FIREFIGHTERS' RETIREMENT SYSTEM

ACTUARIAL VALUATION AS OF
JUNE 30, 2011

G. S. CURRAN & COMPANY, LTD.

Actuarial Services

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November 8, 2011

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, 2011. 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, 2012, to recommend the net direct employer contribution rate for fiscal 2013, 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, 2011	June 30, 2010
Valuation Date:		June 30, 2011	June 30, 2010
Census Summary:	Active Contributing Members	4,020	3,989
	Retired Members and Beneficiaries	1,802	1,749
	DROP Participants	225	162
	Terminated Due a Deferred Benefit	68	59
	Terminated Due a Refund	418	442
Payroll (excludes DROP Participants):		$ 193,136,985	$ 189,542,210
Benefits in Payment:		$ 58,699,965	$ 56,056,554
Market Value of Assets:		$ 1,154,482,040	$ 971,775,080
Unfunded Actuarial Accrued Liability:		$ 416,177,743	$ 396,204,368
Actuarial Asset Value:		$ 1,204,830,245	$ 1,140,054,175
Actuarial Accrued Liability:		$ 1,621,007,988	$ 1,536,258,543
Ratio of Actuarial Value of Assets to Actuarial Accrued Liabilities:		74.33%	74.21%

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	FISCAL 2012	FISCAL 2011
Normal Cost as of July 1:	$ 47,869,777	$ 46,768,881
Amortization Cost (Credit) as of July 1:	$ 37,903,169	$ 35,214,367
Total Actuarially Required Contribution Inclusive of Estimated Administrative Costs:	$ 89,914,621	$ 85,926,974
Expected Insurance Premium Taxes	$ 21,858,158	$ 21,624,265
Net Direct Combined Actuarially Req'd Contributions	$ 68,056,463	$ 64,302,709
Actual Net Direct Combined Contribution Rate:	33.25%	29.50%
Actuarially Required Net Direct Combined Cont. Rate:	34.02%	32.97%

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Minimum Recommended Net Direct Employer Cont. Rate

For Employees with Earnings Below Poverty Level-	Fiscal 2013: 26.00%	Fiscal 2012: 25.25%
For Employees with Earnings Above Poverty Level -	Fiscal 2013: 24.00%	Fiscal 2012: 23.25%

Employee Contribution Rate: 8.00% of payroll below poverty level/10.00% of payroll above poverty level

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: None

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.

Replaced 11/28/11

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 4,245 active contributing members in the system of whom 1,874 have vested retirement benefits; in addition, there are 225 participants in the Deferred Retirement Option Plan (DROP); 1,802 former system members or their beneficiaries are receiving retirement benefits. An additional 486 members have contributions remaining on deposit with the system; of this number, 68 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 auditor, the firm of Duplantier, Hrapmann, Hogan & Maher, Certified Public Accountants. As indicated in the system's financial statements, the net market value of the system's assets was $1,154,482,040 as of June 30, 2011. Net investment income for fiscal 2011 measured on a market value basis amounted to $169,709,240. Contributions to the system for fiscal 2011 totaled $79,689,735; benefits and expenses amounted to $66,692,015.

Notwithstanding our efforts to review both census and financial data for apparent errors, we must rely upon the system's administrative staff and accountants to provide accurate information. Our review of submitted information is limited to validation of reasonableness and consistency. Verification of submitted data to source information is beyond the scope of our efforts.

COMMENTS ON ACTUARIAL METHODS AND ASSUMPTIONS

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

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

The current year 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.

CHANGES IN PLAN PROVISIONS

The following changes in plan provisions were enacted during the 2011 Regular Session of the Louisiana Legislature:

Act 238 changes the employee contribution rate effective July 1, 2011 from a fixed rate of 8% to a rate which is at least 8% but not greater than 10% based on the total contribution expressed as a percentage of payroll after applying all required tax contributions. The employee rate, when such contributions total 25% or less, is set at 8%. The employee rate then increases 0.25% for each 0.75% increase in the total rate, subject to a maximum rate of 10%. The change does not apply to members whose earnable compensation is less than or equal to the poverty guidelines issued by the U. S. Department of Health and Human Services.

The act also allows the Board of Trustees to maintain the net direct employer contribution rate at the prior fiscal year level at such time as the rate would otherwise decrease or to set the rate at any point between the previous year's net direct employer contribution rate and the recommended net direct employer contribution rate. Any excess funds collected, resulting from the higher contribution rate, are used to reduce the system's unfunded actuarial accrued liability. The Board may not utilize the above provision to set the net direct employer contribution rate at a level higher than 15%.

The act also limited the earnings to be considered in calculating final average compensation such that the earnings for the thirteenth through the twenty-fourth month may not exceed 115% of the earnings for the first twelve months and the earnings to be considered for the final twelve months may not exceed 115% of the earnings for the thirteenth through the twenty-fourth months. However, the provision set the minimum average final compensation to be used in the calculation of retirement benefits to the average compensation as it existed prior to the effective date of the act. In addition, the act excludes salary increases related to a promotion within the civil service system.

The act also made various changes to the structure of the Funding Review Panel.

Act 277 extends the authority of a retired member or a Deferred Retirement Option Plan participant to convert from a service retirement to a service connected disability retirement, subject to the provisions of R. S. 11:2258, from July 1, 2011 through July 1, 2016.

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

ASSET EXPERIENCE

The actuarial and market rates of return for the past ten years are given below. 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
2002	-3.7%	-3.0%
2003	5.4%	0.9%
2004	11.0%	8.0%
2005	10.4%	10.4%
2006	12.3%	9.9% *
2007	17.2%	11.6%
2008	- 5.0%	9.0%
2009	-20.8%	-4.9% **
2010	12.2%	6.1%
2011	17.4%	4.5%

* 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 2011, the fund earned $20,490,535 of dividends, interest and other recurring income. In addition, the Fund had net realized and unrealized capital gains on investments of $156,563,254. Investment expenses amounted to $7,344,549. The geometric mean of the market value rates of return was 5.0% measured over the last ten years and 6.5% measured over the last twenty years.

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 2011, the system experienced net actuarial investment earnings of $34,204,316 below the actuarial assumed earnings rate of 7.5% which produced an actuarial loss and increased the interest-adjusted amortization payments on the system's UAL by $3,398,881 or 1.70% of payroll, in fiscal 2012.

PLAN DEMOGRAPHICS AND LIABILITY EXPERIENCE

A reconciliation of the census for the system is given in Exhibit X. The average active contributing member is 37 years old with 11.03 years of service credit and an annual salary of $48,044. The system's active contributing membership experienced an increase during fiscal 2011 of 31 members. The number of DROP participants increased by 63. Over the last five years active membership has increased by 486 members. A review of the active census by age indicates that over the last ten years the population in the under forty age group has decreased while the proportion of active members over fifty 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 $3,152. The number of retirees and beneficiaries receiving benefits from the system increased by 53 during the fiscal year. Over the last five years, the number has increased by 325; during the same period, the annual benefits in payment increased by $19,050,346.

The changes in the makeup of the population and changes in members' salaries increased the interest adjusted normal cost over the last year by $1,141,432; the normal cost percentage decreased by 0.05% of payroll. Plan liability experience for fiscal 2011 was favorable. Salary increase rates at most durations were below projections. Retirements were below projections. Retiree deaths were above projections. These factors decreased costs. Offsetting this decrease were DROP entries significantly above projections and withdrawals below projections. Net plan liability experience gains totaled $13,197,519. These gains decreased the interest-adjusted amortization payments on the system's unfunded accrued liability by $1,311,437, or 0.66% of payroll, in fiscal 2011.

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 2011 contributions totaled $6,777,563 less than required; the interest-adjusted amortization payment on the contribution shortfall for fiscal 2012 is $673,486, or 0.34% of payroll. In addition, for fiscal 2012 the net effect of the change in payroll on amortization costs was to reduce such costs by 0.47% 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 2012 except for those items labeled fiscal 2011.

	Dollars	Percentage of Payroll
Normal Cost for Fiscal 2011	$ 48,491,009	24.86%
Cost of Assumption, Demographic, and Salary Changes	$ 1,141,432	(0.05%)
Normal Cost for Fiscal 2012	$ 49,632,441	24.81%
UAL Payments for Fiscal 2011	$ 36,511,033	18.72%
Change due to change in payroll	N/A	(0.47%)
Additional Amortization Expenses for Fiscal 2012:		
Merger Loss (Gain)	$ 26,879	0.01%
Asset Experience Loss (Gain)	$ 3,398,881	1.70%
Contribution Loss (Gain)	$ 673,486	0.34%
Liability Loss (Gain)	$ (1,311,437)	(0.66%)
Net Amortization Expense (Credit) for Fiscal 2012	$ 2,787,809	1.39%
Estimated Administrative Cost for Fiscal 2012	$ 983,338	0.49%
Total Normal Cost & Amortization Payments	$ 89,914,621	44.94%

The derivation of the actuarially required contribution for the current fiscal year is given in Exhibit I. The normal cost for fiscal 2012 as of July 1, 2011 is $47,869,777. The amortization payments on the system's unfunded actuarial accrued liability as of July 1, 2011 total $37,903,169. 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 2012 is $89,914,621. We estimate insurance premium taxes of $21,858,158 will be paid to the system in fiscal 2012. Hence, the total actuarially required net direct combined contribution (consisting of employee contributions and the net direct employer contribution) for fiscal 2012 amounts to $68,056,463 or 34.02% of payroll.

Since the actual net direct combined contribution rate for fiscal 2012 is 33.25% of payroll, there will be a contribution shortfall of 0.77% of payroll. The effect of this shortfall will be to increase the required contributions for fiscal 2012 by 0.08% of payroll. The statutes require rounding the net direct employer contribution rate to the nearest 0.25%. Therefore, we recommend a combined employee and net direct employer contribution rate of 34.00% for fiscal 2013. For members with earnings less than or equal to the Department of HHS poverty guidelines, employee contributions will be set equal to 8.00% of payroll. The employer contribution rate to be applied to the earnings of such members will be set equal to 26.00% of payroll. For members with earnings greater than the Department of HHS poverty guidelines, employee contributions will be set equal to 10.00% of payroll. The employer contribution rate to be applied to the earnings of such members will be set equal to 24.00% of payroll.

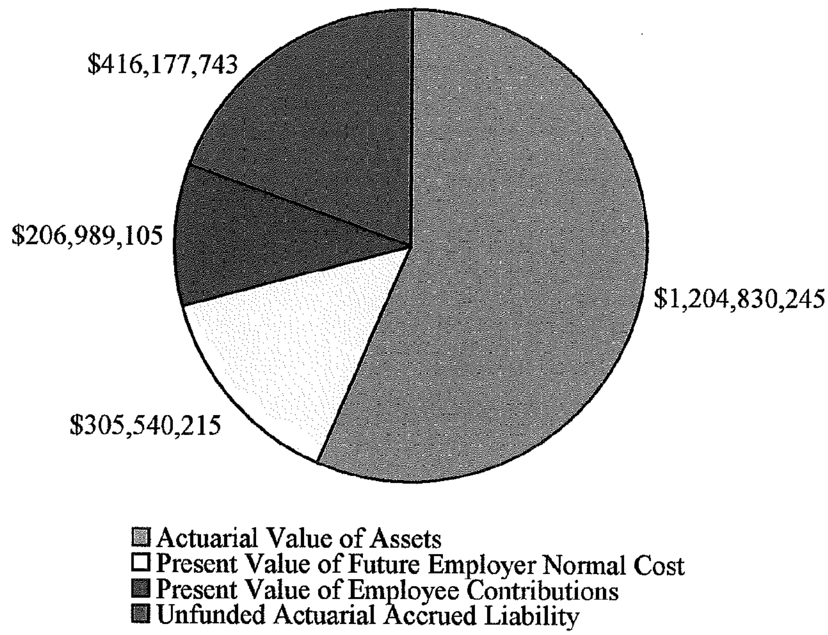
Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions, changes in economic or demographic assumptions, completion of amortization payments or credit schedules, and changes in plan provisions or applicable law. Analysis of the effect of all these factors is beyond the scope of this report. We have, however, calculated the sensitivity of the plan's costs to a change in two factors. First, we have determined that based on current assets and demographics, for each percentage under (over) the assumed rate of return on the actuarial value of assets, there will be a corresponding increase (reduction) in the actuarially required contribution as a percentage of projected payroll of 0.60%. In addition, we have determined that a 1% reduction in the valuation interest rate for the Fund would increase the actuarially required contribution rate for fiscal 2012 by 14.45%.

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

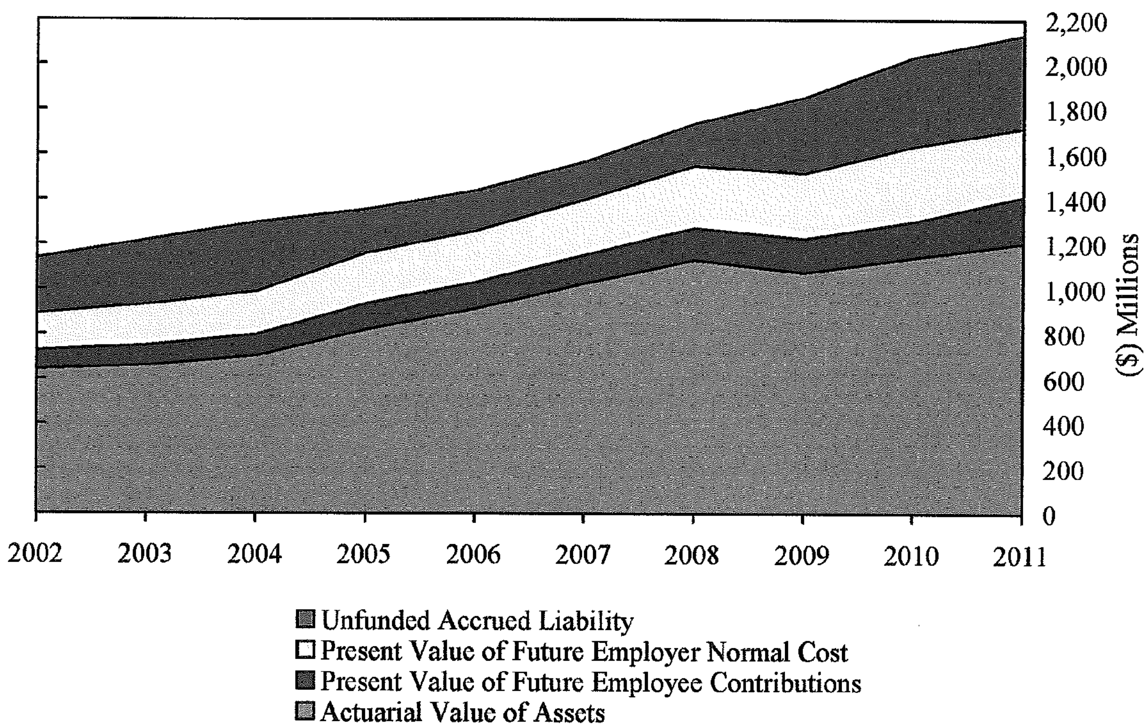
COST OF LIVING INCREASES

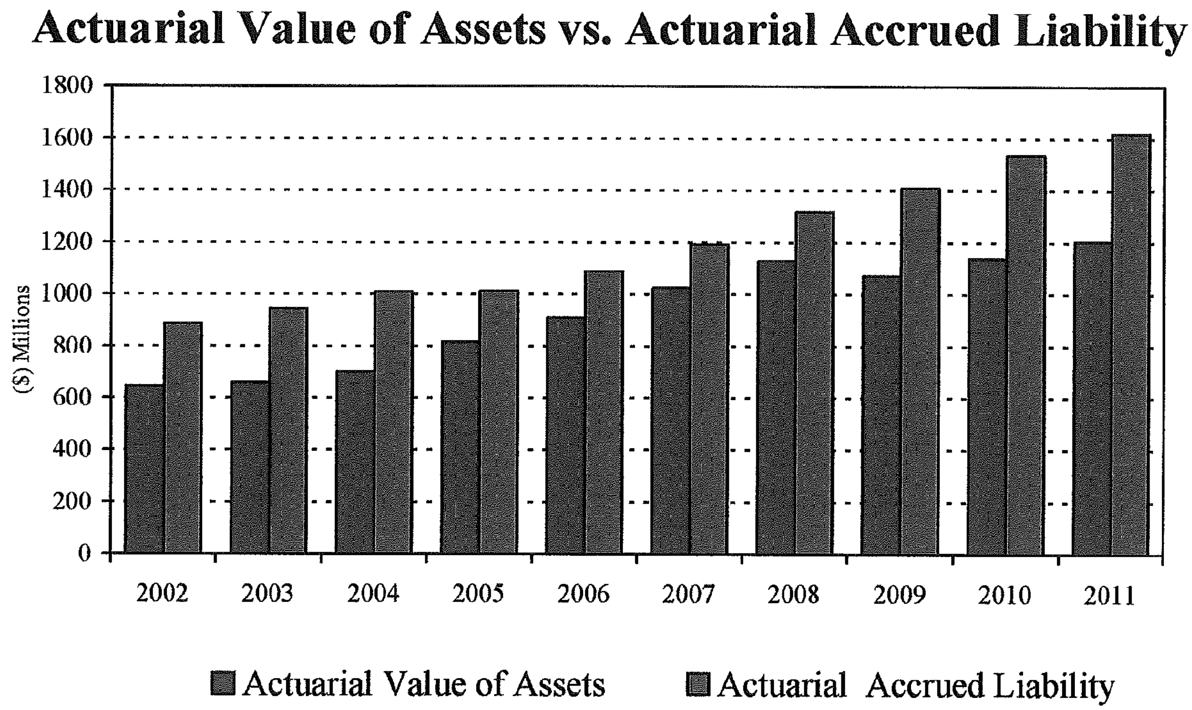
During fiscal 2011, the actual cost of living (as measured by the US Department of Labor CPI-U) increased by 3.56%. Cost of living provisions for the system are detailed in R.S. 11:2260A(7) and R.S. 11:246. The former statute allows the board to use interest earnings in excess of the normal requirements 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 2011 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.

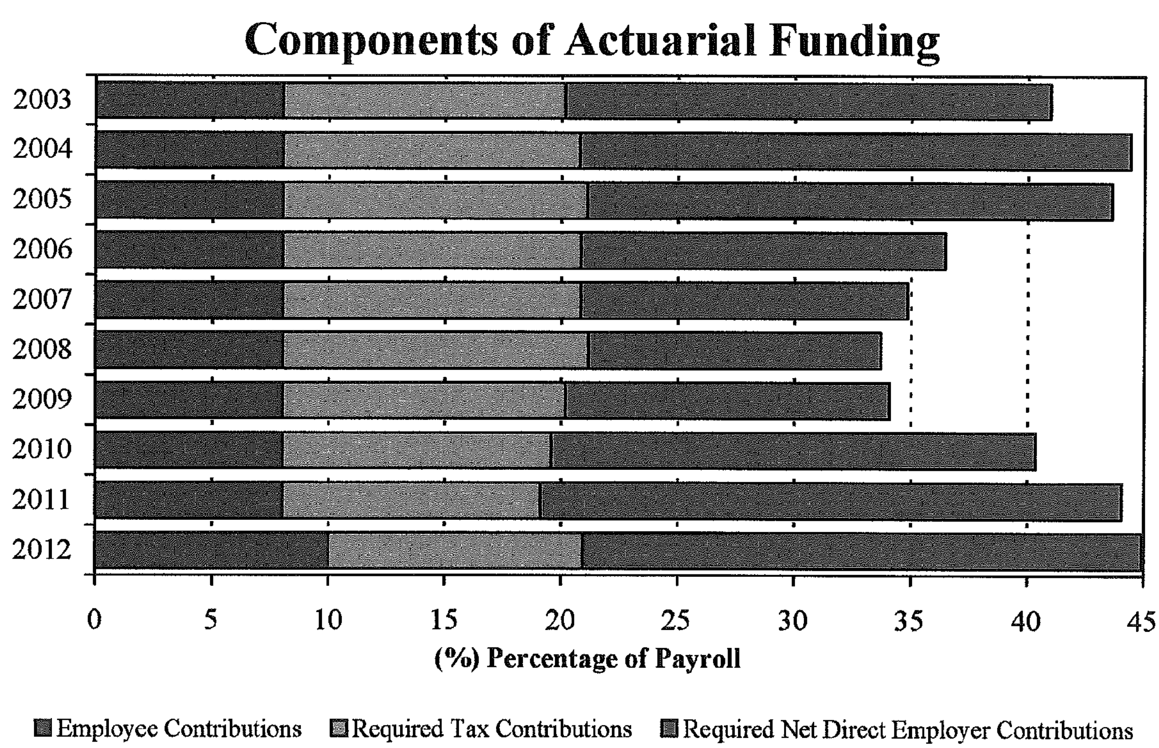
Components of Present Value of Future Benefits
June 30, 2011



Components of Present Value of Future Benefits
Historical

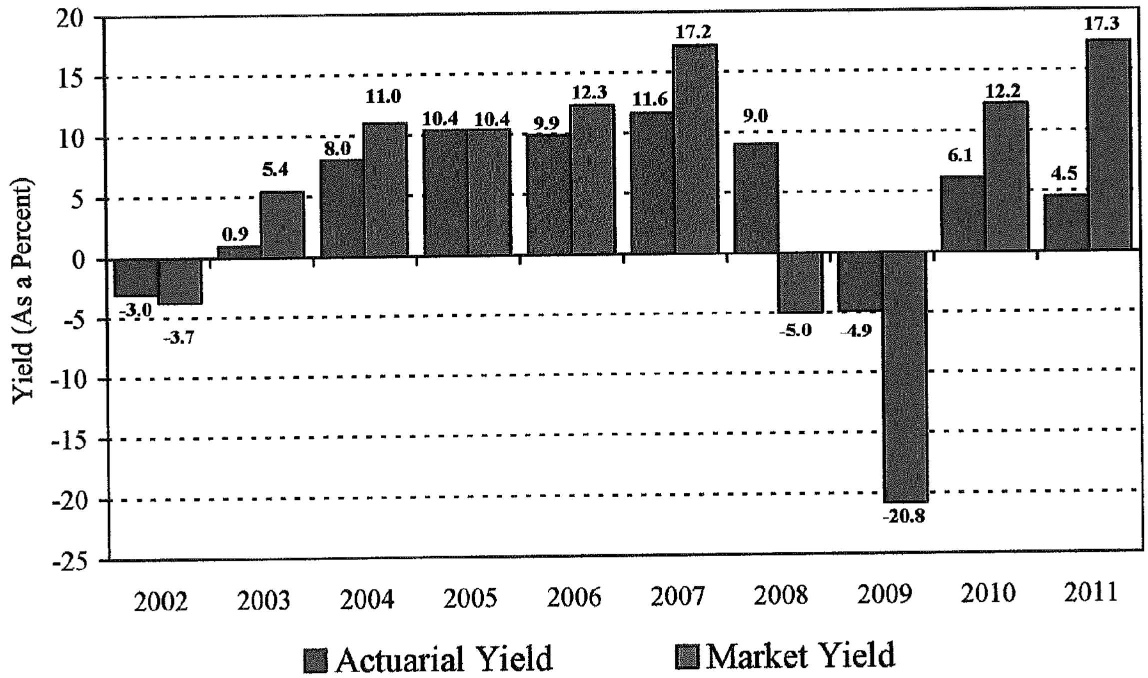




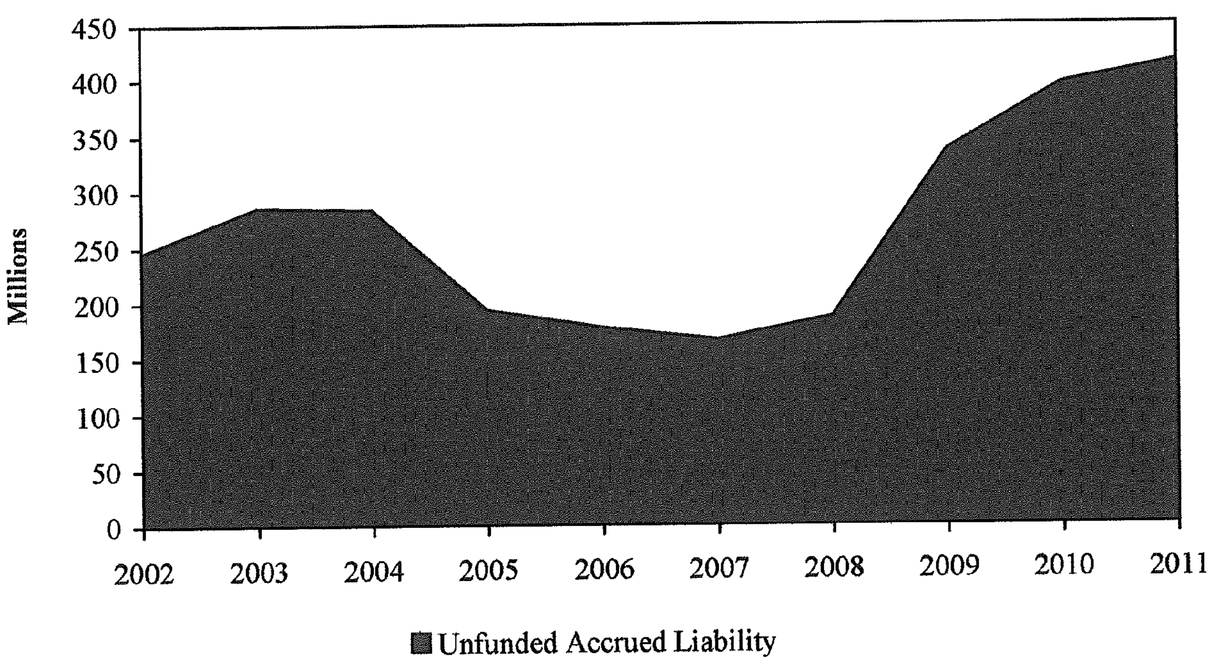


(2012 employee contribution level is based on members with earnings above the poverty level)

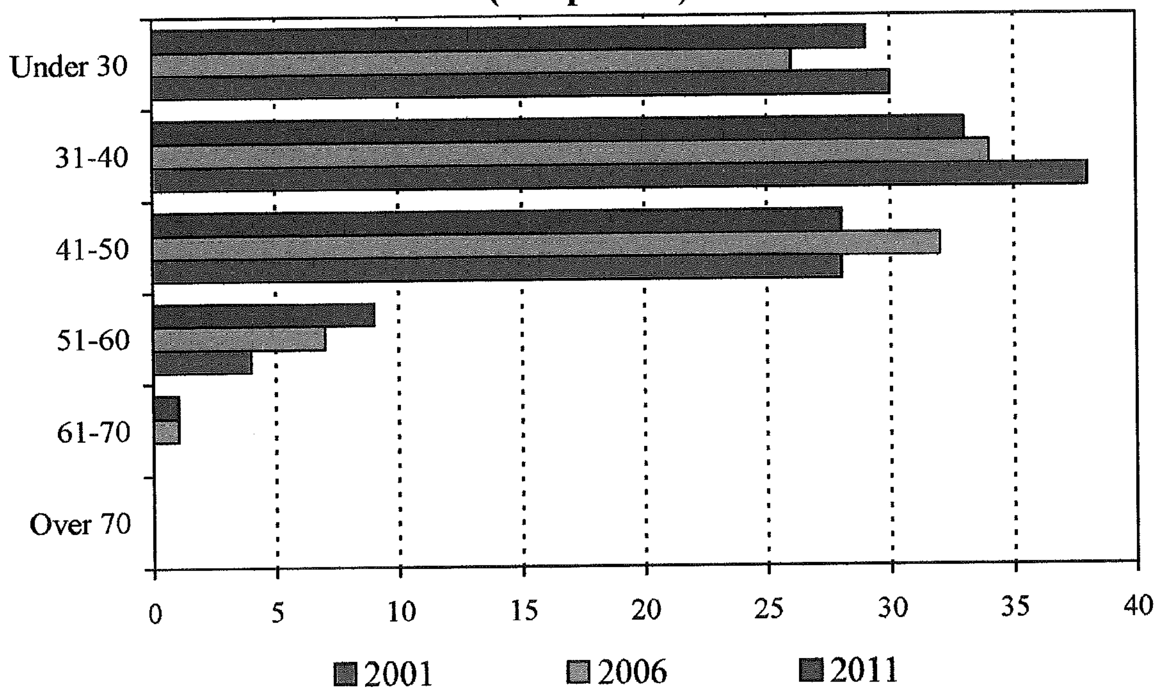
Historical Asset Yields



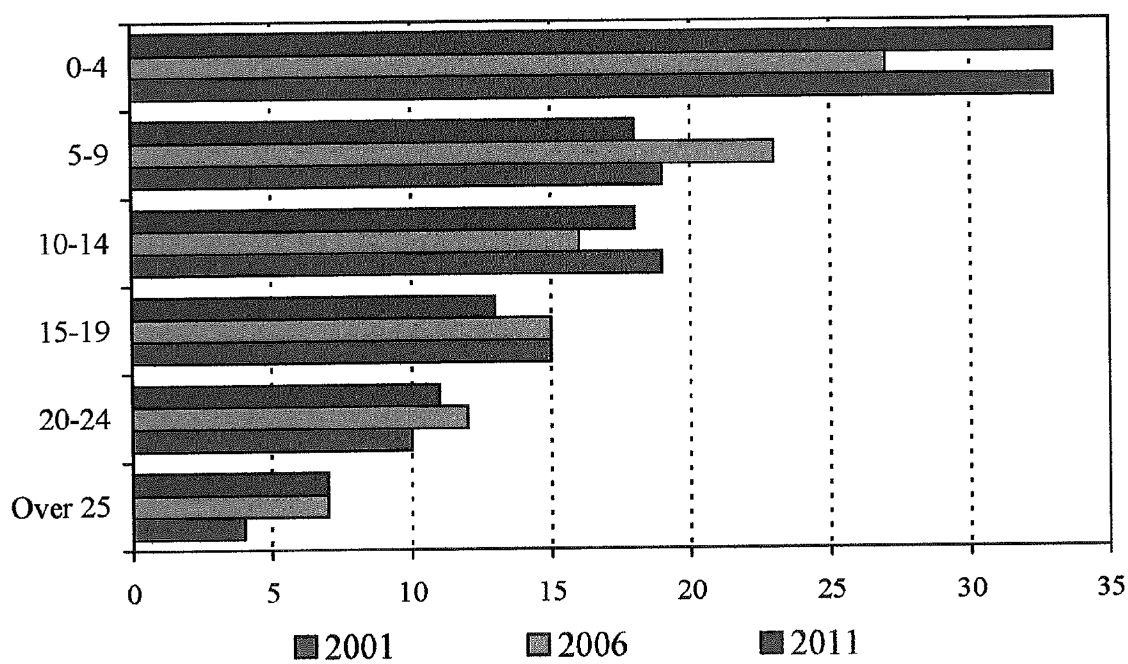
Unfunded Accrued Liability



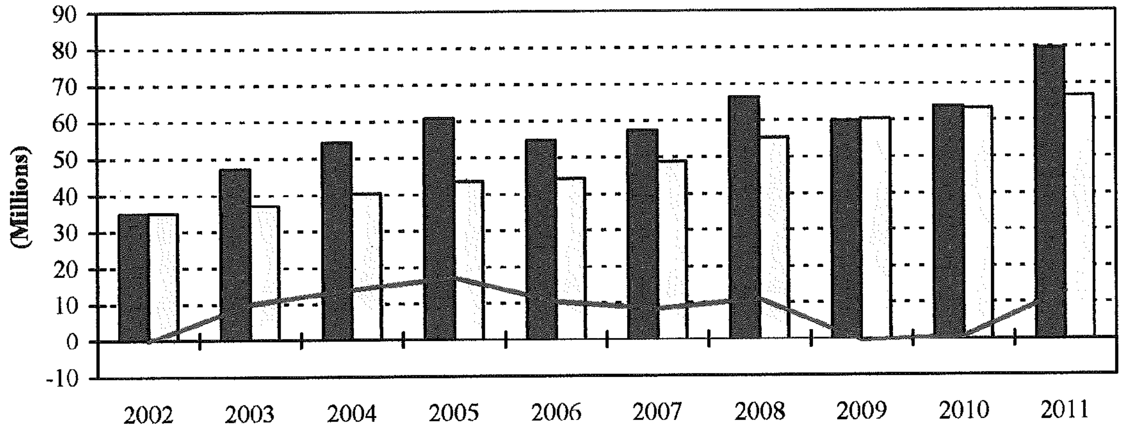
Active – Census By Age
(as a percent)



Active – Census By Service
(as a percent)

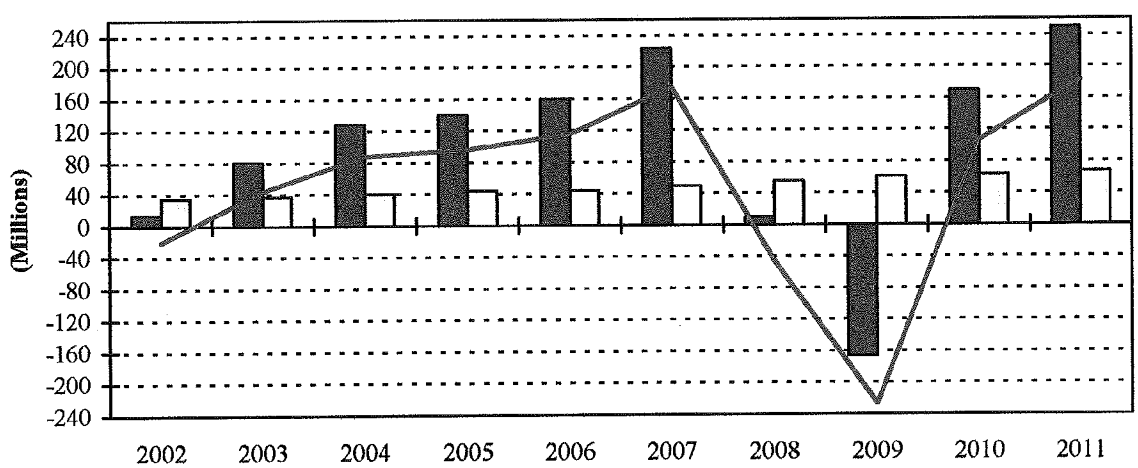


Net Non-Investment Income



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Non-Investment Income ($Mil) ■	34.9	47.1	54.4	60.8	54.7	57.4	66.3	59.8	63.7	79.7
Benefits and Expenses ($Mil) □	35.1	37.1	40.4	43.6	44.2	48.9	55.3	60.3	63.1	66.7
Net Non-Investment Income ($Mil) ——	-0.2	10.0	14.4	17.2	10.5	8.5	11.0	-0.5	0.6	13.0

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



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Total Income ($Mil) ■	14.0	80.8	128.1	139.8	159.5	223.3	9.5	-166.6	169.3	249.4
Benefits and Expenses ($Mil) □	35.1	37.1	40.4	43.6	44.2	48.9	55.3	60.3	63.1	66.7
Net Change in MVA ($Mil) ——	-21.1	43.7	87.7	96.2	115.3	174.4	-45.8	-226.9	106.2	182.7

EXHIBITS

EXHIBIT I
ANALYSIS OF ACTUARIALLY REQUIRED CONTRIBUTIONS

1.	Normal Cost of Retirement Benefits	$ 42,592,234
2.	Normal Cost of Death Benefits	$ 1,269,503
3.	Normal Cost of Disability Benefits	$ 1,141,444
4.	Normal Cost of Deferred Retirement Benefits	$ 1,433,369
5.	Normal Cost of Contribution Refunds	$ 1,433,227
6.	TOTAL Normal Cost as of July 1, 2011 (1+2+3+4+5)	$ 47,869,777
7.	Amortization of Unfunded Accrued Liability of $416,177,743	$ 37,903,169
8.	TOTAL Normal Cost & Amortization Payments (6+7)	$ 85,772,946
9.	Normal Cost and Amortization Payments Interest Adjusted for Midyear Payment	$ 88,931,283
10.	Estimated Administrative Cost for Fiscal 2012	$ 983,338
11.	TOTAL Administrative and Interest Adjusted Actuarial Costs (9+10)	$ 89,914,621
12.	Expected Insurance Premium Taxes due in Fiscal 2012	$ 21,858,158
13.	Net Direct Combined Actuarially Req'd Contributions for Fiscal 2012 (11-12)	$ 68,056,463
14.	Projected Payroll For Contributing Members July 1, 2011 through June 30, 2012	$200,028,163
15.	Net Direct Combined Actuarially Required Contributions as a % of Projected Payroll for Fiscal 2012 (13 ÷ 14)	34.02%
16.	Actual Net Direct Combined Contribution Rate for Fiscal 2012	33.25%
17.	Contribution Gain (Loss) as a Percentage of Payroll (16 – 15)	(0.77%)
18.	Adjustment to Following Year Payment for Contribution Gain (Loss)	(0.08%)
19.	Recommended Net Direct Combined Contribution Rate for Fiscal 2013 (15 – 18) (Rounded to nearest 0.25%)	34.00%
20.	Recommended Net Direct Employee Contribution Rate (for members with earnings less than or equal to the Department of HHS poverty guidelines)	8.00%
21.	Recommended Net Direct Employer Contribution Rate (for members with earnings less than or equal to the Department of HHS poverty guidelines)	26.00%
22.	Recommended Net Direct Employee Contribution Rate (for members with earnings more than the Department of HHS poverty guidelines)	10.00%
23.	Recommended Net Direct Employer Contribution Rate (for members with earnings more than the Department of HHS poverty guidelines)	24.00%

EXHIBIT II
PRESENT VALUE OF FUTURE BENEFITS

Present Value of Future Benefits for Active Members:

Retirement Benefits	$ 1,378,551,877	
Survivor Benefits	21,501,720	
Disability Benefits	16,935,903	
Vested Deferred Termination Benefits	26,915,724	
Contribution Refunds	10,725,600	
TOTAL Present Value of Future Benefits for Active Members		$ 1,454,630,824

Present Value of Future Benefits for Terminated Members:

Terminated Vested Members Due Benefits at Retirement	$ 10,329,021	
Terminated Members with Reciprocals Due Benefits at Retirement	0	
Terminated Members Due a Refund	1,470,242	
TOTAL Present Value of Future Benefits for Terminated Members		$ 11,799,263

Present Value of Future Benefits for Retirees:

Regular Retirees	$ 529,626,667	
Disability Retirees	26,953,417	
Survivors & Widows	47,283,314	
Retiree DROP Account Balance	60,769,366	
IBO Retirees' Account Balance	2,474,457	
TOTAL Present Value of Future Benefits for Retirees & Survivors		$ 667,107,221
TOTAL Present Value of Future Benefits		$ 2,133,537,308

EXHIBIT III – Schedule A
MARKET VALUE OF ASSETS

Current Assets:		
Cash & Cash Equivalents in Banks	$ 8,096,048	
Contributions Receivable from Members	1,255,418	
Contributions Receivable from Employers	3,498,023	
Accrued Interest and Dividends on Investments	4,085,813	
Receivable on Currency Contracts	11,998,719	
Investments Receivables	57,157,167	
Prepaid Expenses	450	
TOTAL CURRENT ASSETS		$ 86,091,638
Property, Plant and Equipment (Net of accumulated depreciation)		$ 789,235
Investments:		
Common Stock	$374,248,711	
Mutual Funds	148,143,631	
Hedge Funds	131,970,006	
Private Equity	118,897,017	
Private Real Estate	98,414,367	
Corporate Bonds	65,727,789	
Cash & Cash Equivalents	60,578,638	
Emerging Market Debt	39,092,234	
Asset Backed Securities	26,211,075	
U. S. Government Securities	15,922,044	
TOTAL INVESTMENTS		$1,079,205,512
MERGER NOTES		$ 3,317,170
TOTAL ASSETS		$1,169,403,555
Current Liabilities:		
Payable on Currency Contracts	12,273,018	
Investment Payables	2,230,832	
Accounts Payable	417,665	
TOTAL CURRENT LIABILITIES		$ 14,921,515
NET MARKET VALUE OF ASSETS		$1,154,482,040

EXHIBIT III – SCHEDULE B
ACTUARIAL VALUE OF ASSETS

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

Fiscal year 2011	$ 96,347,506
Fiscal year 2010	40,659,988
Fiscal year 2009	(308,277,876)
Fiscal year 2008	(142,555,260)
Fiscal year 2007	93,344,557
Total for five years	$ (220,481,085)

Deferral of excess (shortfall) of invested income:

Fiscal year 2011 (80%)	$ 77,078,005
Fiscal year 2010 (60%)	24,395,993
Fiscal year 2009 (40%)	(123,311,151)
Fiscal year 2008 (20%)	(28,511,052)
Fiscal year 2007 (0%)	0
Total deferred for year	$ (50,348,205)

Market value of plan net assets, end of year	$ 1,154,482,040
Preliminary actuarial value of plan assets, end of year	$ 1,204,830,245

Actuarial value of assets corridor

85% of market value, end of year	$ 981,309,734
115% of market value, end of year	$ 1,327,654,346

Final actuarial value of plan net assets, end of year	$ 1,204,830,245

EXHIBIT IV
PRESENT VALUE OF FUTURE CONTRIBUTIONS

Employee Contributions to the Annuity Savings Fund	$	206,989,105
Employer Normal Contributions to the Pension Accumulation Fund		305,540,215
Employer Payments on the Unfunded Actuarial Accrued Liability		416,177,743
TOTAL PRESENT VALUE OF FUTURE CONTRIBUTIONS	$	928,707,063

EXHIBIT V - SCHEDULE A
ACTUARIAL ACCRUED LIABILITIES

LIABILITY FOR ACTIVE MEMBERS		
Accrued Liability for Retirement Benefits	$ 921,839,042	
Accrued Liability for Survivor Benefits	8,049,011	
Accrued Liability for Disability Benefits	4,859,802	
Accrued Liability for Vested Termination Benefits	11,704,996	
Accrued Liability for Refunds of Contributions	(4,351,347)	
TOTAL Actuarial Accrued Liability for Active Members		$ 942,101,504
LIABILITY FOR TERMINATED MEMBERS		$ 11,799,263
LIABILITY FOR RETIREES AND SURVIVORS		$ 667,107,221
TOTAL ACTUARIAL ACCRUED LIABILITY		$1,621,007,988
ACTUARIAL VALUE OF ASSETS		$1,204,830,245
UNFUNDED ACTUARIAL ACCRUED LIABILITY		$ 416,177,743

EXHIBIT V - SCHEDULE B
CHANGE IN UNFUNDED ACTUARIAL ACCRUED LIABILITY

Prior Year Unfunded Accrued Liability		$ 396,204,368
Interest on Unfunded Accrued Liability	$ 29,715,328	
Normal Cost for Prior Year	46,768,881	
Interest on the Normal Cost	3,507,666	
Normal Cost for Merged Systems with Accrued Interest	0	
Administrative Expenses	964,964	
Interest on Expenses	35,532	
TOTAL Increases to Unfunded Accrued Liability		$ 80,992,371
Required Contributions for Prior Year with interest	$ 89,132,488	
Contribution Excess (Shortfall) with accrued interest	(6,777,563)	
Cost of Living Adjustment Gains (Losses)	0	
Merger Gains (Losses)	(329,132)	
Investment Gains (Losses)	(34,204,316)	
Liability Experience Gains (Losses)	13,197,519	
Liability Assumption Gains (Losses)	0	
TOTAL Decreases to Unfunded Accrued Liability		$ 61,018,996
CURRENT YEAR UNFUNDED ACCRUED LIABILITY		$ 416,177,743

EXHIBIT V - SCHEDULE C
AMORTIZATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITY
JUNE 30, 2011

FISCAL YEAR	DESCRIPTION	AMORT. PERIOD	INITIAL BALANCE	YEARS REMAINING	REMAINING BALANCE	AMORT. PAYMENTS
1993	Merger Loss (Gain)	30	13,485,002	12	8,711,774	1,047,664
1995	Merger Loss (Gain)	30	41,779,611	14	29,701,990	3,254,713
1996	Merger Loss (Gain)	30	1,772,399	15	1,311,887	138,251
1997	Merger Loss (Gain)	30	890,324	16	683,316	69,534
1998	Merger Loss (Gain)	30	1,602,435	17	1,270,726	125,299
1999	Merger Loss (Gain)	30	14,104,876	18	11,521,003	1,104,183
2001	Merger Loss (Gain)	30	3,117,590	20	2,680,510	244,593
2002	Cumulative Non-Merger Bases	27	175,578,584	18	148,467,297	14,229,238
2003	Contribution Loss (Gain)	15	2,678,010	7	1,601,793	281,320
2003	Assumption Loss (Gain)	15	(3,248,077)	7	(1,942,767)	(341,205)
2003	Experience Loss (Gain)	15	44,477,780	7	26,603,416	4,672,310
2004	Contribution Loss (Gain)	15	2,129,874	8	1,411,079	224,102
2004	Experience Loss (Gain)	15	1,570,785	8	1,040,673	165,275
2005	Experience Loss (Gain)	15	(24,922,321)	9	(18,010,028)	(2,626,401)
2005	Assumption Loss (Gain)	15	(57,207,831)	9	(41,341,038)	(6,028,760)
2005	Contribution Loss (Gain)	15	(2,457,193)	9	(1,775,682)	(258,948)
2006	Experience Loss (Gain)	15	(30,043,731)	10	(23,362,389)	(3,166,113)
2006	Benefits/COLA Loss (Gain)	15	12,495,729	10	9,716,838	1,316,843
2006	Assumption Loss (Gain)	15	7,880,410	10	6,127,907	830,465
2006	Contribution Loss (Gain)	15	(3,044,474)	10	(2,367,422)	(320,837)
2007	Contribution Loss (Gain)	15	(3,684,696)	11	(3,053,670)	(388,306)
2007	Merger Loss (Gain)	30	1,065,812	26	1,019,706	83,948
2007	Experience Loss (Gain)	15	(19,348,466)	11	(16,034,929)	(2,039,009)
2007	Benefits/COLA Loss (Gain)	15	13,421,495	11	11,122,986	1,414,404
2008	Assumption Loss (Gain)	15	(138,425)	12	(121,303)	(14,588)
2008	Contribution Loss (Gain)	15	(4,399,499)	12	(3,855,317)	(463,635)
2008	Merger Loss (Gain)	30	1,556,324	27	1,507,698	122,582
2008	Experience Loss (Gain)	15	11,244,458	12	9,853,612	1,184,980
2008	Benefits/COLA Loss (Gain)	15	15,006,752	12	13,150,541	1,581,464
2009	Asset Assumption Loss (Gain)	15	(121,695,690)	13	(112,027,452)	(12,824,715)
2009	Asset Experience Loss (Gain)	20	261,874,151	18	249,326,130	23,895,637
2009	COLA Loss (Gain)	20	15,784,880	18	15,028,527	1,440,347
2009	Experience Loss (Gain)	20	(3,921,422)	18	(3,733,522)	(357,824)
2009	Contribution Loss (Gain)	20	993,536	18	945,929	90,659
2010	Liability Assumption Loss(Gain)	15	37,843,942	14	36,395,002	3,988,126
2010	Asset Experience Loss (Gain)	19	14,930,089	18	14,550,702	1,394,552
2010	Experience Loss (Gain)	19	985,441	18	960,400	92,046
2010	Contribution Loss (Gain)	19	11,264,571	18	10,978,328	1,052,173
2011	Merger Loss (Gain)	30	329,132	30	329,132	25,924
2011	Asset Experience Loss (Gain)	18	34,204,316	18	34,204,316	3,278,172
2011	Experience Loss (Gain)	18	(13,197,519)	18	(13,197,519)	(1,264,862)
2011	Contribution Loss (Gain)	18	6,777,563	18	6,777,563	649,568

TOTAL Unfunded Actuarial Accrued Liability $ 416,177,743

TOTAL Fiscal 2012 Amortization Payments $ 37,903,169

* 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, 2010)		$1,140,054,175
Income:		
Regular Member Contributions	$ 15,647,266	
Regular Employer Contributions	42,158,612	
Insurance Premium Taxes	21,624,265	
Irregular Contributions	259,592	
Contributions from Mergers	0	
TOTAL CONTRIBUTIONS		$ 79,689,735
Interest and Dividends	$ 20,226,421	
Rent Income	28,391	
Interest from Merger Notes	235,723	
Net Appreciation of Fair Value of Investments	156,563,254	
Investment Expenses	(7,344,549)	
SUBTOTAL OF ALL MARKET INVESTMENT INCOME		$ 169,709,240
TOTAL Income		$ 249,398,975
Expenses:		
Retirement/Survivor Benefits/DROP Disbursements	$ 59,900,086	
Refunds of Contributions	1,072,332	
Disability Benefits	4,754,633	
Administrative Expenses	964,964	
Funds Transferred to Another System	0	
TOTAL Expenses		$ 66,692,015
Net Market Income for Fiscal 2011 (Income - Expenses)		$ 182,706,960
Adjustment for Actuarial Smoothing		$ (117,930,890)
Actuarial Value of Assets (June 30, 2011)		$1,204,830,245

EXHIBIT VII
FUND BALANCE

Present Assets of the System Creditable to:

Annuity Savings Fund	$ 128,392,414
Annuity Reserve Fund	603,863,398
Pension Accumulation Fund	335,996,200
Deferred Retirement Option Plan Account	83,755,571
Initial Benefit Option Plan Account	2,474,457
NET MARKET VALUE OF ASSETS	$ 1,154,482,040
ADJUSTMENT FOR ACTUARIAL SMOOTHING	50,348,205
NET ACTUARIAL VALUE OF ASSETS	$ 1,204,830,245

EXHIBIT VIII
PENSION BENEFIT OBLIGATION

Present Value of Credited Projected Payable to Current Employees	$ 899,079,968
Present Value of Benefits Payable to Terminated Employees	11,799,263
Present Value of Benefits Payable to Current Retirees and Beneficiaries	667,107,221
TOTAL PENSION BENEFIT OBLIGATION	$ 1,577,986,452
NET ACTUARIAL VALUE OF ASSETS	$ 1,204,830,245
Ratio of Net Actuarial Value of Assets to Pension Benefit Obligation	76.35%

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:		0.54%
Adjustments in Funded Ratio Due to Mergers or Changes in Assumption(s):		
Changes for Fiscal 1987	(0.72%)	
Changes for Fiscal 1988	(3.24%)	
Changes for Fiscal 1989	(3.80%)	
Changes for Fiscal 1992	1.34%	
Changes for Fiscal 1993	(1.25%)	
Changes for Fiscal 1994	(0.03%)	
Changes for Fiscal 1995	(1.73%)	
Changes for Fiscal 1996	(16.29%)	
Changes for Fiscal 1997	(3.65%)	
Changes for Fiscal 1998	(0.27%)	
Changes for Fiscal 1999	(0.97%)	
Changes for Fiscal 2000	(2.97%)	
Changes for Fiscal 2001	(0.23%)	
Changes for Fiscal 2003	0.45%	
Changes for Fiscal 2005	4.16%	
Changes for Fiscal 2006	(0.71%)	
Changes for Fiscal 2007	(0.09%)	
Changes for Fiscal 2008	(0.01%)	
Changes for Fiscal 2009	8.88%	
Changes for Fiscal 2010	(2.00%)	
Changes for Fiscal 2011	(0.02%)	
TOTAL Adjustments		(23.15%)
Amortization of Adjustments in Funded Ratio over 30 years:		
Changes for Fiscal 1987	0.58%	
Changes for Fiscal 1988	2.48%	
Changes for Fiscal 1989	2.79%	
Changes for Fiscal 1992	(0.85%)	
Changes for Fiscal 1993	0.75%	
Changes for Fiscal 1994	0.02%	
Changes for Fiscal 1995	0.92%	
Changes for Fiscal 1996	8.15%	
Changes for Fiscal 1997	1.70%	
Changes for Fiscal 1998	0.12%	
Changes for Fiscal 1999	0.39%	
Changes for Fiscal 2000	1.09%	
Changes for Fiscal 2001	0.08%	
Changes for Fiscal 2003	(0.12%)	
Changes for Fiscal 2005	(0.83%)	
Changes for Fiscal 2006	0.12%	
Changes for Fiscal 2007	0.01%	
Changes for Fiscal 2008	0.00%	
Changes for Fiscal 2009	(0.59%)	
Changes for Fiscal 2010	0.07%	
Changes for Fiscal 2011	0.00%	
TOTAL Amortization of Adjustments		16.88%
Target Ratio for Current Fiscal Year		93.62%
Actuarial Value of Assets Divided by PBO as of Fiscal 2011		76.35%

EXHIBIT X
CENSUS DATA

	Active	Terminated with Funds on Deposit	DROP	Retired	Total
Number of members as of June 30, 2010	3,989	501	162	1,749	6,401
Additions to Census					
Initial membership	270	21			291
Death of another member			(1)	26	25
Omitted in error last year				5	5
Adjustment for multiple records				11	11
Change in Status during Year					
Actives terminating service	(79)	79			
Actives who retired	(35)			35	
Actives entering DROP	(101)		101		
Term. members rehired	27	(27)			
Term. members who retire		(1)		1	
Retirees who are rehired					
Refunded who are rehired	12				12
DROP participants retiring			(30)	30	
DROP returned to work	7		(7)		
Omitted in error last year					
Eliminated from Census					
Refund of contributions	(63)	(85)			(148)
Deaths	(7)	(1)		(55)	(63)
Included in error last year					
Suspended Benefits					
Adjustment for Multiple Records		(1)			(1)
Number of members as of June 30, 2011	4,020	486	225	1,802	6,533

ACTIVES CENSUS BY AGE:

Age	Number Male	Number Female	Total Number	Average Salary	Total Salary
16 - 20	39	0	39	30,382	1,184,910
21 - 25	442	10	452	34,438	15,565,866
26 - 30	635	26	661	38,070	25,163,966
31 - 35	646	33	679	43,347	29,432,523
36 - 40	629	35	664	48,802	32,404,754
41 - 45	554	35	589	54,238	31,945,907
46 - 50	511	43	554	59,273	32,837,466
51 - 55	237	28	265	62,436	16,545,440
56 - 60	87	8	95	68,641	6,520,930
61 - 65	18	1	19	70,428	1,338,140
66 - 70	1	0	1	57,146	57,146
71 - 75	2	0	2	69,969	139,937
TOTAL	3,801	219	4,020	48,044	193,136,985

THE ACTIVE CENSUS INCLUDES 1,874 ACTIVES WITH VESTED BENEFITS, INCLUDING 51 ACTIVE FORMER DROP PARTICIPANTS. THE 225 CURRENT DROP PARTICIPANTS ARE EXCLUDED.

DROP PARTICIPANTS:

Age	Number Male	Number Female	Total Number	Average Benefit	Total Benefit
41 - 45	1	0	1	55,744	55,744
46 - 50	45	2	47	54,481	2,560,619
51 - 55	117	3	120	58,570	7,028,362
56 - 60	50	0	50	59,485	2,974,231
61 - 65	4	1	5	55,626	278,132
66 - 70	2	0	2	33,434	66,868
TOTAL	219	6	225	57,618	12,963,956

Replaced 11/28/11

TERMINATED MEMBERS DUE A DEFERRED RETIREMENT BENEFIT:

Age	Number Male	Number Female	Total Number	Average Benefit	Total Benefit
36 - 40	12	0	12	20,331	243,966
41 - 45	19	1	20	22,032	440,641
46 - 50	26	0	26	27,492	714,786
51 - 55	9	0	9	18,645	167,805
61 - 65	1	0	1	23,393	23,393
TOTAL	67	1	68	23,391	1,590,591

TERMINATED MEMBERS DUE A REFUND OF CONTRIBUTIONS:

Contributions Ranging From		To	Number	Total Contributions
0	-	99	50	2,295
100	-	499	115	29,688
500	-	999	50	35,634
1000	-	1999	57	81,937
2000	-	4999	58	179,808
5000	-	9999	46	330,493
10000	-	19999	27	415,838
20000	-	99999	15	394,549
		TOTAL	418	1,470,242

Replaced 11/28/11

REGULAR RETIREES:

Age	Number Male	Number Female	Total Number	Average Benefit	Total Benefit
41 - 45	3	0	3	60,153	180,458
46 - 50	44	1	45	43,962	1,978,273
51 - 55	186	5	191	42,299	8,079,164
56 - 60	259	9	268	41,808	11,204,551
61 - 65	325	6	331	38,794	12,840,656
66 - 70	190	4	194	35,895	6,963,587
71 - 75	144	2	146	33,723	4,923,524
76 - 80	69	0	69	28,857	1,991,121
81 - 85	68	0	68	25,879	1,759,797
86 - 90	17	0	17	28,625	486,623
91 - 99	2	0	2	27,381	54,762
TOTAL	1,307	27	1,334	37,828	50,462,516

DISABILITY RETIREES:

Age	Number Male	Number Female	Total Number	Average Benefit	Total Benefit
31 - 35	1	0	1	14,719	14,719
36 - 40	4	1	5	17,594	87,969
41 - 45	16	1	17	21,185	360,153
46 - 50	22	3	25	26,203	655,078
51 - 55	19	4	23	19,610	451,034
56 - 60	24	1	25	19,645	491,117
61 - 65	15	1	16	21,881	350,088
66 - 70	12	0	12	16,687	200,249
71 - 75	9	0	9	11,373	102,355
76 - 80	7	0	7	16,370	114,588
81 - 85	2	0	2	9,342	18,684
TOTAL	131	11	142	20,042	2,846,034

SURVIVORS:

Age	Number Male	Number Female	Total Number	Average Benefit	Total Benefit
0 - 25	13	18	31	5,763	178,641
26 - 30	0	3	3	14,145	42,434
31 - 35	1	1	2	13,947	27,893
36 - 40	1	7	8	19,274	154,188
41 - 45	0	7	7	27,965	195,757
46 - 50	0	11	11	22,103	243,130
51 - 55	0	15	15	21,826	327,387
56 - 60	2	22	24	25,061	601,458
61 - 65	0	22	22	16,693	367,243
66 - 70	1	24	25	18,175	454,373
71 - 75	0	41	41	20,504	840,679
76 - 80	1	52	53	16,019	849,012
81 - 85	0	57	57	13,164	750,328
86 - 90	0	14	14	17,123	239,728
91 - 99	0	13	13	9,166	119,164
TOTAL	19	307	326	16,538	5,391,415

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	26	13										39
21 - 25	80	131	80	100	45	16						452
26 - 30	63	95	84	92	86	231	10					661
31 - 35	27	41	40	47	58	230	227	9				679
36 - 40	27	24	12	32	23	125	256	155	10			664
41 - 45	4	14	12	12	13	58	117	204	150	5		589
46 - 50	5	14	6	12	4	34	69	93	190	120	7	554
51 - 55	1	2	3		5	22	32	34	78	68	20	265
56 - 60						4	14	15	22	12	28	95
61 - 65							3	6		2	8	19
66 - 70											1	1
71 & Over										1	1	2
Totals	233	334	237	295	234	720	728	516	450	208	65	4020

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	30,095	30,958										30,382
21 - 25	29,290	32,739	36,272	36,952	37,634	40,207						34,438
26 - 30	29,519	33,829	35,950	38,239	38,771	42,166	47,804					38,070
31 - 35	30,996	33,499	36,647	38,360	42,216	42,255	49,569	59,323				43,347
36 - 40	33,347	35,270	38,203	37,434	40,324	43,972	51,067	57,341	61,663			48,802
41 - 45	30,761	37,355	34,358	39,300	43,212	43,191	52,782	57,244	61,102	66,143		54,238
46 - 50	31,252	43,728	41,789	38,174	34,716	43,273	54,365	57,480	62,325	68,945	76,868	59,273
51 - 55	29,930	47,201	40,106		47,729	47,006	54,669	58,906	63,145	71,598	74,093	62,436
56 - 60						52,204	56,441	57,217	65,330	69,640	85,383	68,641
61 - 65							61,725	52,590		64,258	88,614	70,428
66 - 70											57,146	57,146
71 & Over										59,332	80,605	69,969
Average	30,180	33,996	36,410	37,775	39,928	42,803	51,449	57,406	62,192	69,694	80,882	48,044

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 - 35												0
36 - 40								12				12
41 - 45						1	19					20
46 - 50	1	2	1		3	19						26
51 - 55	1	1	2	3	2							9
56 - 60												0
61 - 65	1											1
66 & Over												0
Totals	3	3	3	3	5	20	19	12	0	0	0	68

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 - 35												0
36 - 40								20,330				20,330
41 - 45						41,265	21,020					22,032
46 - 50	47,817	32,750	39,455		39,419	23,356						27,492
51 - 55	8,094	38,423	23,644	15,616	13,577							18,645
56 - 60												0
61 - 65	23,393											23,393
66 & Over												0
Average	26,435	34,641	28,915	15,616	29,082	24,251	21,020	20,330	0	0	0	23,391

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	9	8	10	12	8	1						48
51 - 55	29	35	31	22	32	41	1					191
56 - 60	15	20	23	17	34	122	29	8				268
61 - 65	6	11	6	17	6	107	139	26	10	2	1	331
66 - 70	3	2	1	4	1	28	65	61	17	12		194
71 - 75					1	8	27	40	36	19	15	146
76 - 80						1	4	5	18	20	21	69
81 - 85							3	3	14	16	32	68
86 - 90							1		2	6	8	17
91 & Over										2		2
Totals	62	76	71	72	82	308	269	143	97	77	77	1334

AVERAGE ANNUAL BENEFITS PAYABLE TO 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	Average Benefit
0 - 50	49,305	46,251	53,915	38,893	37,426	39,717						44,974
51 - 55	43,811	43,705	42,481	46,458	39,566	40,095	29,966					42,299
56 - 60	46,963	42,402	45,958	40,312	40,529	43,295	36,431	24,162				41,808
61 - 65	51,861	44,117	43,338	44,704	41,424	40,296	38,287	31,107	27,293	21,273	17,759	38,794
66 - 70	50,414	25,948	31,508	40,393	44,783	37,128	40,436	35,167	24,319	24,672		35,895
71 - 75					23,944	44,914	37,002	42,154	31,872	22,336	18,883	33,723
76 - 80						18,971	41,214	39,514	40,177	26,992	16,510	28,857
81 - 85							27,359	33,458	40,373	32,301	15,478	25,879
86 - 90							26,346		49,396	33,171	20,308	28,625
91 & Over										27,381		27,381
Average	46,470	43,223	45,136	42,995	39,765	41,218	38,324	35,884	33,206	26,928	16,954	37,828

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		2		1	1						5
41 - 45	2	4	1	1		6	2	1				17
46 - 50	1	2		4	2	12	3	1				25
51 - 55		1				9	5	4	4			23
56 - 60					1	3	5	3	8	4	1	25
61 - 65						1	3	5	4	3		16
66 - 70							2	1	3	4	2	12
71 - 75							2				7	9
76 - 80								1	2		4	7
81 - 85							1				1	2
86 & Over												0
Totals	4	7	3	5	4	33	23	16	21	11	15	142

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	25,457		15,419		23,499	8,174						17,594
41 - 45	28,391	29,103	22,175	18,202		16,950	15,884	13,113				21,185
46 - 50	31,398	38,632		32,203	21,482	25,783	16,674	15,223				26,203
51 - 55		27,324				27,035	12,245	15,439	14,354			19,610
56 - 60					22,200	25,910	18,415	17,381	17,694	24,697	6,630	19,645
61 - 65						25,527	27,713	19,649	23,452	16,456		21,881
66 - 70							11,415	17,378	20,339	21,111	7,289	16,687
71 - 75							9,192				11,996	11,373
76 - 80								33,466	17,516		11,523	16,370
81 - 85							5,154				13,530	9,342
86 & Over												0
Average	28,409	31,572	17,671	29,402	22,166	23,653	15,852	18,208	18,515	21,146	10,987	20,042

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	5	10	1	4	4	3	2	2				31
21 - 25												0
26 - 30	2			1								3
31 - 35				1					1			2
36 - 40		1			2	2	2	1				8
41 - 45	1	2		2			1	1				7
46 - 50	2			1	1	1	3	3				11
51 - 55		2		2		4	3	1	1	2		15
56 - 60	1			1		5	5	4	4	4		24
61 - 65						2	6	8	2	1	3	22
66 - 70				1		3	7	4	1	5	4	25
71 - 75						1	5	4	13	4	14	41
76 - 80							4	3	8	9	29	53
81 - 85								3	4	9	41	57
86 - 90								1	3	4	6	14
91 & Over							1			2	10	13
Totals	11	15	1	13	7	21	39	35	37	40	107	326

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AVERAGE ANNUAL BENEFITS PAYABLE TO SURVIVORS OF FORMER MEMBERS:

Attained Ages	Completed Years Since Retirement											Average Benefit
	0	1	2	3	4	5- 9	10-14	15-19	20-24	25-29	30&Over	
0 - 20	4,955	5,512	2,745	5,426	8,537	8,693	3,079	3,956				5,763
21 - 25												0
26 - 30	14,457			13,521								14,145
31 - 35				26,141					1,752			13,947
36 - 40		27,363			25,050	18,612	14,312	10,878				19,273
41 - 45	33,422	39,968		33,695			2,698	12,313				27,965
46 - 50	33,003			27,722	26,947	20,658	22,098	11,835				22,103
51 - 55		27,107		17,697		27,846	16,541	25,253	32,743	9,388		21,826
56 - 60	35,590			30,904		24,169	28,752	29,153	21,148	17,290		25,061
61 - 65						15,702	20,128	16,956	16,406	26,018	6,864	16,693
66 - 70				27,189		23,300	24,589	28,443	2,795	7,199	8,150	18,175
71 - 75						45,565	13,160	41,314	27,384	14,499	10,719	20,504
76 - 80							20,509	31,729	22,730	21,943	10,085	16,019
81 - 85								17,149	15,762	21,217	10,851	13,164
86 - 90								4,959	25,600	20,921	12,381	17,123
91 & Over							2,898			13,721	8,882	9,166
Average	17,155	14,442	2,745	19,228	15,885	22,050	18,994	22,136	22,497	17,688	10,315	16,538

EXHIBIT XI
YEAR-TO-YEAR COMPARISON

	Fiscal 2011	Fiscal 2010	Fiscal 2009	Fiscal 2008
Number of Active Contributing Members	4,020	3,989	3,882	3,821
Number of Retirees & Survivors	1,802	1,749	1,688	1,631
DROP Participants	225	162	147	130
Number Terminated Due Deferred Benefits	68	59	55	55
Number of Terminated Due Refund	418	442	407	350
Active Lives Payroll (excludes DROP participants)	$ 193,136,985	$ 189,542,210	$ 178,913,097	$ 169,401,716
Retiree Benefits in Payment	$ 58,699,965	$ 56,056,554	$ 53,031,851	$ 48,416,581
Market Value of Assets	$1,154,482,040	$ 971,775,080	$ 865,547,030	$1,092,459,674
Ratio of Actuarial Value of Assets to Actuarial Accrued Liability	74.33%	74.21%	76.13%	85.78%
Actuarial Accrued Liability	$1,621,007,988	$1,536,258,543	$1,410,559,615	$1,317,161,382
Actuarial Value of Assets	$1,204,830,245	$1,140,054,175	$1,073,797,423	$1,129,809,421
UAL (Funding Excess)	$ 416,177,743	$ 396,204,368	$ 336,762,192	$ 187,351,961
P.V. of Future Employer Normal Contributions	$ 305,540,215	$ 335,984,027	$ 292,585,945	$ 277,566,364
P.V. of Future Employee Contributions	$ 206,989,105	$ 160,939,180	$ 150,094,699	$ 142,412,175
Present Value of Future Benefits	$2,133,537,308	$2,033,181,750	$1,853,240,259	$1,737,139,921

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	Fiscal 2012	Fiscal 2011	Fiscal 2010	Fiscal 2009
Employee Contribution Rate (For employees with earnings above the poverty level)	10.00%	8.00%	8.00%	8.00%
Required Tax Contributions as a Percentage of Projected Payroll	10.93%	11.09%	11.56%	12.20%
Actuarially Required Employer Contribution as a Percentage of Projected Payroll (For employees with earnings above the poverty level)	24.02%	24.97%	20.79%	13.89%
Actual Employer Contribution Rate (For employees with earnings above the poverty level)	23.25%	21.50%	14.00%	12.50%

Fiscal 2007	Fiscal 2006	Fiscal 2005	Fiscal 2004	Fiscal 2003	Fiscal 2002
3,632	3,534	3,532	3,431	3,360	3,322
1,555	1,477	1,434	1,379	1,315	1,278
134	111	103	114	120	145
54	52	45	42	36	30
298	249	189	181	143	133
$ 150,960,665	$ 140,175,740	$ 134,313,739	$ 128,144,746	$ 121,012,780	$ 114,422,827
$ 43,972,738	$ 39,649,619	$ 36,510,489	$ 34,076,169	$ 31,542,638	$ 29,610,698
$1,138,227,081	$ 963,805,222	$ 848,499,924	$ 752,274,788	$ 664,570,797	$ 620,860,572
86.02%	83.66%	80.88%	71.84%	69.69%	72.33%
$1,192,323,327	$1,089,280,137	$1,012,901,863	$1,010,016,864	$ 944,688,430	$ 888,963,640
$1,025,656,019	$ 911,329,622	$ 819,240,156	$ 725,615,787	$ 658,376,086	$ 642,947,201
$ 166,667,308	$ 177,950,515	$ 193,661,707	$ 284,401,078	$ 286,312,344	$ 246,016,439
$ 247,631,617	$ 230,234,335	$ 226,307,495	$ 192,151,099	$ 182,925,316	$ 166,298,912
$ 126,968,955	$ 118,092,552	$ 114,703,708	$ 94,736,659	$ 90,145,420	$ 82,398,183
$1,566,923,899	$1,437,607,024	$1,353,913,066	$1,296,904,623	$1,217,759,166	$1,137,660,735

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Fiscal 2008	Fiscal 2007	Fiscal 2006	Fiscal 2005	Fiscal 2004	Fiscal 2003
8.00%	8.00%	8.00%	8.00%	8.00%	8.00%
13.16%	12.83%	12.82%	13.11%	12.77%	12.17%
12.56%	14.01%	15.66%	22.51%	23.64%	20.78%
13.75%	15.50%	18.00%	24.00%	21.00%	18.25%

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 contribution rates effective July 1, 2011 changed from a fixed rate of 8% to a rate which is at least 8% but not greater than 10% based on the total contribution expressed as a percentage of payroll after applying all required tax contributions. The employee rate, when such contributions total 25% or less, is set at 8%. The employee rate then increases 0.25% for each 0.75% increase in the total rate, subject to a maximum rate of 10%. The change does not apply to members whose earnable compensation is less than or equal to the poverty guidelines issued by the U. S. Department of Health and Human Services. 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.

ACTIVE MEMBER, ANNUITANT, AND BENEFICIARY MORTALITY: RP 2000 Combined Healthy Table set back 1 years for males and 1 year for females

RETIREE COST OF LIVING INCREASES: The present value of future retirement benefits is based on benefits currently being paid by the system and includes previously granted cost of living increases. The present values do not include provisions for potential future increases not yet authorized by the Board of Trustees.

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

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

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

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

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

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

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

Ages	Retirement Rates
74 & Under	0.20
75 & Over	1.00

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

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

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

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.

Actuarially Required Net Direct Combined Contribution – The sum of the actuarially required employee contributions and net direct employer contributions after reduction for projected Insurance Premium Taxes due to the system.

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: