBUTIONS

1.	Normal Cost of Retirement Benefits	$ 36,700,769
2.	Normal Cost of Death Benefits	$ 1,679,831
3.	Normal Cost of Disability Benefits	$ 1,309,773
4.	Normal Cost of Deferred Retirement Benefits	$ 1,280,754
5.	Normal Cost of Contribution Refunds	$ 1,215,793
6.	TOTAL Normal Cost as of July 1, 2009 (1+2+3+4+5)	$ 42,186,920
7.	Amortization of Unfunded Accrued Liability of $336,762,192	$ 28,687,470
8.	TOTAL Normal Cost & Amortization Payments (6+7)	$ 70,874,390
9.	Normal Cost and Amortization Payments Interest Adjusted for Midyear Payment	$ 73,484,132
10.	Estimated Administrative Cost for Fiscal 2010	$ 866,420
11.	TOTAL Administrative and Interest Adjusted Actuarial Costs (9+10)	$ 74,350,552
12.	Projected Employee Contributions for Fiscal 2010	$ 14,739,917
13.	GROSS Employer Actuarially Required Contribution to be funded by direct employer contributions and Insurance Premium Taxes for Fiscal 2010 (11 - 12)	$ 59,610,635
14.	Expected Insurance Premium Taxes due in Fiscal 2010	$ 21,306,059
15.	Net Direct Actuarially Required Employer Contributions for Fiscal 2010 (13-14)	$ 38,304,576
16.	Projected Payroll For Contributing Members July 1, 2009 through June 30, 2010	$184,248,962
17.	Employer's Net Direct Actuarially Required Contribution as a % of Projected Payroll for Fiscal 2010 (15 ÷ 16)	20.79%
18.	Actual Net Direct Employer Contribution Rate for Fiscal 2010	14.00%
19.	Contribution Gain (Loss) as a Percentage of Payroll (18 – 17)	(6.79%)
20.	Adjustment to Following Year Payment for Contribution Gain (Loss)	(0.63%)
21.	Recommended Net Direct Employer Contribution Rate for Fiscal 2011 (17 – 20) (Rounded to nearest 0.25%)	21.50%

EXHIBIT II
PRESENT VALUE OF FUTURE BENEFITS

Present Value of Future Benefits for Active Members:

Retirement Benefits	$1,171,344,660	
Survivor Benefits	28,999,126	
Disability Benefits	19,166,115	
Vested Deferred Termination Benefits	23,661,417	
Contribution Refunds	8,374,138	
TOTAL Present Value of Future Benefits for Active Members		$ 1,251,545,456

Present Value of Future Benefits for Terminated Members:

Terminated Vested Members Due Benefits at Retirement	$ 7,165,328	
Terminated Members with Reciprocals Due Benefits at Retirement	0	
Terminated Members Due a Refund	1,308,965	
TOTAL Present Value of Future Benefits for Terminated Members		$ 8,474,293

Present Value of Future Benefits for Retirees:

Regular Retirees	$ 475,216,321	
Disability Retirees	23,940,710	
Survivors & Widows	39,210,897	
Retiree DROP Account Balance	52,689,582	
IBO Retirees' Account Balance	2,163,000	
TOTAL Present Value of Future Benefits for Retirees & Survivors		$ 593,220,510
TOTAL Present Value of Future Benefits		$ 1,853,240,259

EXHIBIT III – Schedule A
MARKET VALUE OF ASSETS

Current Assets:		
Cash & Cash Equivalents in Banks	$ 5,673,678	
Contributions Receivable from Members	1,186,266	
Contributions Receivable from Employers	1,861,981	
Accrued Interest on Investments	1,614,315	
Prepaid Expenses	121,227	
TOTAL CURRENT ASSETS		$ 10,457,467
Property, Plant and Equipment (Net of accumulated depreciation)		$ 771,333
Investments:		
Hedge Funds	$ 200,791,786	
Common Stock	146,458,721	
Foreign Stocks	131,812,282	
Corporate Bonds	95,575,069	
Private Real Estate	84,535,669	
Cash & Cash Equivalents	72,017,247	
Asset Backed Securities	38,362,485	
Private Equity	34,037,024	
Emerging Market Debt	28,136,789	
U. S. Government Securities	12,746,348	
Foreign Obligations	5,924,582	
TOTAL INVESTMENTS		$ 850,398,002
MERGER NOTES		$ 4,478,020
TOTAL ASSETS		$ 866,104,822
Current Liabilities:		
Accounts Payable	557,792	
TOTAL CURRENT LIABILITIES		$ 557,792
NET MARKET VALUE OF ASSETS		$ 865,547,030

EXHIBIT III – SCHEDULE B
ACTUARIAL VALUE OF ASSETS

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

Fiscal year 2009	$ (308,277,876)
Fiscal year 2008	(142,555,260)
Fiscal year 2007	93,344,557
Fiscal year 2006	40,744,514
Fiscal year 2005	21,949,605
Total for four years	$ (294,794,460)

Deferral of excess (shortfall) of invested income:

Fiscal year 2009 (80%)	$ (246,622,301)
Fiscal year 2008 (60%)	(85,533,156)
Fiscal year 2007 (40%)	37,337,823
Fiscal year 2006 (20%)	8,148,903
Fiscal year 2005 (0%)	0
Total deferred for year	$ (286,668,731)

Market value of plan net assets, end of year	$ 865,547,030
Preliminary actuarial value of plan assets, end of year	$ 1,152,215,761

Actuarial value of assets corridor

85% of market value, end of year	$ 735,714,976
115% of market value, end of year	$ 995,379,084
Final actuarial value of plan net assets, end of year	$ 1,073,797,423

EXHIBIT IV
PRESENT VALUE OF FUTURE CONTRIBUTIONS

Employee Contributions to the Annuity Savings Fund		$ 150,094,699
Employer Normal Contributions to the Pension Accumulation Fund		292,585,945
Employer Payments on the Unfunded Actuarial Accrued Liability		336,762,192
TOTAL PRESENT VALUE OF FUTURE CONTRIBUTIONS		$ 779,442,836

EXHIBIT V - SCHEDULE A
ACTUARIAL ACCRUED LIABILITIES

LIABILITY FOR ACTIVE MEMBERS		
Accrued Liability for Retirement Benefits	$ 785,684,418	
Accrued Liability for Survivor Benefits	11,510,309	
Accrued Liability for Disability Benefits	5,552,843	
Accrued Liability for Vested Termination Benefits	10,317,129	
Accrued Liability for Refunds of Contributions	(4,199,887)	
TOTAL Actuarial Accrued Liability for Active Members		$ 808,864,812
LIABILITY FOR TERMINATED MEMBERS		$ 8,474,293
LIABILITY FOR RETIREES AND SURVIVORS		$ 593,220,510
TOTAL ACTUARIAL ACCRUED LIABILITY		$1,410,559,615
ACTUARIAL VALUE OF ASSETS		$1,073,797,423
UNFUNDED ACTUARIAL ACCRUED LIABILITY		$ 336,762,192

EXHIBIT V - SCHEDULE B
CHANGE IN UNFUNDED ACTUARIAL ACCRUED LIABILITY

Prior Year Unfunded Accrued Liability		$ 187,351,961
Interest on Unfunded Accrued Liability	$ 14,051,397	
Normal Cost for Prior Year	39,982,649	
Interest on the Normal Cost	2,998,699	
Normal Cost for Merged Systems with Accrued Interest	0	
Administrative Expenses	868,688	
Interest on Expenses	31,987	
TOTAL Increases to Unfunded Accrued Liability		$ 57,933,420
Required Contributions for Prior Year with interest	$ 61,558,644	
Contribution Excess (Shortfall) with accrued interest	(993,536)	
Cost of Living Adjustment Gains (Losses)	(15,784,880)	
Merger Gains (Losses)	0	
Investment Gains (Losses)	(261,874,151)	
Liability Experience Gains (Losses)	3,921,422	
Asset Assumption Gains (Losses)	121,695,690	
TOTAL Decreases to Unfunded Accrued Liability		$ (91,476,811)
CURRENT YEAR UNFUNDED ACCRUED LIABILITY		$ 336,762,192

EXHIBIT V - SCHEDULE C
AMORTIZATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITY
JUNE 30, 2009

	FISCAL YEAR	DESCRIPTION	AMORT. PERIOD	INITIAL BALANCE	YEARS REMAINING	REMAINING BALANCE	AMORT. PAYMENTS
	1993	Merger Loss (Gain)	30	13,485,002	14	9,560,818	1,047,664
	1995	Merger Loss (Gain)	30	41,779,611	16	31,984,454	3,254,713
	1996	Merger Loss (Gain)	30	1,772,399	17	1,402,075	138,251
	1997	Merger Loss (Gain)	30	890,324	18	725,512	69,533
	1998	Merger Loss (Gain)	30	1,602,435	19	1,341,457	125,299
	1999	Merger Loss (Gain)	30	14,104,876	20	12,100,829	1,104,183
	2001	Merger Loss (Gain)	30	3,117,590	22	2,791,654	244,593
*	2002	Cumulative Non-Merger Bases	27	175,578,584	20	155,939,332	14,229,238
	2003	Contribution Loss (Gain)	15	2,678,010	9	1,929,097	281,320
	2003	Assumption Loss (Gain)	15	(3,248,077)	9	(2,339,744)	(341,205)
	2003	Experience Loss (Gain)	15	44,477,780	9	32,039,448	4,672,310
	2004	Contribution Loss (Gain)	15	2,129,874	10	1,653,621	224,102
	2004	Experience Loss (Gain)	15	1,570,785	10	1,219,548	165,275
	2005	Experience Loss (Gain)	15	(24,922,321)	11	(20,654,229)	(2,626,401)
	2005	Assumption Loss (Gain)	15	(57,207,831)	11	(47,410,657)	(6,028,760)
	2005	Contribution Loss (Gain)	15	(2,457,193)	11	(2,036,384)	(258,948)
	2006	Experience Loss (Gain)	15	(30,043,731)	12	(26,327,571)	(3,166,113)
	2006	Benefits/COLA Loss (Gain)	15	12,495,729	12	10,950,111	1,316,843
	2006	Assumption Loss (Gain)	15	7,880,410	12	6,905,669	830,465
	2006	Contribution Loss (Gain)	15	(3,044,474)	12	(2,667,898)	(320,837)
	2007	Contribution Loss (Gain)	15	(3,684,696)	13	(3,391,962)	(388,306)
	2007	Merger Loss (Gain)	30	1,065,812	28	1,044,423	83,948
	2007	Experience Loss (Gain)	15	(19,348,466)	13	(17,811,307)	(2,039,009)
	2007	Benefits/COLA Loss (Gain)	15	13,421,495	13	12,355,211	1,414,404
	2008	Assumption Loss (Gain)	15	(138,425)	14	(133,125)	(14,588)
	2008	Contribution Loss (Gain)	15	(4,399,499)	14	(4,231,054)	(463,634)
	2008	Merger Loss (Gain)	30	1,556,324	29	1,541,272	122,582
	2008	Experience Loss (Gain)	15	11,244,458	14	10,813,939	1,184,980
	2008	Benefits/COLA Loss (Gain)	15	15,006,752	14	14,432,185	1,581,464
	2009	Asset Assumption Loss (Gain)	15	(121,695,690)	15	(121,695,690)	(12,824,715)
	2009	Asset Experience Loss (Gain)	20	261,874,151	20	261,874,151	23,895,637
	2009	COLA Loss (Gain)	20	15,784,880	20	15,784,880	1,440,347
	2009	Experience Loss (Gain)	20	(3,921,422)	20	(3,921,422)	(357,824)
	2009	Contribution Loss (Gain)	20	993,536	20	993,536	90,659
		TOTAL Unfunded Actuarial Accrued Liability				$ 336,762,192	
		TOTAL Fiscal 2009 Amortization Payments					$ 28,687,470

* 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, 2008)		$ 1,129,809,421
Income:		
Regular Member Contributions	$ 14,508,015	
Regular Employer Contributions	22,640,615	
Insurance Premium Taxes	21,265,547	
Irregular Contributions	1,366,321	
Contributions from Mergers	0	
TOTAL CONTRIBUTIONS		$ 59,780,498
Interest and Dividends	$ 14,852,395	
Rent Income	28,391	
Interest from Merger Notes	344,300	
Net Appreciation of Fair Value of Investments	(238,233,057)	
Securities Lending	175,403	
Investment Expenses	(3,531,049)	
SUBTOTAL OF ALL MARKET INVESTMENT INCOME		$ (226,363,617)
TOTAL Income		$ (166,583,119)
Expenses:		
Retirement and Survivor Benefits	$ 46,908,854	
DROP Disbursements	7,536,502	
Refunds of Contributions	951,693	
Disability Benefits	4,063,788	
Administrative Expenses	868,687	
Funds Transferred to Another System	0	
TOTAL Expenses		$ 60,329,524
Net Market Income for Fiscal 2009 (Income - Expenses)		$ (226,912,643)
Adjustment for Actuarial Smoothing		$ 170,900,645
Actuarial Value of Assets (June 30, 2009)		$ 1,073,797,423

EXHIBIT VII
FUND BALANCE

Present Assets of the System Creditable to:

Annuity Savings Fund	$	118,231,820
Annuity Reserve Fund		538,367,928
Pension Accumulation Fund		138,565,021
Deferred Retirement Option Plan Account		68,219,261
Initial Benefit Option Plan Account		2,163,000
NET MARKET VALUE OF ASSETS	$	865,547,030
ADJUSTMENT FOR ACTUARIAL SMOOTHING		208,250,393
NET ACTUARIAL VALUE OF ASSETS	$	1,073,797,423

EXHIBIT VIII
PENSION BENEFIT OBLIGATION

Present Value of Credited Projected Payable to Current Employees	$	767,870,762
Present Value of Benefits Payable to Terminated Employees		8,474,293
Present Value of Benefits Payable to Current Retirees and Beneficiaries		593,220,510
TOTAL PENSION BENEFIT OBLIGATION	$	1,369,565,565
NET ACTUARIAL VALUE OF ASSETS	$	1,073,797,423
Ratio of Net Actuarial Value of Assets to Pension Benefit Obligation		78.40%

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:		0.50%
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%	
TOTAL Adjustments		(21.13%)
Amortization of Adjustments in Funded Ratio over 30 years:		
Changes for Fiscal 1987	0.53%	
Changes for Fiscal 1988	2.27%	
Changes for Fiscal 1989	2.53%	
Changes for Fiscal 1992	(0.76%)	
Changes for Fiscal 1993	0.67%	
Changes for Fiscal 1994	0.02%	
Changes for Fiscal 1995	0.81%	
Changes for Fiscal 1996	7.06%	
Changes for Fiscal 1997	1.46%	
Changes for Fiscal 1998	0.10%	
Changes for Fiscal 1999	0.32%	
Changes for Fiscal 2000	0.89%	
Changes for Fiscal 2001	0.06%	
Changes for Fiscal 2003	(0.09%)	
Changes for Fiscal 2005	(0.55%)	
Changes for Fiscal 2006	0.07%	
Changes for Fiscal 2007	0.01%	
Changes for Fiscal 2008	0.00%	
Changes for Fiscal 2009	0.00%	
TOTAL Amortization of Adjustments		15.40%
Target Ratio for Current Fiscal Year		94.12%
Actuarial Value of Assets Divided by PBO as of Fiscal 2009		78.40%

EXHIBIT X
CENSUS DATA

	Active	Terminated with Funds on Deposit	DROP	Retired	Total
Number of members as of June 30, 2008	3,821	405	130	1,631	5,987
Additions to Census					
Initial membership	260	31			291
Death of another member				17	17
Omitted in error last year				6	6
Adjustment for multiple records				3	3
Change in Status during Year					
Actives terminating service	(88)	88			
Actives who retired	(36)			36	
Actives entering DROP	(63)		63		
Term. members rehired	17	(17)			
Term. members who retire		(7)		7	
Retirees who are rehired					
Refunded who are rehired	14				14
DROP participants retiring			(34)	34	
DROP returned to work	11		(11)		
Omitted in error last year					
Eliminated from Census					
Refund of contributions	(54)	(38)			(92)
Deaths			(1)	(46)	(47)
Included in error last year					
Suspended Benefits					
Number of members as of June 30, 2009	3,882	462	147	1,688	6,179

ACTIVES CENSUS BY AGE:

Age	Number Male	Number Female	Total Number	Average Salary	Total Salary
16 - 20	44	0	44	25,347	1,115,266
21 - 25	413	18	431	31,272	13,478,345
26 - 30	584	41	625	36,224	22,640,127
31 - 35	588	31	619	41,048	25,408,750
36 - 40	634	36	670	46,888	31,414,798
41 - 45	577	38	615	52,204	32,105,414
46 - 50	475	40	515	57,735	29,733,532
51 - 55	244	24	268	63,179	16,932,029
56 - 60	69	3	72	65,052	4,683,764
61 - 65	18	2	20	60,311	1,206,210
66 - 70	2	0	2	61,207	122,413
71 - 75	1	0	1	72,449	72,449
TOTAL	3,649	233	3,882	46,088	178,913,097

THE ACTIVE CENSUS INCLUDES 1,735 ACTIVES WITH VESTED BENEFITS, INCLUDING 49 ACTIVE FORMER DROP PARTICIPANTS. THE 147 CURRENT DROP PARTICIPANTS ARE EXCLUDED.

DROP PARTICIPANTS:

Age	Number Male	Number Female	Total Number	Average Benefit	Total Benefit
46 - 50	33	1	34	47,585	1,617,895
51 - 55	80	1	81	47,945	3,883,565
56 - 60	26	1	27	48,171	1,300,605
61 - 65	4	0	4	53,486	213,944
66 - 70	1	0	1	33,262	33,262
TOTAL	144	3	147	47,954	7,049,271

TERMINATED MEMBERS DUE A DEFERRED RETIREMENT BENEFIT:

Age	Number Male	Number Female	Total Number	Average Benefit	Total Benefit
31 - 35	2	0	2	18,503	37,005
36 - 40	9	0	9	19,557	176,009
41 - 45	21	1	22	22,782	501,197
46 - 50	17	1	18	22,813	410,640
51 - 55	3	1	4	20,991	83,965
TOTAL	52	3	55	21,978	1,208,816

TERMINATED MEMBERS DUE A REFUND OF CONTRIBUTIONS:

Contributions Ranging From		To	Number	Total Contributions
0	-	99	45	2,146
100	-	499	110	29,600
500	-	999	51	35,805
1000	-	1999	62	88,181
2000	-	4999	68	202,435
5000	-	9999	34	240,407
10000	-	19999	24	373,435
20000	-	99999	13	336,956
		TOTAL	407	1,308,965

REGULAR RETIREES:

Age	Number Male	Number Female	Total Number	Average Benefit	Total Benefit
41 - 45	6	0	6	34,282	205,689
46 - 50	60	1	61	44,508	2,715,014
51 - 55	154	7	161	41,188	6,631,242
56 - 60	275	8	283	40,449	11,447,196
61 - 65	279	5	284	37,065	10,526,550
66 - 70	184	2	186	36,435	6,776,861
71 - 75	120	0	120	31,056	3,726,777
76 - 80	75	0	75	26,539	1,990,454
81 - 85	57	0	57	25,147	1,433,359
86 - 90	13	0	13	27,590	358,665
91 - 99	2	0	2	26,854	53,707
TOTAL	1,225	23	1,248	36,751	45,865,514

DISABILITY RETIREES:

Age	Number Male	Number Female	Total Number	Average Benefit	Total Benefit
31 - 35	1	0	1	14,719	14,719
36 - 40	5	0	5	14,195	70,974
41 - 45	14	3	17	21,078	358,329
46 - 50	24	2	26	21,809	567,032
51 - 55	20	1	21	18,519	388,903
56 - 60	27	2	29	18,938	549,206
61 - 65	11	0	11	18,928	208,206
66 - 70	8	0	8	13,895	111,159
71 - 75	9	0	9	12,939	116,449
76 - 80	6	0	6	16,866	101,195
81 - 85	2	0	2	9,342	18,684
TOTAL	127	8	135	18,554	2,504,856

SURVIVORS:

Age	Number Male	Number Female	Total Number	Average Benefit	Total Benefit
0 - 25	11	11	22	5,216	114,752
26 - 30	0	1	1	13,521	13,521
31 - 35	1	1	2	13,947	27,893
36 - 40	0	8	8	17,467	139,735
41 - 45	0	4	4	20,350	81,399
46 - 50	0	6	6	19,464	116,786
51 - 55	1	11	12	21,919	263,030
56 - 60	2	25	27	20,326	548,810
61 - 65	1	18	19	15,554	295,520
66 - 70	0	25	25	19,693	492,324
71 - 75	0	42	42	18,756	787,765
76 - 80	0	61	61	13,944	850,586
81 - 85	1	44	45	12,338	555,218
86 - 90	0	20	20	14,164	283,283
91 - 99	0	11	11	8,260	90,859
TOTAL	17	288	305	15,284	4,661,481

ACTIVE MEMBERS:

Attained Ages	Completed Years of Service: 0	1	2	3	4	5- 9	10-14	15-19	20-24	25-29	30&Over	Total
0 - 20	30	14										44
21 - 25	99	150	101	49	22	10						431
26 - 30	74	85	81	62	68	238	17					625
31 - 35	34	40	43	28	39	245	184	6				619
36 - 40	15	22	27	17	25	143	246	173	2			670
41 - 45	10	17	6	6	11	68	139	207	138	13		615
46 - 50	6	7	4	8	3	36	48	109	174	114	6	515
51 - 55	1		2	1	3	25	23	43	75	60	35	268
56 - 60						2	9	10	9	17	25	72
61 - 65							4	6		3	7	20
66 - 70									1		1	2
71 & Over											1	1
Totals	269	335	264	171	171	767	670	554	399	207	75	3882

AVERAGE ANNUAL SALARY OF ACTIVE MEMBERS:

Attained Ages	Completed Years of Service: 0	1	2	3	4	5- 9	10-14	15-19	20-24	25-29	30&Over	Average Salary
0 - 20	23,792	28,679										25,347
21 - 25	25,369	30,118	33,957	36,427	37,888	40,091						31,272
26 - 30	26,502	31,235	35,616	36,295	38,354	39,940	45,580					36,224
31 - 35	27,224	32,730	35,931	32,364	37,400	41,513	47,634	54,795				41,048
36 - 40	25,513	32,101	36,206	38,260	36,309	42,434	49,149	55,023	56,279			46,888
41 - 45	31,522	34,273	41,600	31,944	41,872	42,014	51,529	54,053	59,753	65,499		52,204
46 - 50	33,132	31,541	22,160	45,706	34,586	44,186	50,352	55,459	60,344	67,864	77,824	57,735
51 - 55	20,792		71,537	46,078	43,344	52,573	49,863	57,203	62,093	73,725	74,020	63,179
56 - 60						42,027	45,010	55,526	59,587	67,934	77,928	65,052
61 - 65							44,577	51,252		53,137	80,140	60,311
66 - 70									53,685		68,728	61,207
71 & Over											72,449	72,449
Average	26,132	31,024	35,297	36,229	38,025	41,710	49,164	54,881	60,414	69,207	76,107	46,088

TERMINATED MEMBERS DUE A DEFERRED RETIREMENT BENEFIT:

Attained Ages	Years Until Retirement Eligibility: 0	1	2	3	4	5- 9	10-14	15-19	20-24	25-29	30&Over	Total
0 - 30												0
31 - 35									2			2
36 - 40								9				9
41 - 45						1	21					22
46 - 50	2		1	2		13						18
51 - 55		1	2		1							4
56 & Over												0
Totals	2	1	3	2	1	14	21	9	2	0	0	55

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

Attained Ages	Years Until Retirement Eligibility: 0	1	2	3	4	5- 9	10-14	15-19	20-24	25-29	30&Over	Average Benefit
0 - 30												0
31 - 35									18,503			18,503
36 - 40								19,557				19,557
41 - 45						37,991	22,057					22,782
46 - 50	36,544		27,093	32,750		18,843						22,813
51 - 55		23,337	20,700		19,228							20,991
56 & Over												0
Average	36,544	23,337	22,831	32,750	19,228	20,211	22,057	19,557	18,503	0	0	21,978

SERVICE RETIREES:

Attained Ages	Completed Years Since Retirement											
	0	1	2	3	4	5- 9	10-14	15-19	20-24	25-29	30&Over	Total
0 - 50	22	19	15	4	7							67
51 - 55	27	24	39	22	17	30	2					161
56 - 60	14	21	23	20	29	137	26	13				283
61 - 65	7	7	4	11	9	111	102	16	15	2		284
66 - 70		4	1	3	3	30	75	38	17	14	1	186
71 - 75			1		1	5	19	31	29	22	12	120
76 - 80						1	2	7	17	20	28	75
81 - 85						2		2	9	15	29	57
86 - 90							1	2	1	4	5	13
91 & Over										2		2
Totals	70	75	83	60	66	316	227	109	88	79	75	1248

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	46,865	44,174	39,182	45,095	40,324							43,593
51 - 55	41,853	41,810	39,049	40,160	43,385	43,103	30,345					41,188
56 - 60	49,238	48,052	41,328	44,661	42,025	39,593	36,151	24,784				40,449
61 - 65	42,734	30,632	41,906	36,985	43,351	40,015	36,899	26,309	25,354	20,913		37,065
66 - 70		40,393	44,783	28,343	56,923	37,633	42,439	32,914	24,252	21,581	37,673	36,435
71 - 75			23,944		38,273	23,605	41,516	37,929	30,375	22,934	16,375	31,056
76 - 80						5,996	39,396	34,676	40,003	27,360	15,560	26,539
81 - 85						9,562		48,178	40,221	29,517	17,694	25,147
86 - 90							26,346	43,120	28,285	32,581	17,494	27,590
91 & Over										26,853		26,853
Average	44,993	43,038	39,729	40,816	42,996	39,339	38,948	32,981	31,180	25,601	16,939	36,751

DISABILITY RETIREES:

Attained Ages	Completed Years Since Retirement: 0	1	2	3	4	5- 9	10-14	15-19	20-24	25-29	30&Over	Total
0 - 30												0
31 - 35						1						1
36 - 40	1		1		1	2						5
41 - 45	1	2		3	2	6	3					17
46 - 50		3	2	5	4	7	2	2	1			26
51 - 55			1	1		6	4	6	3			21
56 - 60						4	5	11	5	3	1	29
61 - 65							2	1	4	2	2	11
66 - 70						2		1	2		3	8
71 - 75						2			1	1	5	9
76 - 80							1		1	1	3	6
81 - 85						1					1	2
86 & Over												0
Totals	2	5	4	9	7	31	17	21	17	7	15	135

AVERAGE ANNUAL BENEFITS PAYABLE TO DISABILITY RETIREES:

Attained Ages	Completed Years Since Retirement: 0	1	2	3	4	5- 9	10-14	15-19	20-24	25-29	30&Over	Average Benefit
0 - 30												0
31 - 35						14,719						14,719
36 - 40	8,613		20,706		12,204	14,726						14,195
41 - 45	22,175	23,564		24,997	28,479	18,174	16,011					21,078
46 - 50		32,158	18,989	24,480	26,379	21,514	10,693	10,259	12,161			21,809
51 - 55			22,200	20,746		19,694	19,534	15,480	18,927			18,519
56 - 60						24,013	21,426	17,827	20,046	14,357	6,630	18,938
61 - 65							18,507	31,582	21,228	20,059	7,289	18,928
66 - 70						11,761		17,378	21,975		8,770	13,895
71 - 75						9,192			13,394	20,887	12,757	12,939
76 - 80							33,466		21,638	17,510	9,527	16,866
81 - 85						5,154					13,530	9,342
86 & Over												0
Average	15,394	28,721	20,221	24,237	24,954	18,229	19,127	17,069	19,592	17,370	10,227	18,554

SURVIVING BENEFICIARIES OF FORMER MEMBERS:

Attained Ages	Completed Years Since Retirement											
	0	1	2	3	4	5- 9	10-14	15-19	20-24	25-29	30&Over	Total
0 - 20		6	4		1	2	6					19
21 - 25						1		2				3
26 - 30		1										1
31 - 35		1							1			2
36 - 40		1	2			2	2	1				8
41 - 45		1				1	1	1				4
46 - 50		1	1				3	1				6
51 - 55				2		3	2	2	3			12
56 - 60				1	2	4	9	5	4	2		27
61 - 65						2	5	3	3	3	3	19
66 - 70		1		1		4	3	4	2	4	6	25
71 - 75						5	3	7	8	5	14	42
76 - 80						1	1	4	5	14	36	61
81 - 85								1	7	7	30	45
86 - 90						2			3	3	12	20
91 & Over										1	10	11
Totals	0	12	7	4	3	27	35	31	36	39	111	305

AVERAGE ANNUAL BENEFITS PAYABLE TO SURVIVORS OF FORMER MEMBERS:

Attained Ages	Completed Years Since Retirement											
	0	1	2	3	4	5- 9	10-14	15-19	20-24	25-29	30&Over	Average Benefit
0 - 20		3,398	8,537		18,190	3,945	3,754					5,428
21 - 25						4,733		3,442				3,872
26 - 30		13,521										13,521
31 - 35		26,141							1,752			13,947
36 - 40		20,244	25,050			18,612	9,928	12,313				17,467
41 - 45		47,145				22,075	2,698	9,482				20,350
46 - 50		27,722	26,947				18,341	7,093				19,464
51 - 55				19,687		22,773	28,086	28,998	13,723			21,919
56 - 60				15,479	24,275	19,132	19,715	27,162	20,487	6,531		20,326
61 - 65						14,211	21,188	19,259	19,610	9,235	5,615	15,554
66 - 70		27,189		45,565		23,806	26,611	29,874	9,275	7,695	12,615	19,693
71 - 75						7,566	51,745	28,719	25,732	16,620	7,480	18,756
76 - 80						2,898	32,775	19,690	15,334	17,709	11,432	13,944
81 - 85								4,959	17,244	18,052	10,106	12,338
86 - 90						2,810			23,364	23,930	11,315	14,164
91 & Over										13,721	7,714	8,260
Average	0	15,196	15,885	25,104	22,246	14,324	20,214	22,309	18,766	15,755	10,134	15,284

EXHIBIT XI
YEAR-TO-YEAR COMPARISON

	Fiscal 2009	Fiscal 2008	Fiscal 2007	Fiscal 2006
Number of Active Contributing Members	3,882	3,821	3,632	3,534
Number of Retirees & Survivors	1,688	1,631	1,555	1,477
DROP Participants	147	130	134	111
Number Terminated Due Deferred Benefits	55	55	54	52
Number of Terminated Due Refund	407	350	298	249
Active Lives Payroll (excludes DROP participants)	$ 178,913,097	$ 169,401,716	$ 150,960,665	$ 140,175,740
Retiree Benefits in Payment	$ 53,031,851	$ 48,416,581	$ 43,972,738	$ 39,649,619
Market Value of Assets	$ 865,547,030	$1,092,459,674	$1,138,227,081	$ 963,805,222
Ratio of Actuarial Value of Assets to Actuarial Accrued Liability	76.13%	85.78%	86.02%	83.66%
Actuarial Accrued Liability	$1,410,559,615	$1,317,161,382	$1,192,323,327	$1,089,280,137
Actuarial Value of Assets	$1,073,797,423	$1,129,809,421	$1,025,656,019	$ 911,329,622
UAL (Funding Excess)	$ 336,762,192	$ 187,351,961	$ 166,667,308	$ 177,950,515
P.V. of Future Employer Normal Contributions	$ 292,585,945	$ 277,566,364	$ 247,631,617	$ 230,234,335
P.V. of Future Employee Contributions	$ 150,094,699	$ 142,412,175	$ 126,968,955	$ 118,092,552
Present Value of Future Benefits	$1,853,240,259	$1,737,139,921	$1,566,923,899	$1,437,607,024

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	Fiscal 2010	Fiscal 2009	Fiscal 2008	Fiscal 2007
Employee Contribution Rate	8.00%	8.00%	8.00%	8.00%
Required Tax Contributions as a Percentage of Projected Payroll	11.56%	12.20%	13.16%	12.83%
Actuarially Required Employer Contribution As a Percentage of Projected Payroll	20.79%	13.89%	12.56%	14.01%
Actual Employer Contribution Rate	14.00%	12.50%	13.75%	15.50%

Fiscal 2005	Fiscal 2004	Fiscal 2003	Fiscal 2002	Fiscal 2001	Fiscal 2000
3,532	3,431	3,360	3,322	3,257	3,098
1,434	1,379	1,315	1,278	1,230	1,155
103	114	120	145	156	155
45	42	36	30	25	18
189	181	143	133	118	95
$ 134,313,739	$ 128,144,746	$ 121,012,780	$ 114,422,827	$ 107,667,223	$ 100,504,497
$ 36,510,489	$ 34,076,169	$ 31,542,638	$ 29,610,698	$ 27,934,986	$ 25,932,694
$ 848,499,924	$ 752,274,788	$ 664,570,797	$ 620,860,572	$ 641,929,807	$ 645,641,501
80.88%	71.84%	69.69%	72.33%	79.45%	82.95%
$1,012,901,863	$1,010,016,864	$ 944,688,430	$ 888,963,640	$ 834,986,462	$ 779,541,318
$ 819,240,156	$ 725,615,787	$ 658,376,086	$ 642,947,201	$ 663,377,250	$ 646,609,069
$ 193,661,707	$ 284,401,078	$ 286,312,344	$ 246,016,439	$ 171,609,212	$ 132,932,249
$ 226,307,495	$ 192,151,099	$ 182,925,316	$ 166,298,912	$ 159,311,329	$ 149,049,128
$ 114,703,708	$ 94,736,659	$ 90,145,420	$ 82,398,183	$ 79,024,405	$ 73,957,562
$1,353,913,066	$1,296,904,623	$1,217,759,166	$1,137,660,735	$1,073,322,196	$1,002,548,008

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Fiscal 2006	Fiscal 2005	Fiscal 2004	Fiscal 2003	Fiscal 2002	Fiscal 2001
8.00%	8.00%	8.00%	8.00%	8.00%	8.00%
12.82%	13.11%	12.77%	12.17%	13.31%	18.64%
15.66%	22.51%	23.64%	20.78%	17.44%	9.00%
18.00%	24.00%	21.00%	18.25%	9.00%	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×(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 of 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.

ANNUITANT MORTALITY: 1994 Uninsured Pensioner Mortality Table Utilized for Pre- Retirement and Post-Retirement Mortality

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	14.700%
3 – 14	6.300%
15 & over	5.300%

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	0.25
75 & Over	1.00

DISABILITY RATES: 70% 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:

Service	Factor	Service	Factor
<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:

Member's Age	% With Children	Number of Children	Average Age
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	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 dated 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: