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
Gary Curran, F.C.A., M.A.A.A., A.S.A.

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

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SUMMARY OF VALUATION RESULTS
FIREFIGHTERS' RETIREMENT SYSTEM

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.

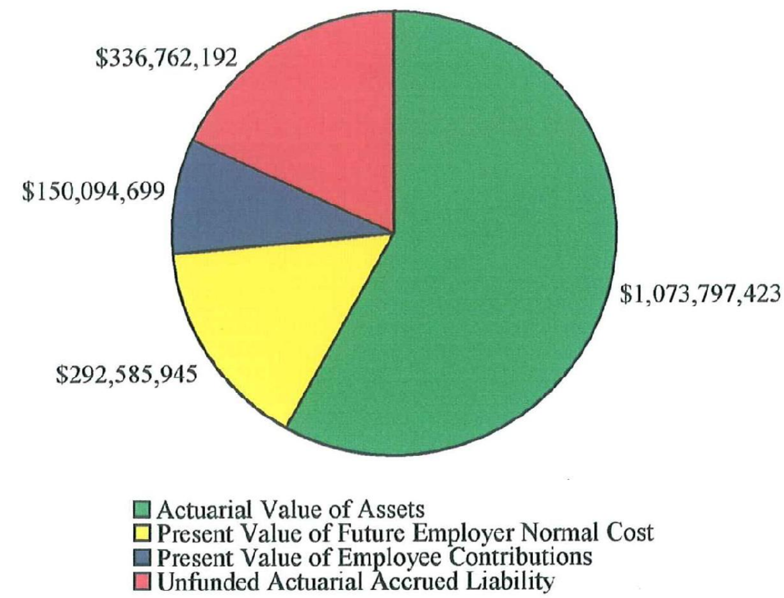
Since actual employer contributions for fiscal 2010 are 14.00% of payroll, we estimate the effect of the contribution shortfall will be to increase required contributions in fiscal 2011 by 0.63% of payroll. Since the statutes require rounding the net direct employer contributions rate to the nearest 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×(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.

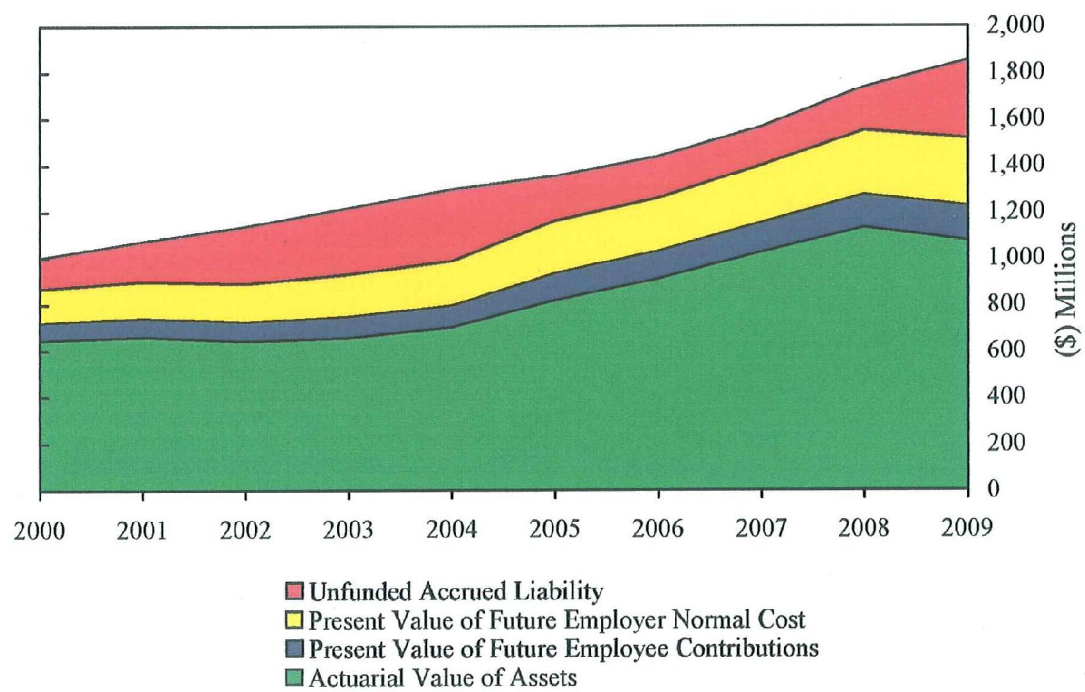
Components of Present Value of Future Benefits

June 30, 2009

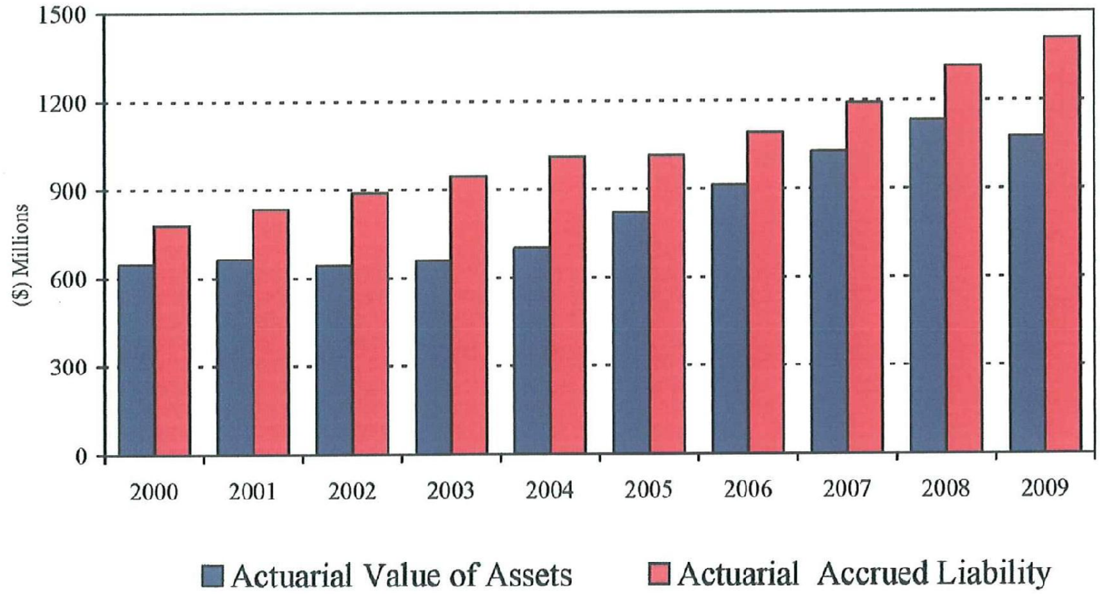


Components of Present Value of Future Benefits

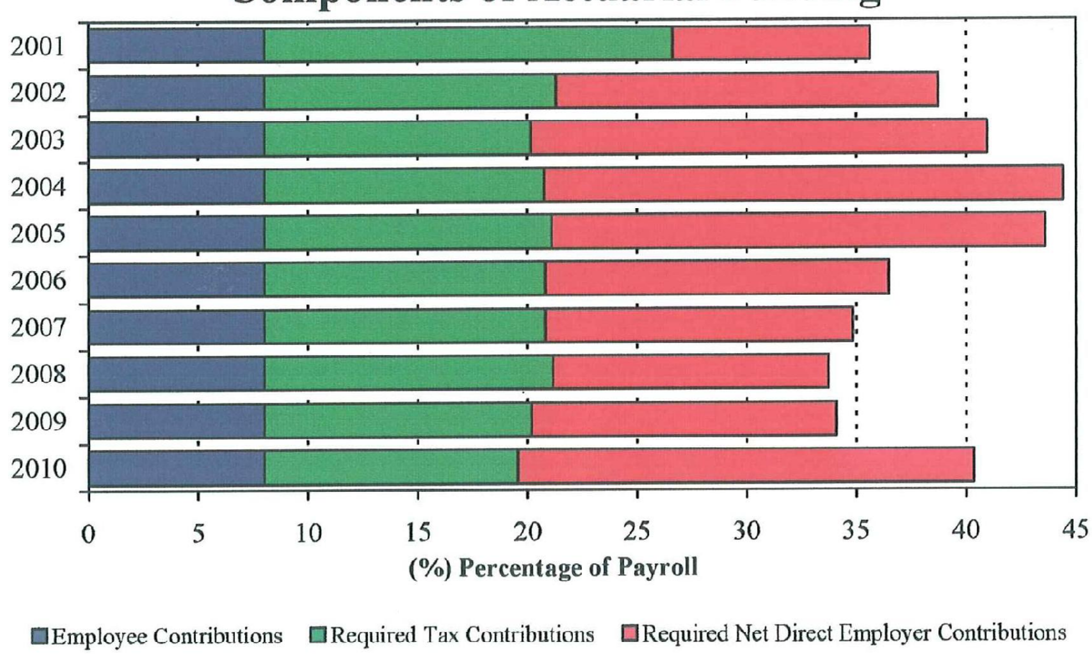
Historical



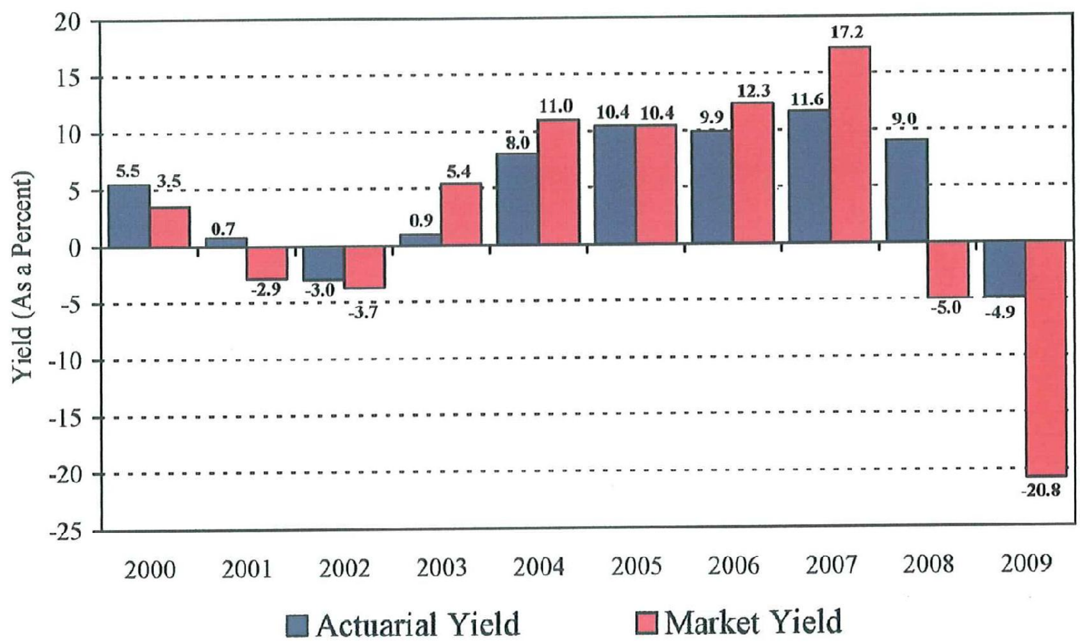
Actuarial Value of Assets vs. Actuarial Accrued Liability



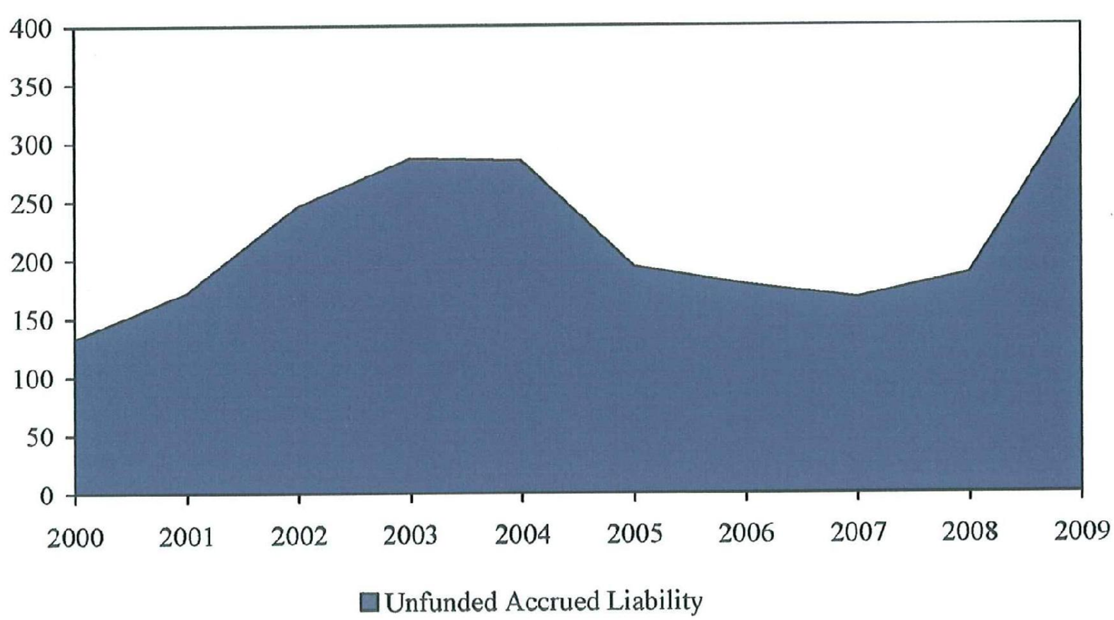
Components of Actuarial Funding



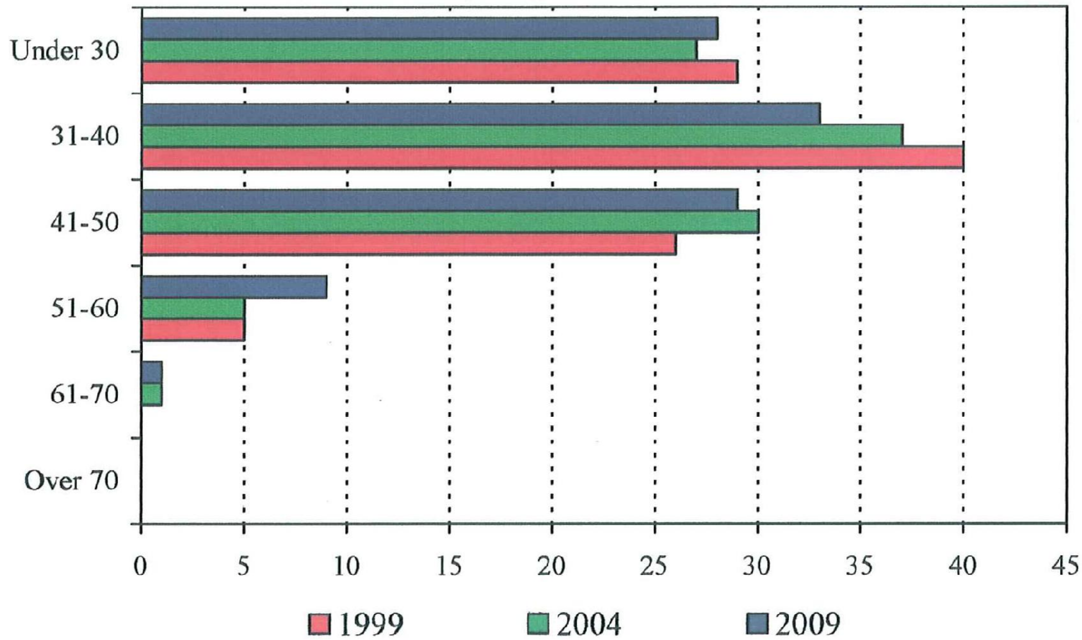
Historical Asset Yields



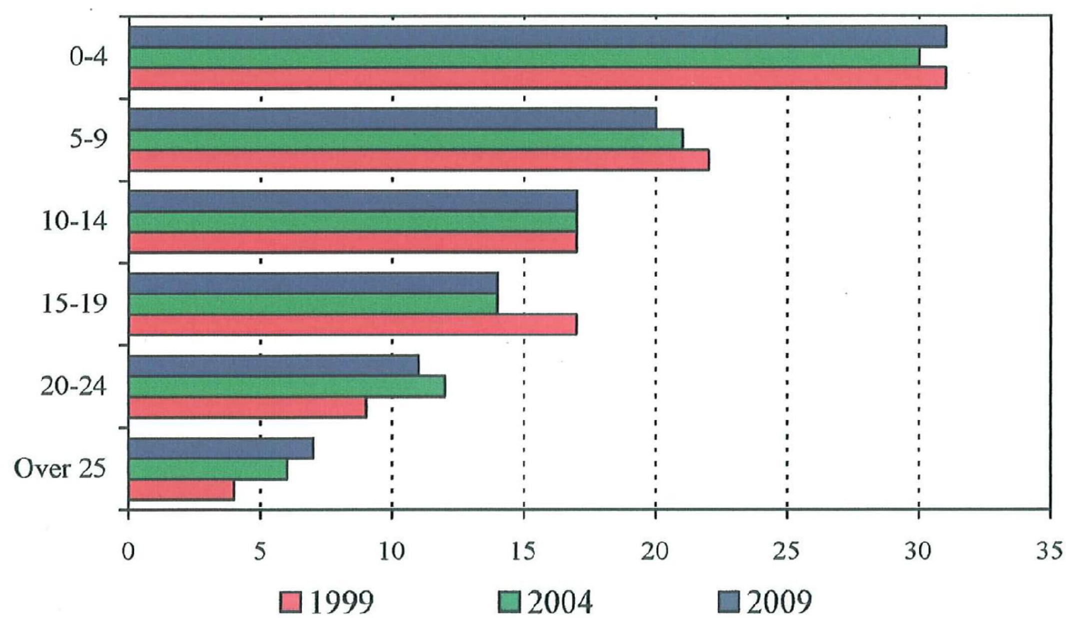
Unfunded Accrued Liability



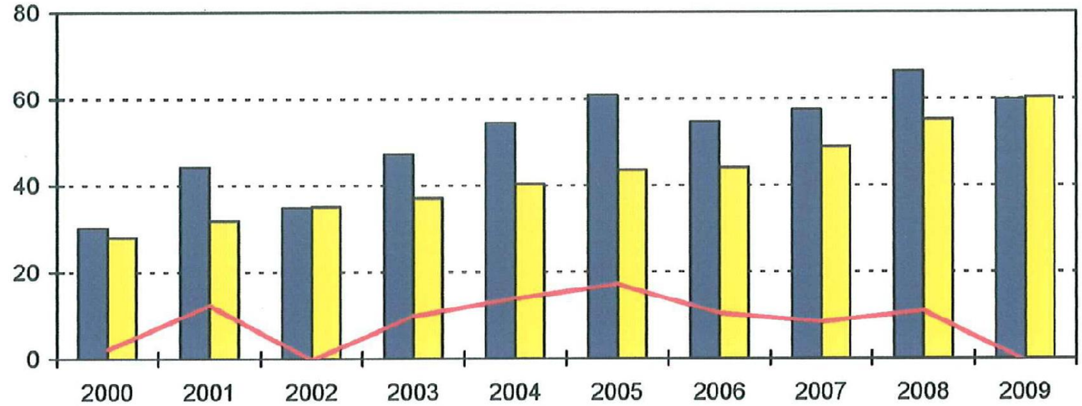
Active – Census By Age
(as a percent)



Active – Census By Service
(as a percent)

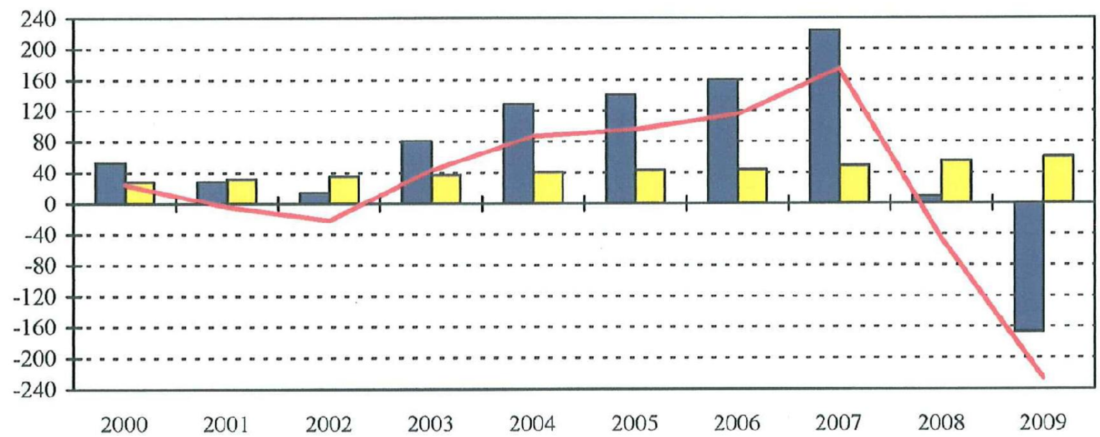


Net Non-Investment Income



	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