

**MUNICIPAL EMPLOYEES'
RETIREMENT SYSTEM**

ACTUARIAL VALUATION AS OF
JUNE 30, 2015

G. S. CURRAN & COMPANY, LTD.

Actuarial Services

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

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

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

December 8, 2015

Board of Trustees
Municipal Employees' Retirement System
7937 Office Park Boulevard
Baton Rouge, Louisiana 70809

Ladies and Gentlemen:

We are pleased to present our report on the actuarial valuation of the Municipal Employees' Retirement System for the fiscal year ending June 30, 2015. 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 Municipal Employees' Retirement System of the State of Louisiana. The primary purpose of this report is to determine the actuarially required contribution for the retirement system for the fiscal year ending June 30, 2016, and to recommend the net direct employer contribution rate for fiscal 2017. This report does not contain the information necessary for accounting disclosures as required by Governmental Accounting Standards Board (GASB) Statements 67 and 68; that information is included in a separate report. This report was prepared exclusively for the Municipal Employees' Retirement System for a specific limited purpose. It is not for the use or benefit of any third party for any purpose.

In our opinion, all of the assumptions on which this valuation is based are reasonable individually and in the aggregate. Both economic and demographic assumptions are based on our expectations for future experience for the fund. This report has been prepared in accordance with generally accepted actuarial principles and practices, and to the best of our knowledge and belief, fairly reflects the actuarial present values and costs stated herein. The undersigned actuaries are members of the American Academy of Actuaries and have met the qualification standards for the American Academy of Actuaries to render the actuarial opinions incorporated in this report, and are available to provide further information or answer any questions with respect to this valuation.

Sincerely,

G. S. CURRAN & COMPANY, LTD.

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


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

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**SUMMARY OF VALUATION RESULTS
MUNICIPAL EMPLOYEES' RETIREMENT SYSTEM – PLAN A**

Valuation Date:		June 30, 2015	June 30, 2014
Census Summary:	Active Members	4,926	4,894
	Retired Members and Survivors	3,262	3,177
	Terminated Due a Deferred Benefit	182	184
	Terminated Due a Refund	2,731	2,667

Payroll:	\$ 172,033,158	\$ 167,852,836
Benefits in Payment:	\$ 54,791,335	\$ 51,636,071
Funding Deposit Account	\$ 7,833,707	\$ 8,930,139
Frozen Unfunded Actuarial Accrued Liability:	\$ 73,553,869	\$ 74,454,702
Market Value of Assets (MVA):	\$ 698,984,365	\$ 730,072,543
Actuarial Asset Value (AVA):	\$ 770,402,847	\$ 751,235,484
Actuarial Accrued Liability (Entry Age Normal):	\$ 1,038,155,304	\$ 967,584,136
Funded Ratio (AVA/Entry Age Normal Accrued Liability):	74.21%	77.64%

	FISCAL 2016	FISCAL 2015
Employers' Normal Cost (July 1):	\$ 37,571,057	\$ 30,894,803
Amortization Cost (July 1):	\$ 6,365,283	\$ 6,191,251
Interest Adjusted Actuarially Required Contributions Including Estimated Administrative Costs:	\$ 46,646,383	\$ 39,623,854
Projected Ad Valorem and Revenue Sharing	\$ 6,389,026	\$ 6,057,083
Actuarially Required Net Direct Employer Contributions	\$ 40,257,357	\$ 33,566,771
Actuarially Required Net Direct Employer Contribution Rate	22.92%	19.48%
Actual Net Direct Employer Contribution Rate:	19.75%	20.75% †

Minimum Net Direct Employer Contribution Rate: For Fiscal 2016: 23.25% For Fiscal 2015: 19.25%

Employee Contribution Rate: 9.50% of Payroll

Actuarial Cost Method: Frozen Attained Age Normal Actuarial Cost Method

Valuation Interest Rate: 7.50% (Net of Investment Expense)

Census Exclusions: All individuals submitted by the system were included in the valuation.

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 Amortization Periods: Changes were made to the valuation interest rate, salary scale, mortality, retirement, DROP entry, and withdrawal rates. In addition, family statistics were updated.

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

† Includes 1% withdrawal from the Funding Deposit Account

COMMENTS ON DATA

For the valuation, the administrative director of the system furnished a census on electronic media 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, 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 VIII, there are 4,926 active members in Plan A, of whom, 1,867 members, including 238 participants in the Deferred Retirement Option Plan (DROP), have vested retirement benefits; 3,262 former Plan A members or their beneficiaries are receiving retirement benefits. An additional 2,913 former members of Plan A have contributions remaining on deposit with the system. This includes 182 former members who have vested rights or have filed reciprocal agreements for future retirement benefits. Census data on members of Plan B may be found in Exhibit XVII. There are 2,200 active members in Plan B, of whom, 785 members, including 76 DROP participants, have vested retirement benefits; 959 former members of Plan B or their beneficiaries are receiving retirement benefits. An additional, 1,289 former members of Plan B have contributions remaining on deposit with the system. Of this number, 71 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. For this valuation, the number of such records is de minimis.

In addition to the statistical information provided on the system's participants, the system's administrative director furnished general information related to other aspects of the system's expenses, benefits and funding. Except as stated below, valuation asset values as well as income and expenses for the fiscal year were based on information furnished by the system's auditor, the firm of Duplantier, Hrapmann, Hogan & Maher, L.L.P. As indicated in the system's audit report, the net market value of Plan A's assets was \$698,984,365 as of June 30, 2015. For Plan A, the net investment income for fiscal 2015 measured on a market value basis amounted to a loss of \$22,780,531. Contributions to Plan A for the fiscal year totaled \$56,226,535; benefits and expenses amounted to \$64,534,182.

The net market value of Plan B's assets was \$149,268,995 as of June 30, 2015. For Plan B, the net investment income for fiscal 2015 measured on a market value basis amounted to a loss of \$4,932,969. Contributions to Plan B for the fiscal year totaled \$12,731,003; benefits and expenses amounted to \$15,188,435.

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

COMMENTS ON ACTUARIAL METHODS AND ASSUMPTIONS

This valuation is based on the Frozen Attained Age Normal actuarial cost method with the unfunded actuarial accrued liability frozen as of June 30, 1989. Under the provisions of Louisiana R.S. 11:103 the unfunded accrued liability for Plan A, which was determined to be \$48,466,297 as of June 30, 1989, was amortized over forty years with payments increasing at 4.25% per year. The unfunded accrued liability for Plan B, which was determined to be \$9,853,175 as of June 30, 1989, was amortized over forty years with payments decreasing at 2% per year. In Plan A, payroll growth less than 4.25% per year will increase future amortization payments as a percent of payroll. In Plan B, any payroll growth or payroll decline less than 2% per year will reduce future amortization payments as a percent of payroll. Under the Frozen Attained Age Normal Cost Method, actuarial gains and losses are spread over future normal costs. Thus, favorable plan experience will lower future normal costs; unfavorable experience will cause future normal costs to increase. In addition, changes in benefits and assumptions are also spread over future normal costs.

Prior to the June 30, 2009 valuation, in any year in which the net direct employer contribution was set above the actuarially required employer contribution rate, excess funds collected, if any, were used to reduce the frozen unfunded actuarial accrued liability. In Plan B, the board elected to freeze the employer contribution rate in fiscal 2001. As a result of the additional contributions generated by this freeze in rates, the unfunded accrued liability will be fully amortized by June 30, 2023. Effective with the June 30, 2009 valuation, any excess funds collected as a result of a freeze in employer contributions are credited to the Funding Deposit Account. Funds deposited into the Funding Deposit Account can be used to reduce the unfunded accrued liability, reduce future normal costs, offset net direct employer contributions as determined by the board of trustees, or fund a cost of living increase (subject to restrictions).

The current year actuarial assumptions utilized for this report are based on the results of an actuarial experience study for the period July 1, 2009 – June 30, 2014, unless otherwise specified in this report. Based on the results of the actuarial experience study and expectations of future experience, retirement, disability, and withdrawal rates were changed. Family statistics were also updated based on more recent measures available from the United States Census Bureau. The new assumptions are listed in the back of this report. In the case of mortality, the data was assigned credibility weighting and combined with a standard table to produce current levels of mortality. This mortality was then projected forward to a period equivalent to the estimated duration of the fund's liabilities. The RP-2000 Healthy Annuitant Sex Distinct Tables (set forward 2 years for males and set forward

1 year for females) projected to 2028 using scale AA as published by the Society of Actuaries were selected for annuitant and beneficiary mortality. For employees, the RP-2000 Employee Sex Distinct Tables set back 2 years for both males and females was selected. The RP-2000 Disabled Lives Mortality Table set back 5 years for males and set back 3 years for females was selected for disabled annuitants. Setbacks in the employee and disability tables were used to approximate mortality improvement.

In determining the valuation interest rate, consideration was given to several factors. First consensus estimates of rates of return, standard deviations, and correlation coefficients for asset classes derived from various asset consulting firms were developed. These factors were used to derive forward estimates of the Fund's portfolio earnings rate. Consideration was also given to the report of Meketa Investment Group on 30 year Return Projections of future expected rates of return for the current portfolio asset allocation. As a result, in order to better reflect lower expected returns, we have lowered the assumed rate of return from 7.75% to 7.50% for the June 30, 2015 valuation. The salary increase rate was lowered based on to 5.00% based on forward estimates of future increases in pay resulting from three sources; inflation, merit, and productivity. An inflation rate of 2.875% was implicit in both the assumed rate of return and rate of salary increases.

All assumptions are based on estimates of future long-term experience for the fund. All calculations, recommendations, and conclusions are based on the assumptions specified. To the extent that prospective experience differs from that assumed, adjustments will be required to contribution levels. Such differences will be revealed in future actuarial valuations. The net effect of all changes in assumptions was to increase the normal cost accrual rate by 3.7614% in Plan A and 1.6342% in Plan B.

CHANGES IN PLAN PROVISIONS

The following changes in plan provisions were enacted during the 2015 Regular Session of the Louisiana Legislature:

ACT 38 allows the Local Tax Division of the Board of Tax Appeals to join the Municipal Employees' Retirement System pursuant to an agreement with the Board.

ACT 285 allows the City of Mandeville, at its discretion, to pay the Municipal Employees' Retirement System, from its own funds, all or a portion of the employee contributions.

ACT 370 allows the Municipal Employees' Retirement System to provide a cost of living increase pursuant to the requirements of R.S. 11:243(G)(3), notwithstanding the provisions of R.S. 11:243(G)(1), from the balance in the systems' funding deposit account.

ASSET EXPERIENCE

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

<u>Plan A</u>	<u>Market Value</u>	<u>Actuarial Value</u>
2006	8.6%	10.7% *
2007	18.1% ‡	10.8% ‡
2008	1.1%	9.0%
2009	-13.8% ‡	0.9% ‡*
2010	11.0%	5.9%
2011	10.5%	4.2%
2012	-4.8% †	0.7% †
2013	4.3%	0.7%
2014	12.3%	5.8%
2015	-3.1%	3.7%

<u>Plan B</u>	<u>Market Value</u>	<u>Actuarial Value</u>
2006	8.5%	13.7% *
2007	17.4% ‡	10.6% ‡
2008	1.3%	8.8%
2009	-13.7% ‡	0.9% ‡*
2010	10.9%	5.8%
2011	10.5%	4.2%
2012	-4.7% †	1.0% †
2013	4.1%	0.9%
2014	11.7%	5.6%
2015	-3.2%	3.5%

* Includes the effect of a change in asset valuation method.

‡ Includes the impact of inclusion of the prior period adjustment for investment income as income in fiscal year.

† Based upon asset values which include an unaudited “best estimate” of the value of a receivable related to the FIA Leveraged Fund

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. 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 2015, Plan A earned \$3,009,754 and Plan B earned \$1,103,493 of dividends, interest and other recurring income. In addition, Plan A had net realized and unrealized capital losses on investments of \$22,486,593 while the total of such losses for Plan B amounted to \$5,326,972. Investment expenses were \$3,303,692 for Plan A and \$709,490 for Plan B. The geometric mean of the market value rates of return measured over the last ten years was 4.0% for Plan A and 3.9% for Plan B. For the last twenty years, the geometric mean returns were 5.6% for Plan A and 5.4% for Plan B.

The actuarial rate of return is presented for comparison to the assumed long-term rate of return of 7.75% used for the prior valuation. This rate is calculated based on the smoothed value of assets subject to constraints as given in Exhibit VI for Plan A and Exhibit XV for Plan B. Investment income used to calculate this yield is based upon a smoothing of investment income above or below the valuation interest rate. The difference between rates of return on an actuarial and market value

basis results from the smoothing utilized. In the future, yields in excess of the 7.50% assumption will reduce future costs; yields below 7.50% will increase future costs. For Plan A, the net actuarial investment earnings for fiscal 2015 was \$30,429,825 less than the actuarial assumed earnings rate and \$6,841,192 less for Plan B. These actuarial losses increased the normal cost accrual rate by 2.4859% for Plan A and 1.3303% for Plan B.

At the end of each fiscal year, a review of the data is made to identify current members of Plan A and Plan B who have consecutive service credit in both plans that have not been addressed in previous transfers of assets and liabilities between the Plan A and Plan B trust funds pursuant to the provisions of R.S. 11: 1862(F). In the course of reviewing data for the June 30, 2015 valuation we found no such members of Plan A with Plan B service credit and 4 such members of Plan B with Plan A service. Based upon a valuation of the liabilities for service in the previous plan, we recommend a transfer of \$159,924 with accrued interest thereon from June 30, 2015 be made from the Plan A trust to the Plan B trust for fiscal 2015.

PLAN A – DEMOGRAPHICS AND LIABILITY EXPERIENCE

A reconciliation of the census for the plan is given in Exhibit IX. The average active member is 48 years old with 9.89 years of service and an annual salary of \$34,923. The plan's active membership, inclusive of DROP participants, increased by 32 members during the fiscal year. The plan has experienced a decrease in the active plan population of 142 members over the last five years. A review of the active census by age indicates that over the last ten years the population under age thirty and above age fifty has increased while the proportion of active members age thirty-one through fifty has decreased. Over the same ten-year period the plan showed an increase in members with less than five years of service and more than twenty-five years of service. The average regular retiree is 70 years old with a monthly benefit of \$1,609. The number of retirees and beneficiaries receiving benefits from the system increased by 85 during the fiscal year; over the last five years the number of retirees has increased by 355.

Plan liability experience for fiscal 2015 was favorable. Withdrawals and deaths were above projected levels; disabilities were below projected levels. In addition, salary increases were below projected levels. All of these factors generally reduce costs. DROP entries and active retirements were above projected levels. This would tend to partially offset the plan's positive experience. Plan liability gains decreased the normal cost accrual rate by 0.9169%.

PLAN B – DEMOGRAPHICS AND LIABILITY EXPERIENCE

A reconciliation of the census for the plan is given in Exhibit XVII. The average active member is 49 years old with 9.45 years of service and an annual salary of \$31,777. The plan's active membership, inclusive of DROP participants, increased by 32 members during the fiscal year. The plan has experienced an increase in the active plan population of 3 members over the last five years. A review of the active census by age indicates that over the last ten years the population in the under fifty age group has decreased while the proportion of active members over age fifty increased. Over the same ten-year period the plan showed no significant shift in the proportion of the active membership by service group. The average regular retiree is 73 years old with a monthly

benefit of \$962. The number of retirees and beneficiaries receiving benefits from the system increased by 43 during the fiscal year; over the last five years the number of retirees has increased by 123.

Plan liability experience for fiscal 2015 was favorable. Disabilities were below projected levels, withdrawals and retiree deaths were above projected levels; salary increases were below projected levels. These factors tend to reduce costs. Retirements and DROP entries were above projected levels. Both of these factors partially offset the plan's positive experience. Plan liability gains decreased the normal cost accrual rate by 0.1844%.

FUNDING ANALYSIS AND RECOMMENDATIONS

Actuarial funding of a retirement system is a process whereby funds are accumulated over the working lifetimes of employees in such a manner as to have sufficient assets available at retirement to pay for the lifetime benefits accrued by each member of the system. The required contributions are determined by an actuarial valuation based on rates of mortality, termination, disability, and retirement, as well as investment return and other statistical measures specific to the particular group. Each year a determination is made of two cost components, and the actuarially required contributions are based on the sum of these two components plus administrative expenses. These two components are the normal cost and the amortization payment on the unfunded actuarial accrued liability. The normal cost refers to the portion of annual cost based on the salary of active participants. The term unfunded accrued liability (UAL) refers to the excess of the present value of plan benefits over the sum of current assets and future normal costs. Each year the UAL grows with interest and is reduced by payments. Under the funding method used for both plans, changes in plan experience, benefits, or assumptions do not affect the unfunded actuarial accrued liability. These items increase or decrease future normal costs.

In order to establish the actuarially required contribution in any given year, it is necessary to define the assumptions, funding method, and method of amortizing the UAL. Thus, the determination of what contribution is actuarially required depends upon the funding method and amortization schedules employed. Regardless of the method selected, the ultimate cost of providing benefits is dependent upon the benefits, expenses, and investment earnings. Only to the extent that some methods accumulate assets more rapidly and thus produce greater investment earnings does the funding method affect the ultimate cost.

Under the provisions of R.S. 11:103, excess or deficient contributions typically decrease or increase future normal costs. However, if the minimum net direct employer contribution is scheduled to decrease, the board may maintain the contribution rate at some level above the minimum recommended rate. Pursuant to R. S. 11:105 and R. S. 11:107, such excess contributions are credited to the Funding Deposit Account.

For Plan A, the derivation of the actuarially required contribution for the current fiscal year is given in Exhibit I. The normal cost for fiscal 2016 as of July 1, 2015 is \$37,571,057. The amortization payment on the plan's frozen unfunded actuarial accrued liability as of July 1, 2015, is \$6,365,283. The total actuarially required contribution is determined by adjusting the value for interest (since payments are made throughout the fiscal year) and adding estimated administrative expenses. As

given on line 15 of Exhibit I the total actuarially required contribution for fiscal 2016 is \$46,646,383. When this amount is reduced by projected tax contributions and revenue sharing funds, the resulting employers' net direct actuarially required contribution for fiscal 2016 is \$40,257,357. This is 22.92% of the projected Plan A payroll for fiscal 2016.

Liability and asset experience as well as changes in assumptions and benefits can increase or decrease plan costs. In addition to these factors, any COLA granted in the prior fiscal year would increase required contributions. New entrants to the system can also increase or decrease costs as a percent of payroll depending upon their demographic distribution and other factors related to prior plan experience. Finally, contributions above or below requirements may reduce or increase future costs.

The effects of various factors on the cost structure for Plan A are outlined below:

Employer's Normal Cost Accrual Rate – Fiscal 2015	19.7460%
Factors Increasing the Normal Cost Accrual Rate:	
Asset Experience	2.4859%
Change in Valuation Interest Rate	2.4445%
Change in Other Assumptions	1.3169%
Factors Decreasing the Normal Cost Accrual Rate:	
New Members	1.4475%
Plan Liability Experience	0.9169%
Contribution Experience	0.1576%
Employer's Normal Cost Accrual Rate – Fiscal 2016	23.4712%

Required net direct employer contributions are also affected by the available ad valorem taxes and revenue sharing funds which the system receives each year. When these funds change as a percentage of payroll, net direct employer contributions are adjusted accordingly. We estimate that for Plan A these funds collected in fiscal 2016 will increase by 0.12% of payroll. We also estimate the amortization payment on the fund's UAL will increase by 0.03% of projected payroll. The net effect of the above changes in the cost structure of the system resulted in a minimum actuarially required net direct employer contribution rate for fiscal 2016 for Plan A of 22.92%; the actual employer contribution rate for fiscal 2016 is 19.75% of payroll. R.S. 11:103 requires that the net direct employer contributions be rounded to the nearest 0.25%, hence, after accounting for the anticipated contribution shortfall, we are recommending a minimum net direct employer contribution rate for Plan A of 23.25% for fiscal 2017.

For Plan B, the derivation of the actuarially required contribution for the current fiscal year is given in Exhibit X. The normal cost for fiscal 2016 as of July 1, 2015 is \$9,204,425. The amortization payment on the plan's frozen unfunded actuarial accrued liability as of July 1, 2015, is \$537,204. The total actuarially required contribution is determined by adjusting the value for interest (since payments are made throughout the fiscal year) and adding estimated administrative expenses. As given on line 15 of Exhibit X the total actuarially required contribution for fiscal 2016 is \$10,544,183. When this amount is reduced by projected tax contributions and revenue sharing

funds, the resulting employers' net direct actuarially required contribution for fiscal 2016 is \$7,930,409. This is 11.04% of the projected Plan B payroll for fiscal 2016.

The effects of various factors on the cost structure for Plan B are outlined below:

Employer's Normal Cost Accrual Rate – Fiscal 2015	12.2581%
Factors Increasing the Normal Cost Accrual Rate:	
Asset Experience	1.3303%
Change in Valuation Interest Rate	1.3052%
Change in Other Assumptions	0.3290%
Factors Decreasing the Normal Cost Accrual Rate:	
New Members	0.8124%
Liability Experience	0.1844%
Contribution Experience	0.0401%
Employer's Normal Cost Accrual Rate – Fiscal 2016	14.1856%

We estimate that for Plan B the funds collected from ad valorem taxes and revenue sharing funds in fiscal 2016 will increase by 0.13% of payroll. We also estimate that the amortization payment on the fund's UAL will decrease by 0.05% of projected payroll. The net effect of the above changes in the cost structure of the system resulted in a minimum actuarially required net direct employer contribution rate for fiscal 2016 for Plan B of 11.04%; the actual employer contribution rate for fiscal 2016 is 9.50% of payroll. R.S. 11:103 requires that the net direct employer contributions be rounded to the nearest 0.25%, hence, after accounting for the anticipated contribution shortfall, we are recommending a minimum net direct employer contribution rate for Plan B of 11.25% for fiscal 2017.

Both Plan A and Plan B have Funding Deposit Account Credit Balances. Since the Board elected to offset direct employer contributions by 1% in Plan A and 0.5% in Plan for fiscal 2015, the balance in the interest adjusted Funding Deposit Account was reduced for the value of these contributions interest adjusted to the end of the year. Pursuant to board action, \$1,722,998 was withdrawn from the Plan A Funding Deposit Account and \$347,496 from the Plan B Funding Deposit Account to offset employer contributions for fiscal 2015. Once these amounts were adjusted for interest to the end of the year, the June 30, 2015 balance in the Funding Deposit Account was \$7,833,707 for Plan A and \$3,008,116 for Plan B. The balance in these accounts may be used to reduce the outstanding unfunded accrued liability, reduce the future normal costs, reduce contributions for specified fiscal years, or fund cost of living increases (subject to limitations).

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions, changes in economic or demographic assumptions, completion of amortization payments or credit schedules, and changes in plan provisions or applicable law. Analysis of the effect of all these factors is beyond the scope of this report.

We have, however, calculated the sensitivity of the plans' costs to two factors. First, based on current assets and demographics, for each percentage under (over) performance of the return on the actuarial value of assets, there will be a corresponding increase (reduction) in the normal cost accrual rate of 0.63% for Plan A and 0.32% for Plan B. We have also determined that a 1% reduction in the valuation interest rate for each Plan would increase the actuarially required contribution rate for fiscal 2015 by 9.43%; for Plan A and 5.09% in Plan B. Please note that the above results are only intended to serve as an illustration of the impact of a change in the valuation interest rate. Any actual change in the valuation interest rate should only be effected with a review of all other plan assumptions.

In addition to calculating the actuarially required contribution to the fund, we have also calculated the ratio of the system's assets to liabilities. When the actuarial value of assets is divided by the entry age normal accrued liability for the fund the result is 74.21% for Plan A and 77.55% for Plan B as of June 30, 2015. This value in isolation does not give a measure of the ability of the fund to pay benefits in the future or indicate that future contributions are likely to be greater or less than current contributions. In addition, the ratio cannot be used to compare the relative strength of different retirement systems. However, the trend of this ratio over time can give some insight into the financial health of the plan. Even in this regard caution is warranted since market fluctuations in asset values and changes in plan assumptions can distort the underlying trends in this value.

COST OF LIVING INCREASES

During calendar 2015 the actual cost of living (as measured by the US Department of Labor CPI-U) increased by 0.12%. Cost of living provisions for the system are detailed in R.S. 11:1761 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 2% of each retiree's original benefit. R.S. 11:246 provides cost of living increases for retirees and beneficiaries over the age of 65 equal to 2% of the benefit in payment on October 1, 1977, or the date the benefit was originally received if retirement commenced after that date. R.S. 11:241 provides that cost of living benefits shall be in the form (unless the board otherwise specifies) of $\$X \times (A+B)$ where X is at most \$1 and "A" represents the number of years of credited service accrued at retirement or at death of the member or retiree and "B" is equal to the number of years since retirement or since death of the member or retiree to June 30th of the initial year of such increase. The provisions of this subpart do not repeal provisions relative to cost of living adjustments contained within the individual laws governing systems; however, they are to be controlling in cases of conflict.

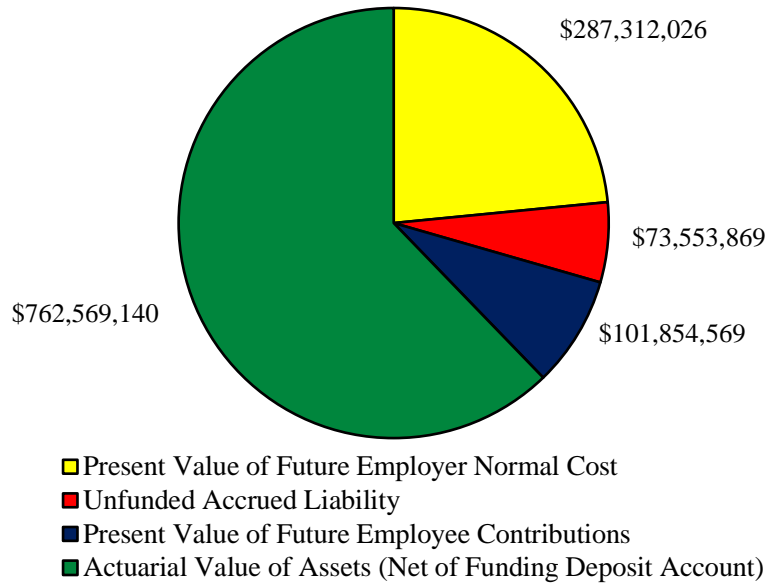
In addition, Act 113 of the 2008 Regular Legislation Session provides for a COLA of 3% of the normal monthly benefit but not less than \$20 per month. Although this COLA is permanent, it may only be granted once. This one-time cost of living increase may only be paid from excess interest earnings.

Based upon the irrevocable election of the Board of Trustees to accept the alternative method for determining eligibility to authorize cost of living increases under Act 170 of the 2013 Legislative Session, the ratio of the plan's assets to benefit obligations must meet the criteria established in R.S. 11:243. Under this section, the system would only be authorized to grant a COLA under R. S. 11:241, R.S. 11:246, or R. S. 11: 1761 in fiscal years in which the rate of return on an actuarial basis exceeds the valuation interest rate and one of the following applies:

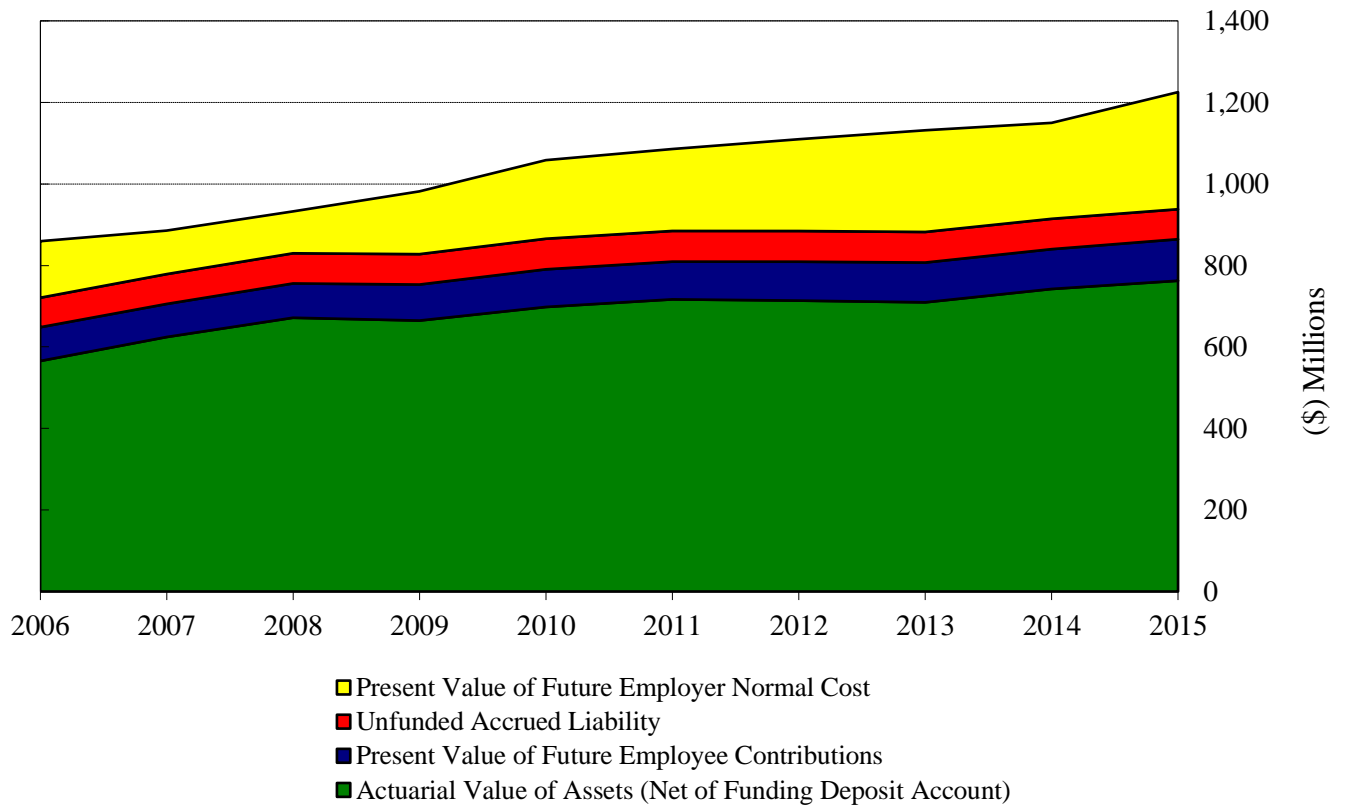
1. The system has a funded ratio of 90% or more and has not granted a benefit increase to retirees, survivors, and beneficiaries in the most recent fiscal year.
2. The system has a funded ratio of 80% or more and has not granted a benefit increase to retirees, survivors, and beneficiaries in the two most recent fiscal years.
3. The system has a funded ratio of 70% or more and has not granted a benefit increase to retirees, survivors, and beneficiaries in the three most recent fiscal years.

We have determined that for fiscal 2015, neither plan had excess interest earnings; hence no cost of living increase is payable to regular retirees.

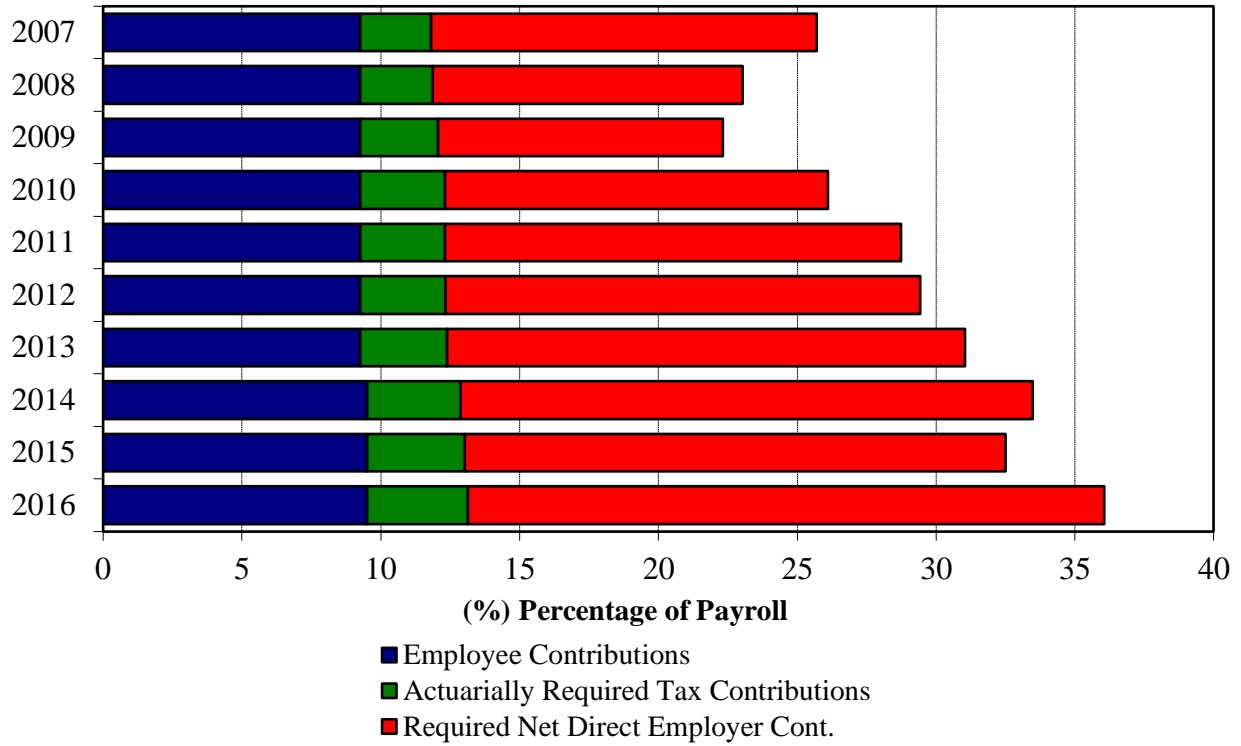
Plan A – Components of Present Value of Future Benefits June 30, 2015



Plan A – Components of Present Value of Future Benefits

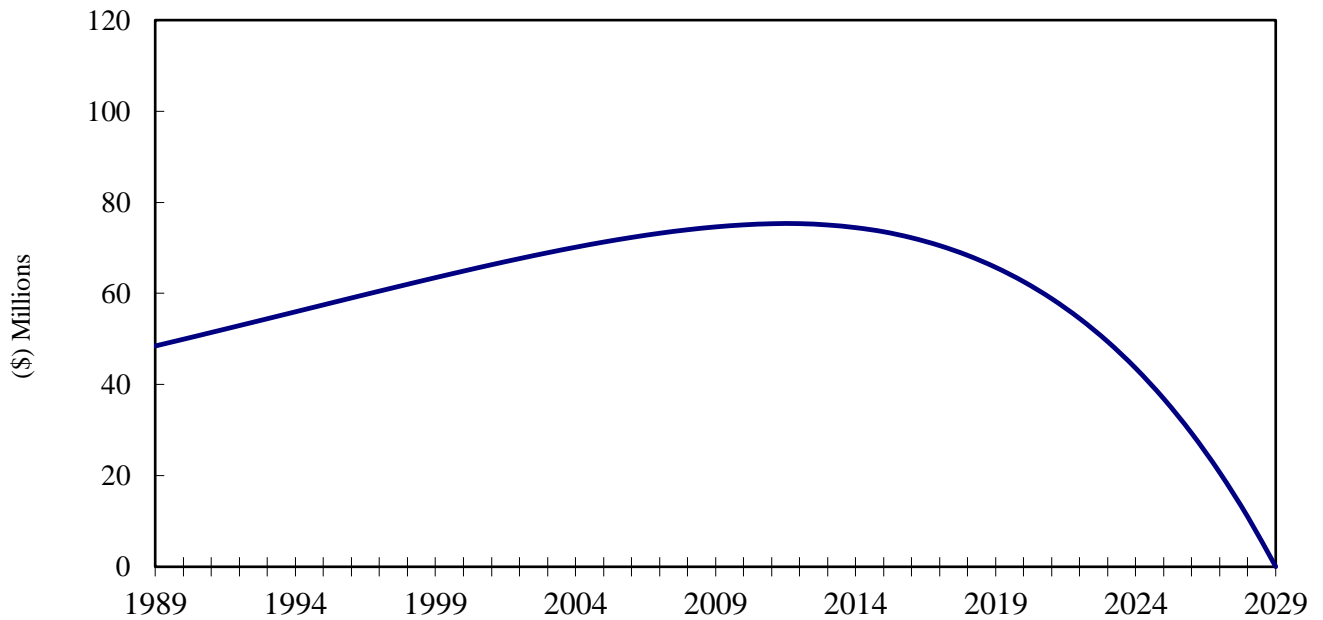


Plan A – Components of Actuarial Funding

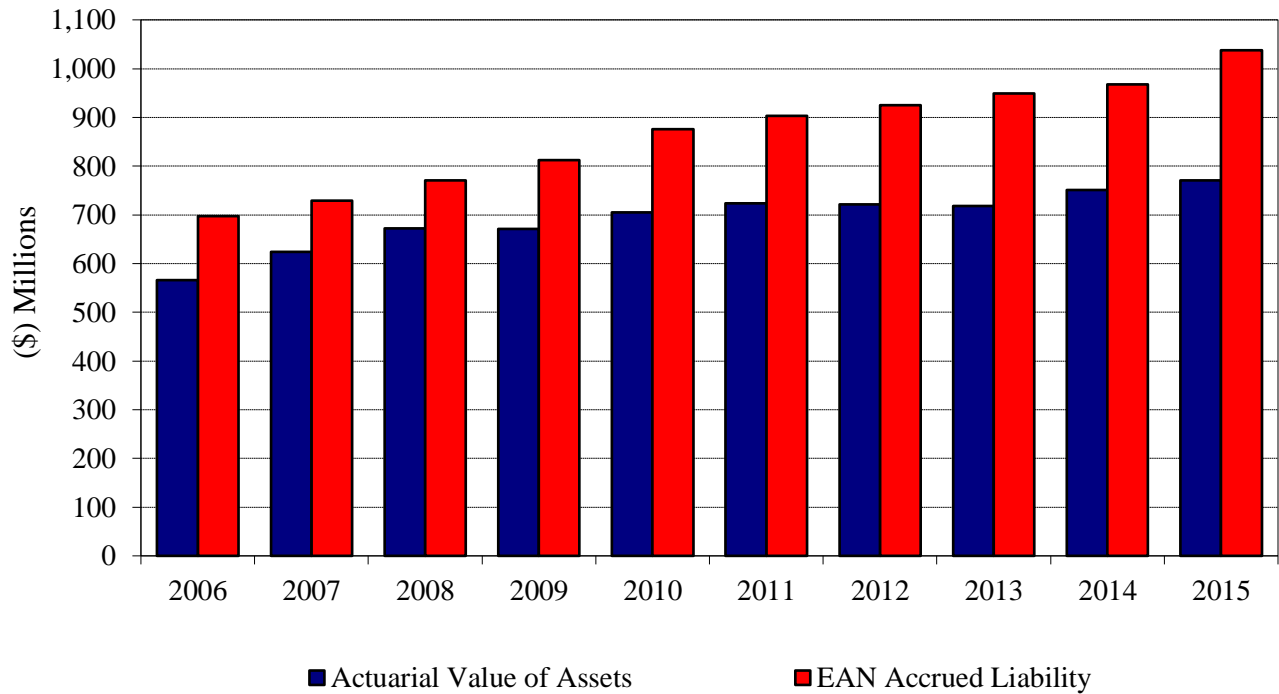


Projected Tax Contributions consist of Projected Ad Valorem and Revenue Sharing Funds as a percent of payroll

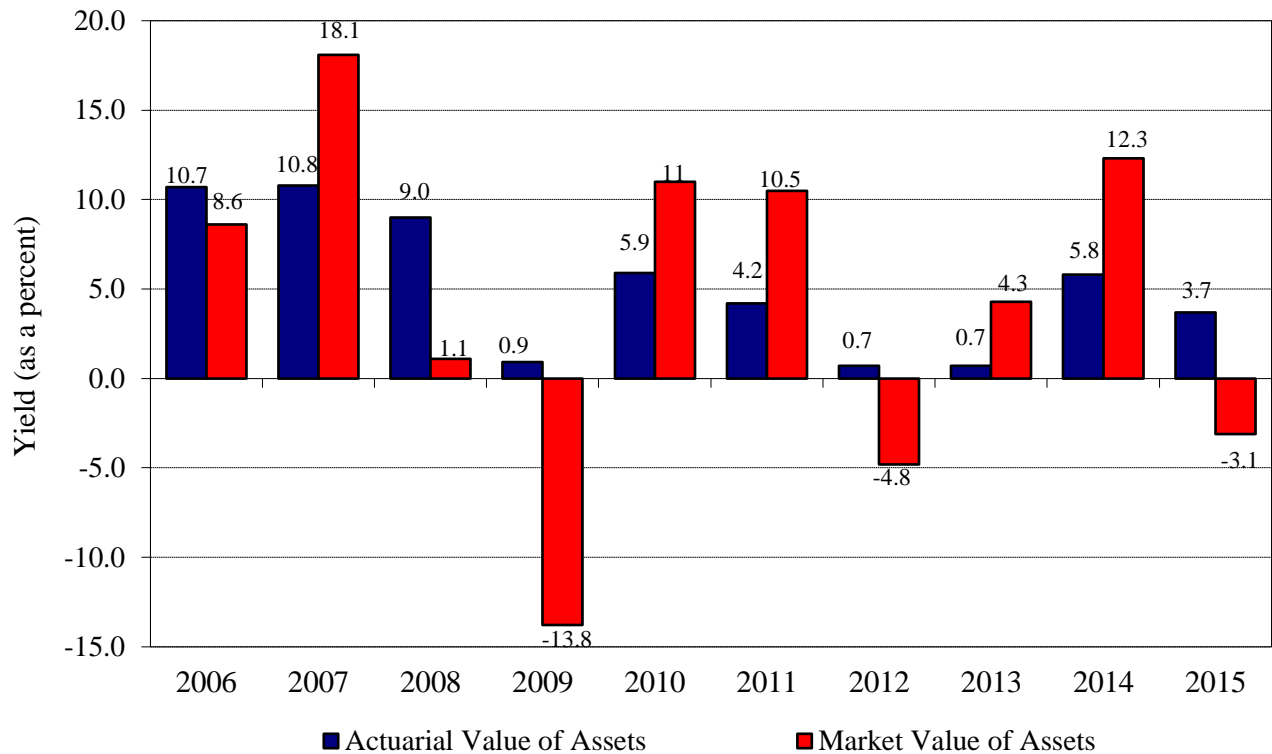
Plan A – Frozen Unfunded Accrued Liability



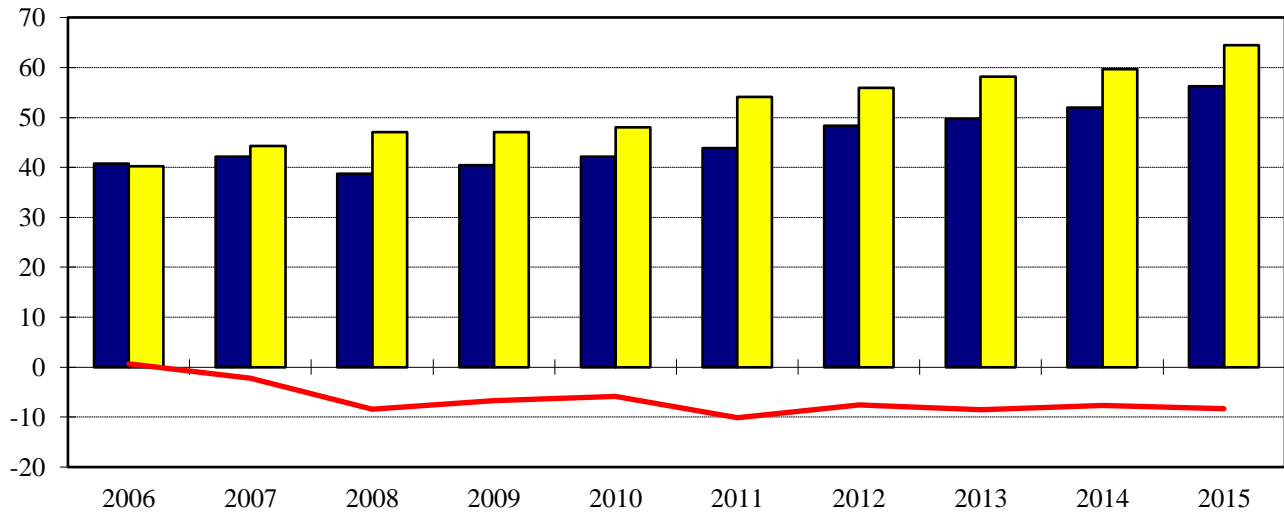
Plan A – Actuarial Value of Assets vs. EAN Accrued Liability



Plan A – Historical Asset Yield

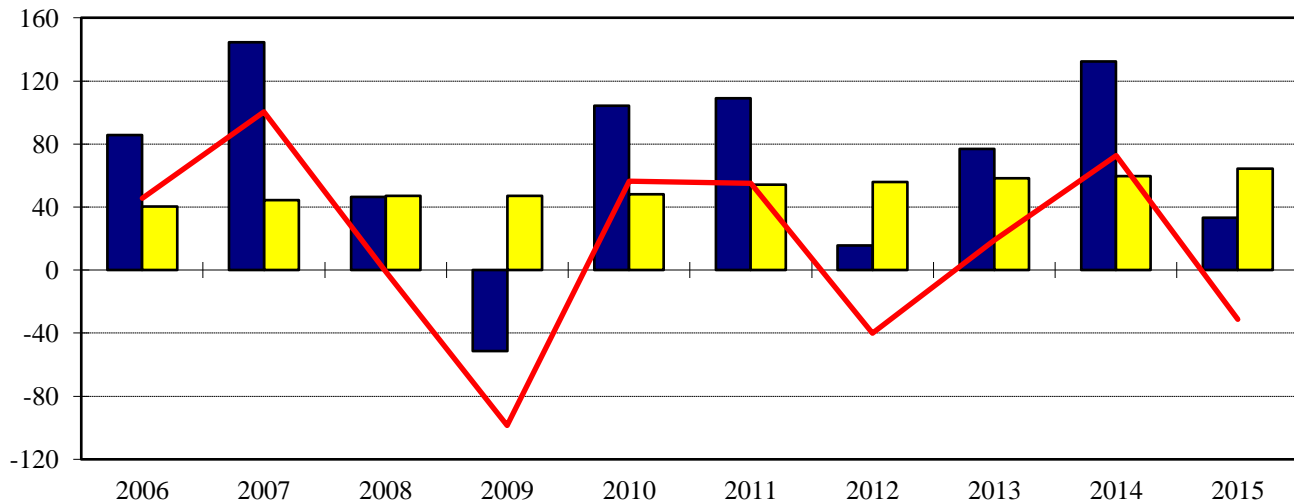


Plan A – Net Non-Investment Income



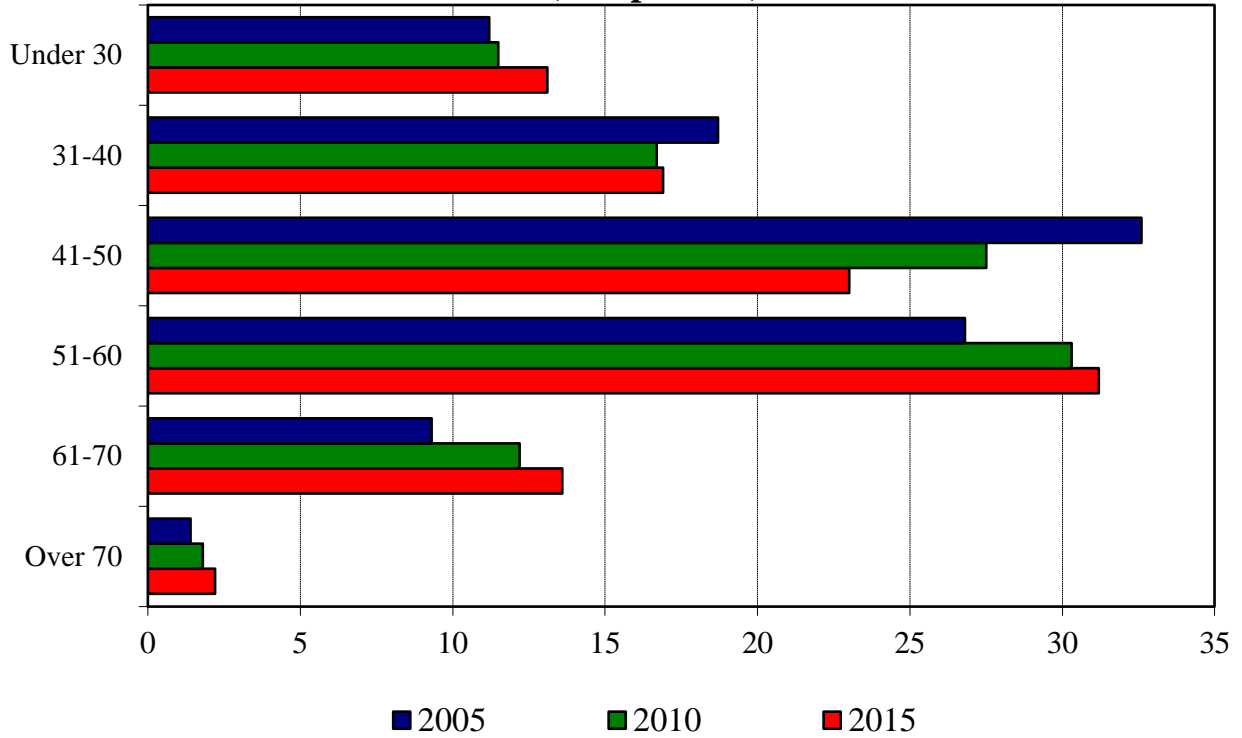
		2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Non-Investment Income (\$Mil)	■	40.8	42.1	38.7	40.4	42.1	43.9	48.3	49.7	52.0	56.2
Benefits and Expenses (\$Mil)	■	40.2	44.3	47.1	47.1	48.0	54.1	55.9	58.2	59.7	64.5
Net Non-Investment Income (\$Mil)	—	0.6	-2.2	-8.4	-6.7	-5.9	-10.2	-7.6	-8.5	-7.7	-8.3

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

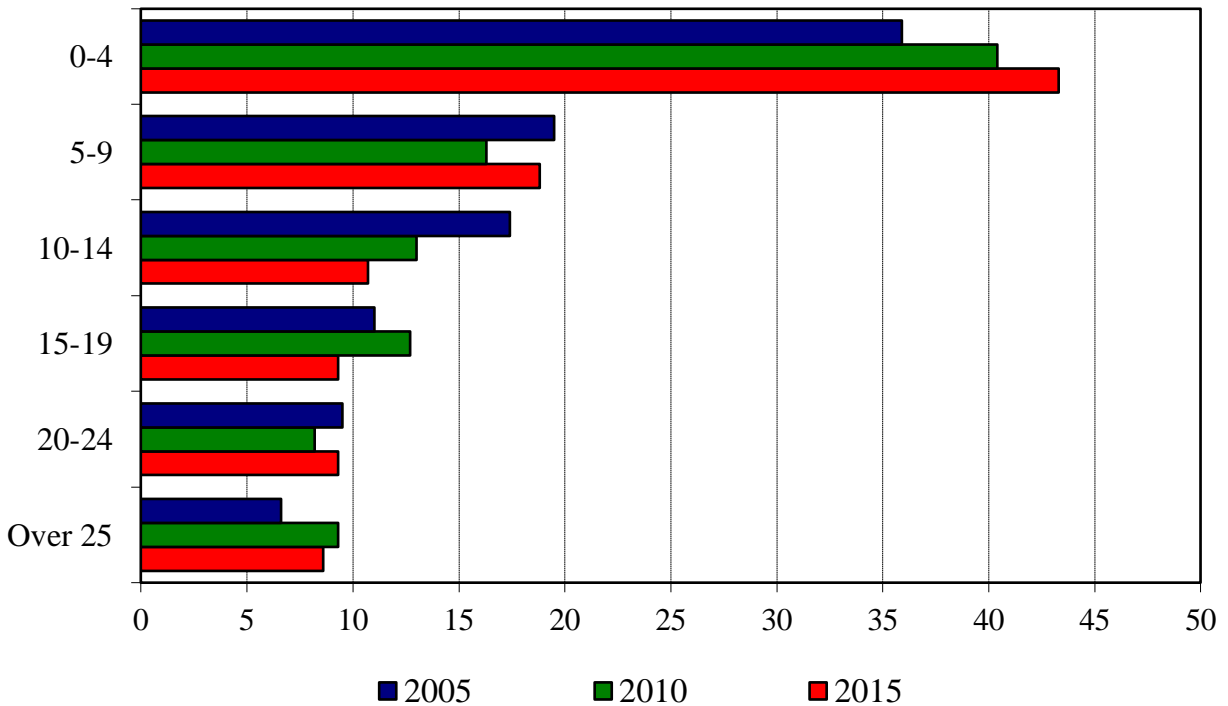


		2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total Income (\$Mil)	■	85.8	144.6	46.3	-51.3	104.3	108.9	15.8	77.0	132.4	33.4
Benefits and Expenses (\$Mil)	■	40.2	44.3	47.1	47.1	48.0	54.1	55.9	58.2	59.7	64.5
Net Change in MVA (\$Mil)	—	45.6	100.3	-0.8	-98.4	56.3	54.8	-40.1	18.8	72.7	-31.1

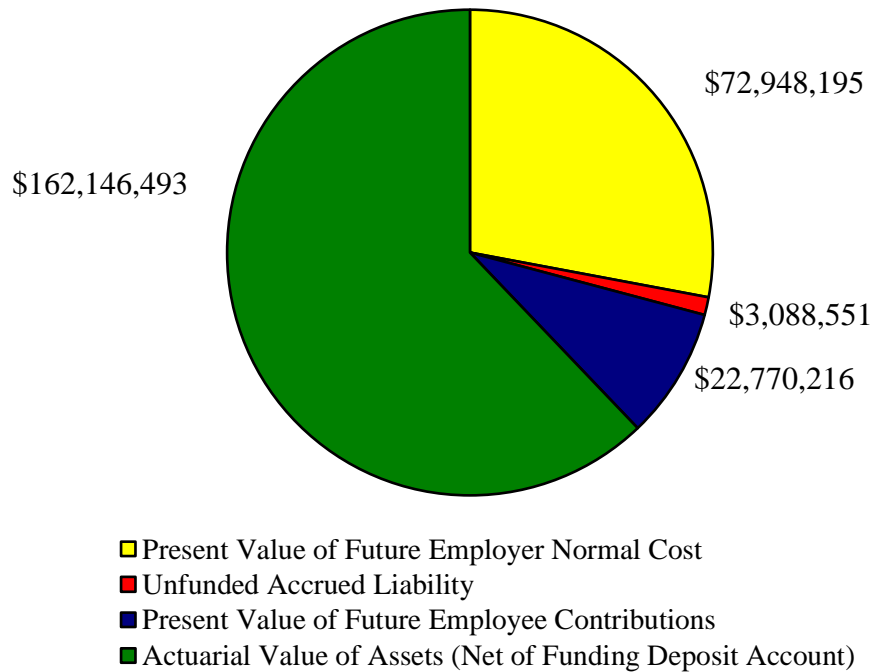
Plan A – Active – Census By Age
(as a percent)



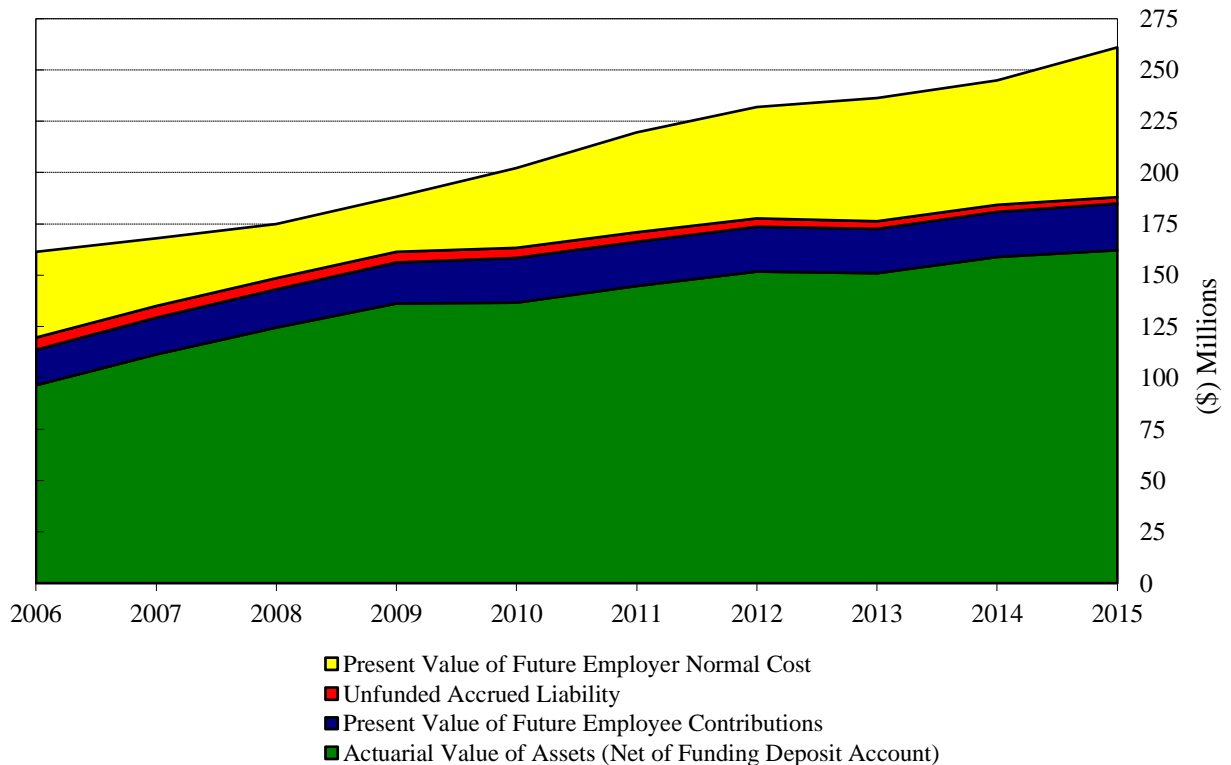
Plan A – Active – Census By Service
(as a percent)



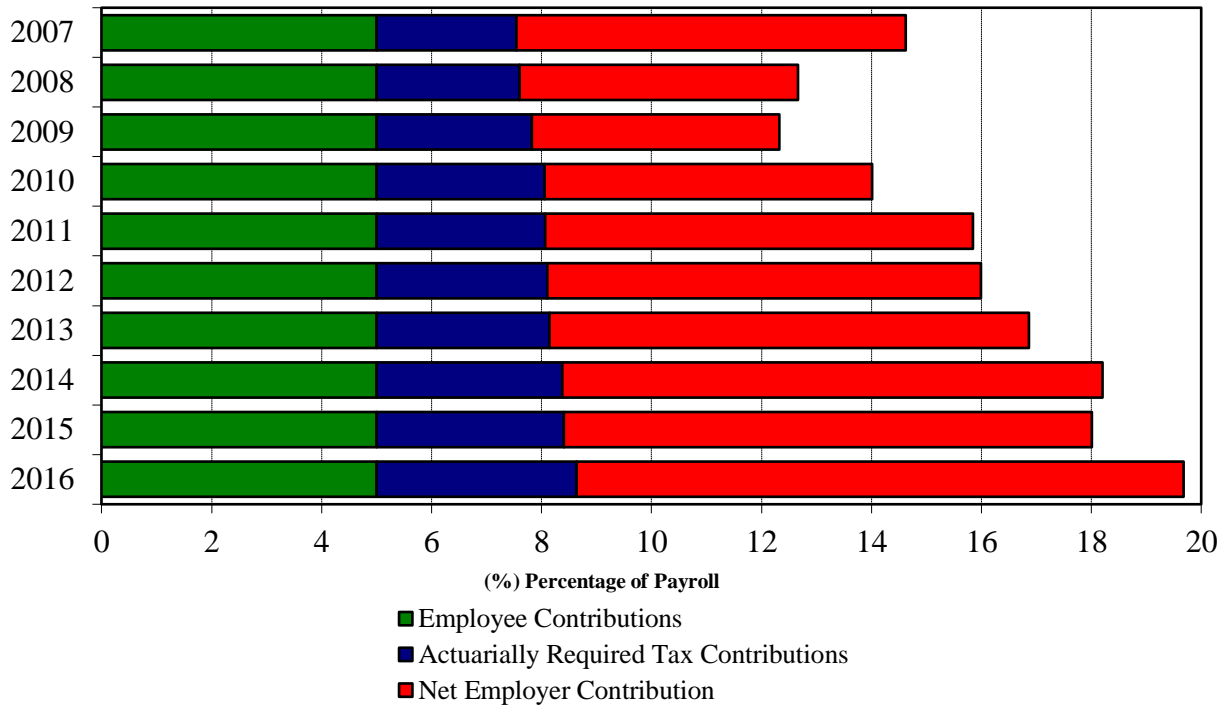
Plan B – Components of Present Value of Future Benefits June 30, 2015



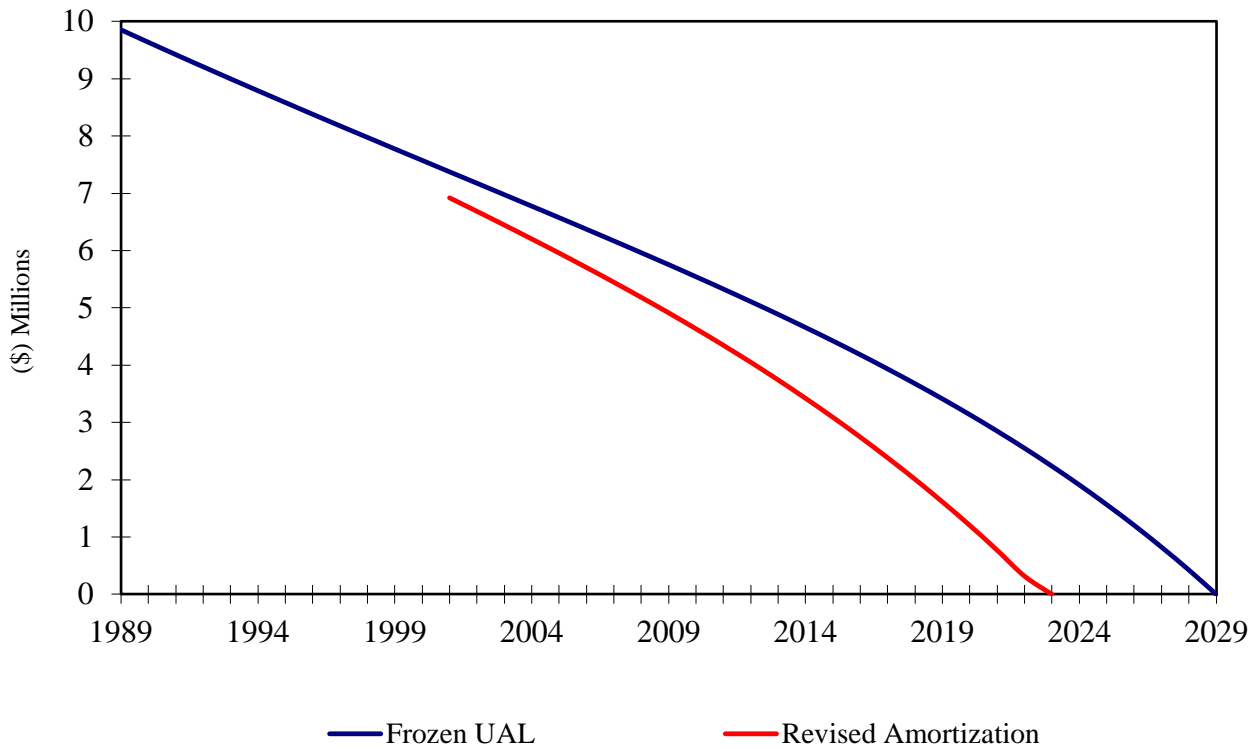
Plan B – Components of Present Value of Future Benefits



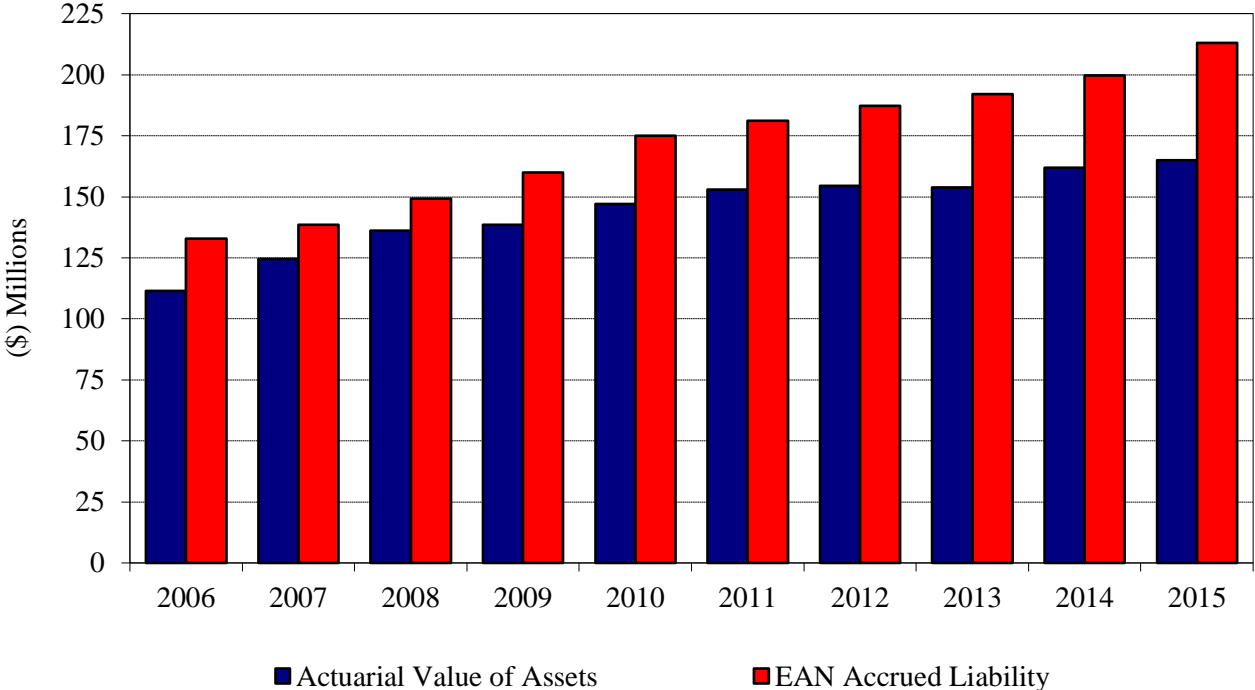
Plan B – Components of Actuarial Funding



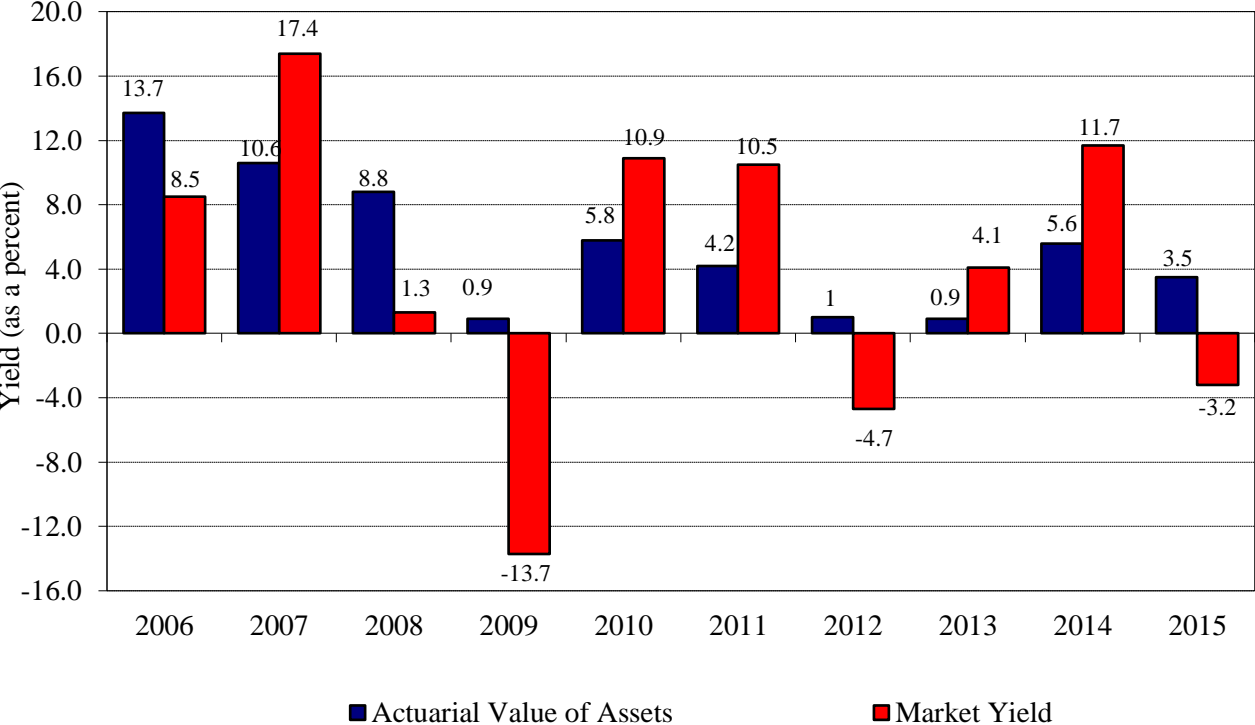
Plan B – Frozen Unfunded Accrued Liability



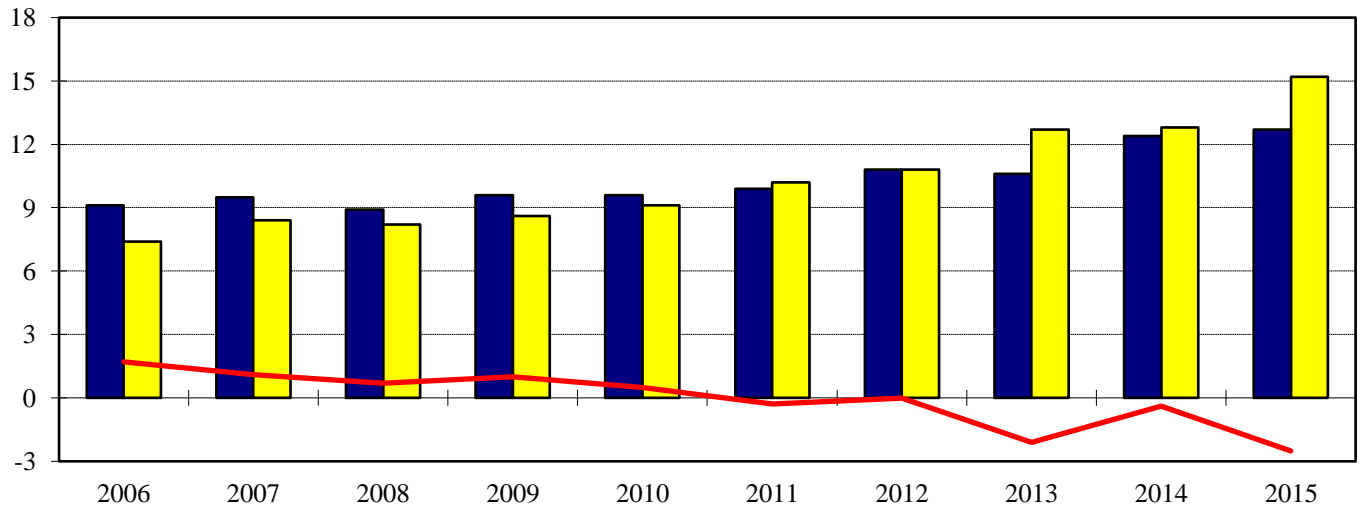
Plan B – Actuarial Value of Assets vs. EAN Accrued Liability



Plan B – Historical Asset Yield

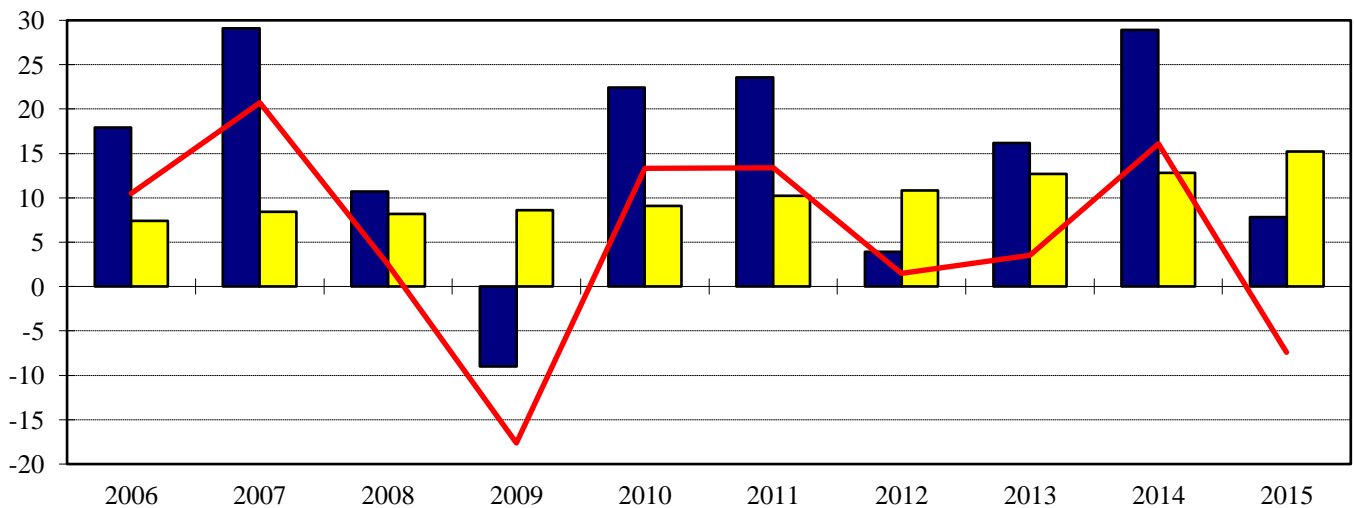


Plan B – Net Non-Investment Income



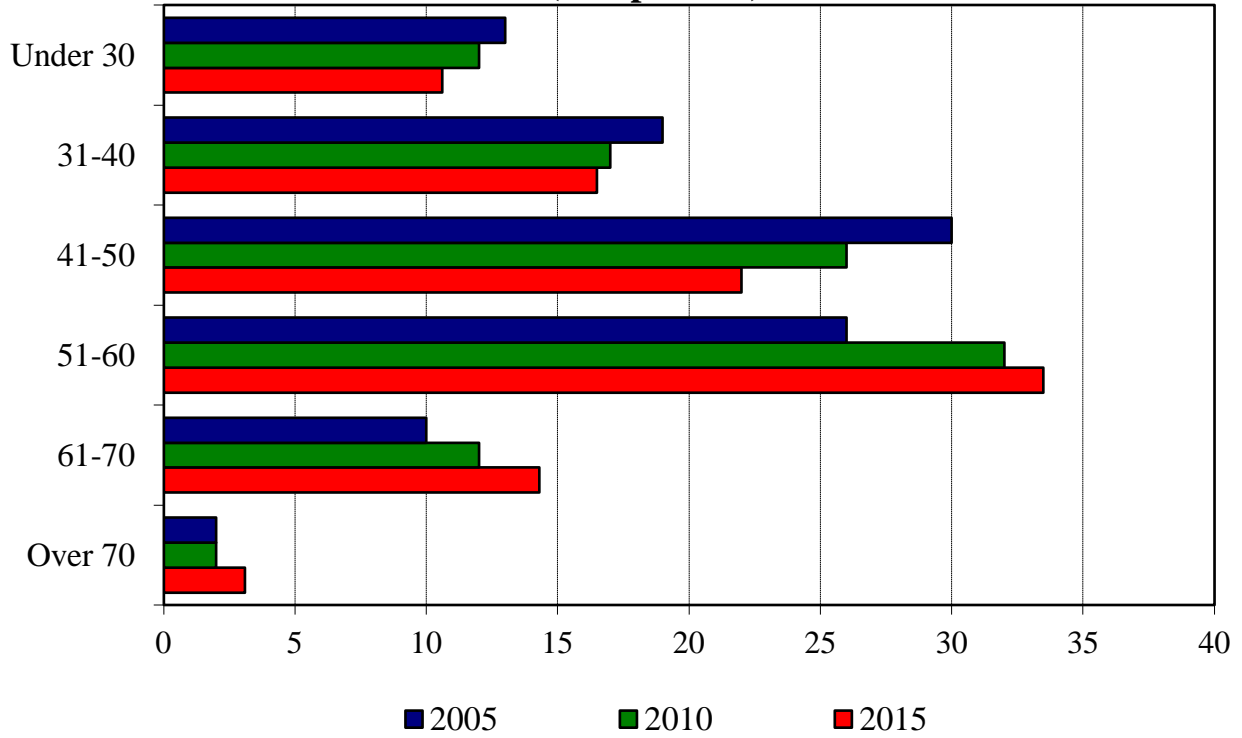
		2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Non-Investment Income (\$Mil)	■	9.1	9.5	8.9	9.6	9.6	9.9	10.8	10.6	12.4	12.7
Benefits and Expenses (\$Mil)	■	7.4	8.4	8.2	8.6	9.1	10.2	10.8	12.7	12.8	15.2
Net Non-Investment Income (\$Mil)	—	1.7	1.1	0.7	1.0	0.5	-0.3	0.0	-2.1	-0.4	-2.5

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



		2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total Income (\$Mil)	■	17.9	29.1	10.7	-9.0	22.4	23.6	3.9	16.2	28.9	7.8
Benefits and Expenses (\$Mil)	■	7.4	8.4	8.2	8.6	9.1	10.2	10.8	12.7	12.8	15.2
Net Change in MVA (\$Mil)	—	10.5	20.7	2.5	-17.6	13.3	13.4	1.5	3.5	16.1	-7.4

Plan B – Active – Census By Age (as a percent)



Plan B – Active – Census By Service (as a percent)

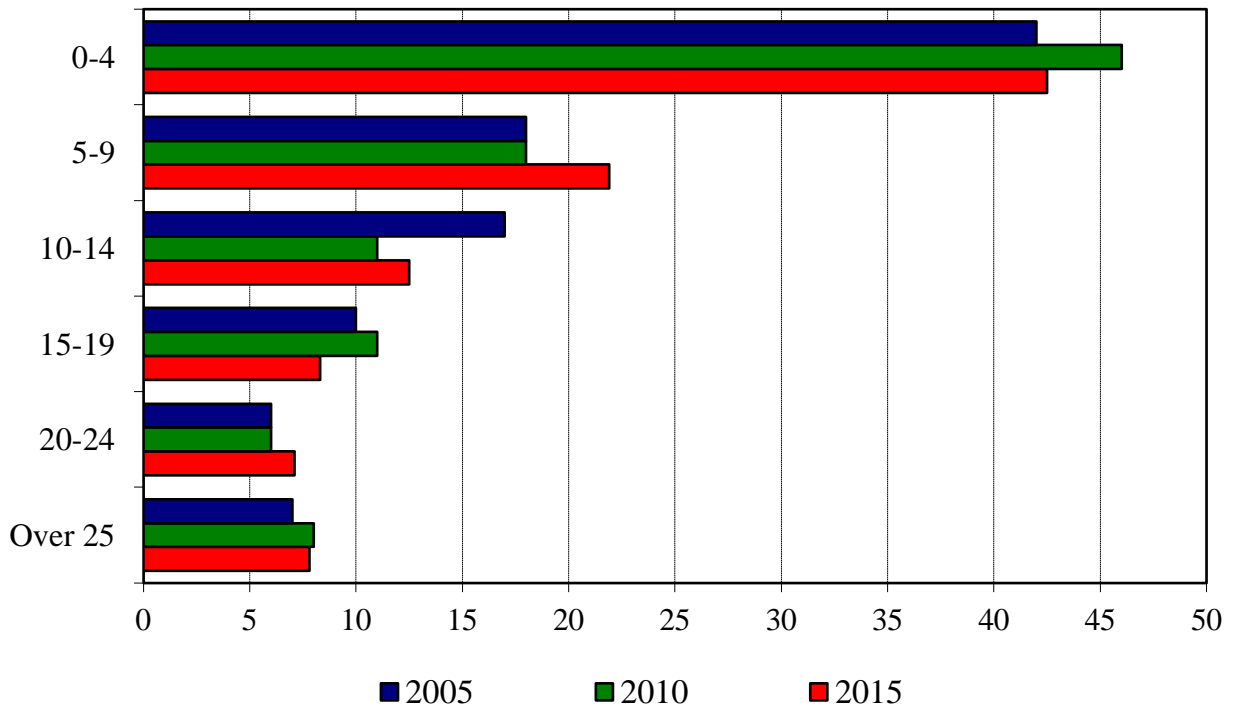


EXHIBIT I
PLAN A: ANALYSIS OF ACTUARIALLY REQUIRED CONTRIBUTIONS

1.	Present Value of Future Benefits	\$ 1,225,289,604
2.	Funding Deposit Account Credit Balance	\$ 7,833,707
3.	Frozen Unfunded Actuarial Accrued Liability	\$ 73,553,869
4.	Actuarial Value of Assets	\$ 770,402,847
5.	Present Value of Future Employee Contributions	\$ 101,854,569
6.	Present Value of Future Employer Normal Costs (1 + 2 – 3 – 4 – 5).....	\$ 287,312,026
7.	Present Value of Future Salaries.....	\$ 1,224,106,753
8.	Employer Normal Cost Accrual Rate (6 ÷ 7)	23.471158%
9.	Projected Fiscal 2016 Salary for Current Membership.....	\$ 160,073,300
10.	Employer Normal Cost as of July 1, 2015 (8 × 9).....	\$ 37,571,057
11.	Amortization Payment on Frozen Unfunded Accrued Liability with Payments increasing at 4.25% per year	\$ 6,365,283
12.	Total Employer Normal Cost & Amortization Payment (10 + 11).....	\$ 43,936,340
13.	Employer Normal Cost and Amortization Payment Interest Adjusted for Midyear Payment	\$ 45,554,167
14.	Estimated Administrative Cost for Fiscal 2016.....	\$ 1,092,216
15.	Gross Employer Actuarially Required Contribution for Fiscal 2016 (13 + 14)	\$ 46,646,383
16.	Projected Ad Valorem Tax Contributions for Fiscal 2016	\$ 6,259,163
17.	Projected Revenue Sharing Funds for Fiscal 2016	\$ 129,863
18.	Employers' Minimum Net Direct Actuarially Required Contribution for Fiscal 2016 (15 – 16 – 17).....	\$ 40,257,357
19.	Projected Payroll for Fiscal 2016.....	\$ 175,617,628
20.	Employers' Minimum Net Direct Actuarially Required Contribution as a % of Projected Payroll for Fiscal 2016 (18 ÷ 19).....	22.92%
21.	Actual Employer Contribution Rate for 2016.....	19.75%
22.	Contribution Shortfall (Excess) as a Percentage of Payroll (20 – 21)	3.17%
23.	Increase (Reduction) to Following Year Payment for Contribution Shortfall (Excess).....	0.41%
24.	Minimum Recommended Net Direct Employer Contribution Rate for Fiscal 2017 (20 + 23, Rounded to nearest 0.25%)	23.25%

EXHIBIT II
PLAN A: PRESENT VALUE OF FUTURE BENEFITS

PRESENT VALUE OF FUTURE BENEFITS FOR ACTIVE MEMBERS:

Retirement Benefits.....	\$ 610,480,539
Survivor Benefits.....	9,832,837
Disability Benefits.....	10,201,962
Vested Termination Benefits.....	29,315,829
Refunds of Contributions	17,693,514

TOTAL Present Value of Future Benefits for Active Members..... \$ 677,524,681

PRESENT VALUE OF FUTURE BENEFITS FOR TERMINATED MEMBERS:

Terminated Vested Members Due Benefits at Retirement.....	\$ 15,908,019
Terminated Members with Reciprocals	
Due Benefits at Retirement	976,775
Terminated Members Due a Refund	2,914,855

TOTAL Present Value of Future Benefits for Terminated Members..... \$ 19,799,649

PRESENT VALUE OF FUTURE BENEFITS FOR RETIREES:

Regular Retirees

Maximum.....	\$ 191,689,791
Option 1	0
Option 2	187,057,399
Option 3	70,331,169
Option 4	2,176,195

TOTAL Regular Retirees..... \$ 451,254,554

Disability Retirees..... 18,924,232

Survivors & Widows..... 52,882,149

Reserve for Accrued Retiree DROP Account Balances..... 4,904,339

TOTAL Present Value of Future Benefits for Retirees & Survivors..... \$ 527,965,274

TOTAL Present Value of Future Benefits..... \$ 1,225,289,604

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

CURRENT ASSETS:

Cash in Banks	\$ 10,978,113
Contributions and Taxes Receivable.....	3,506,712
Accrued Interest and Dividends.....	1,157,579
Investments Receivable.....	2,390,376
Due (to) from Other Funds	(538,283)
Other Current Assets.....	575,422

TOTAL CURRENT ASSETS..... \$ 18,069,919

Property Plant & Equipment..... \$ 869,683

INVESTMENTS:

Equities	\$ 328,275,505
Hedge Fund Investments.....	115,272,571
Real Estate	96,821,302
Fixed Income	58,124,426
Private Equity	57,875,554
Cash Equivalents.....	35,187,722

TOTAL INVESTMENTS..... \$ 691,557,080

TOTAL ASSETS

CURRENT LIABILITIES:

Accounts Payable	\$ 375,858
Refunds Payable.....	411,828
Investments Payable.....	196,096
Due to Plan B	159,924
Other Current Liabilities	2,081,869

TOTAL CURRENT LIABILITIES..... \$ 3,225,575

OTHER CONTROLLING INTEREST

MARKET VALUE OF ASSETS..... \$ 698,984,365

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

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

Fiscal year 2015	\$ (79,045,238)
Fiscal year 2014	29,763,811
Fiscal year 2013	(21,849,970)
Fiscal year 2012	(86,502,955)
Fiscal year 2011	<u>15,459,113</u>
 Total for five years	 \$ (142,175,239)

Deferral of excess (shortfall) of invested income:

Fiscal year 2015 (80%)	\$ (63,236,190)
Fiscal year 2014 (60%)	17,858,287
Fiscal year 2013 (40%)	(8,739,988)
Fiscal year 2012 (20%)	(17,300,591)
Fiscal year 2011 (0%)	<u>0</u>
 Total deferred for year	 \$ (71,418,482)

Market value of plan net assets, end of year..... \$ 698,984,365

Preliminary actuarial value of plan assets, end of year \$ 770,402,847

Actuarial value of assets corridor

85% of market value, end of year	\$ 594,136,710
115% of market value, end of year	\$ 803,832,020

Final actuarial value of plan net assets, end of year \$ 770,402,847

EXHIBIT IV
PLAN A: PRESENT VALUE OF FUTURE CONTRIBUTIONS

Employee Contributions to the Annuity Savings Fund	\$	101,854,569
Employer Normal Contributions to the Pension Accumulation Fund		287,312,026
Employer Amortization Payments to the Pension Accumulation Fund		73,553,869
Funding Deposit Account Credit Balance		(7,833,707)
TOTAL PRESENT VALUE OF FUTURE CONTRIBUTIONS	\$	454,886,757

EXHIBIT V
PLAN A: CHANGE IN FROZEN UNFUNDED ACTUARIAL ACCRUED LIABILITY

Prior Year Frozen Unfunded Accrued Liability	\$	74,454,702
Interest on Frozen Unfunded Accrued Liability	\$	5,770,239
Employer Normal Cost for Prior Year	30,894,803	
Interest on the Normal Cost	2,394,347	
Administrative Expenses	1,367,711	
Interest on Expenses	52,010	
TOTAL Factors Increasing UAL	\$	40,479,110
Direct Employer Contributions	\$	34,062,068
Interest on Employer Contributions	1,295,277	
Ad Valorem Taxes and Revenue Sharing	5,937,609	
Interest on Ad Valorem Taxes and Revenue Sharing Funds	225,789	
Contribution Shortfall (Excess)	(1,790,550)	
Interest on Contribution Shortfall (Excess)	(138,768)	
Withdrawals from Funding Deposit Account	1,722,998	
Interest on Withdrawal from FDA	65,520	
TOTAL Factors Decreasing UAL	\$	41,379,943
NET Change in Frozen Unfunded Accrued Liability	\$	(900,833)
CURRENT YEAR FROZEN UNFUNDED ACCRUED LIABILITY	\$	73,553,869

EXHIBIT VI
PLAN A: ANALYSIS OF CHANGE IN ASSETS

Actuarial Value of Assets (June 30, 2014)	\$	751,235,484
INCOME:		
Member Contributions	\$	15,293,103
Employer Contributions		34,062,068
Irregular Contributions		1,093,679
Ad Valorem Taxes and Revenue Sharing		5,937,609
Transfer to Plan B		(159,924)
Total Contributions	\$	56,226,535
Net (Depreciation) in Fair Value of Investments	\$(22,486,593)	
Net (Income) of Non-Controlling Interests		(763,919)
Interest & Dividend Income		1,474,620
Alternative Investment Income.....		2,178,779
Miscellaneous Income		120,274
Investment Expense		(3,303,692)
Net Investment Income	\$	(22,780,531)
TOTAL Income	\$	33,446,004
EXPENSES:		
Retirement Benefits	\$	53,049,604
DROP Disbursements		7,030,869
Refunds of Contributions.....		3,607,850
Funds Transferred to another System		1,208,474
Transfers between Plans		(1,730,326)
Administrative Expenses		1,367,711
TOTAL Expenses	\$	64,534,182
Net Market Value Income for Fiscal 2015 (Income – Expenses)	\$	(31,088,178)
Unadjusted Fund Balance as of June 30, 2015 (Fund Balance Previous Year + Net Income).....	\$	720,147,306
Adjustment for Actuarial Smoothing.....	\$	50,255,541
Actuarial Value of Assets: (June 30, 2015).....	\$	770,402,847

**EXHIBIT VII – Schedule A
PLAN A: PENSION BENEFIT OBLIGATION**

Present Value of Credited Projected Benefits Payable to Current Employees.....	\$	472,332,118
Present Value of Benefits Payable to Terminated Employees		19,799,649
Present Value of Benefits Payable to Current Retirees and Beneficiaries		527,965,274
 TOTAL PENSION BENEFIT OBLIGATION.....	 \$	 1,020,097,041
 NET ACTUARIAL VALUE OF ASSETS	 \$	 770,402,847
 Ratio of Net Actuarial Value of Assets to Pension Benefit Obligation.....		 75.52%

**EXHIBIT VII – Schedule B
PLAN A: ENTRY AGE NORMAL ACCRUED LIABILITIES**

Accrued Liability for Active Employees	\$	490,390,381
Accrued Liability for Terminated Employees		19,799,649
Accrued Liability for Current Retirees and Beneficiaries		527,965,274
 TOTAL ENTRY AGE NORMAL ACCRUED LIABILITY	 \$	 1,038,155,304
 NET ACTUARIAL VALUE OF ASSETS	 \$	 770,402,847
 Ratio of Net Actuarial Value of Assets to Entry Age Normal Accrued Liability		 74.21%

**EXHIBIT VIII
CENSUS DATA – PLAN A**

	Active	Terminated with Funds on Deposit	DROP	Retired	Total
Number of members as of June 30, 2014	4,647	2,851	247	3,177	10,922
Additions to Census					
Initial membership	686	41			727
Omitted in error last year					
Death of another member				41	41
Adjustment for multiple records					
Change in Status during Year					
Actives terminating service	(141)	141			
Actives who retired	(102)			102	
Actives entering DROP	(93)		93		
Term. members rehired	13	(13)			
Term. members who retire		(16)		16	
Retirees who are rehired					
Refunded who are rehired	19				19
DROP participants retiring			(58)	58	
DROP returned to work	44		(44)		
Omitted in error last year					
Eliminated from Census					
Refund of contributions	(370)	(89)			(459)
Deaths	(14)	(3)		(133)	(150)
Included in error last year					
Adjustment for multiple records	(1)	1		1	1
Number of members as of June 30, 2015	4,688	2,913	238	3,262	11,101

PLAN A - ACTIVES CENSUS BY AGE:

Age	Number Male	Number Female	Total Number	Average Salary	Total Salary
16 - 20	23	3	26	20,081	522,093
21 - 25	176	58	234	23,854	5,581,732
26 - 30	251	134	385	27,329	10,521,826
31 - 35	274	140	414	32,090	13,285,405
36 - 40	256	161	417	31,521	13,144,441
41 - 45	312	183	495	35,026	17,337,980
46 - 50	434	206	640	36,855	23,587,055
51 - 55	530	279	809	36,677	29,671,517
56 - 60	475	251	726	38,393	27,873,155
61 - 65	318	158	476	39,327	18,719,432
66 - 70	140	55	195	39,902	7,780,978
71 - 75	54	21	75	39,601	2,970,068
76 - 80	22	4	26	27,761	721,789
81 - 85	5	1	6	41,833	250,997
86 - 90	2	0	2	32,345	64,690
TOTAL	3,272	1,654	4,926	34,923	172,033,158

THE ACTIVE CENSUS INCLUDES 1,867 ACTIVES WITH VESTED BENEFITS, INCLUDING 238 DROP PARTICIPANTS AND 197 ACTIVE FORMER DROP PARTICIPANTS.

PLAN A - TERMINATED MEMBERS DUE A DEFERRED RETIREMENT BENEFIT:

Age	Number Male	Number Female	Total Number	Average Benefit	Total Benefit
26 - 30	1	0	1	10,256	10,256
31 - 35	2	0	2	12,452	24,903
36 - 40	3	2	5	10,145	50,727
41 - 45	10	2	12	12,664	151,970
46 - 50	14	17	31	12,658	392,394
51 - 55	31	21	52	15,191	789,938
56 - 60	35	28	63	13,319	839,108
61 - 65	6	3	9	11,672	105,048
66 - 70	1	1	2	2,955	5,909
71 - 75	3	2	5	4,114	20,569
TOTAL	106	76	182	13,136	2,390,822

PLAN A - TERMINATED MEMBERS DUE A REFUND OF CONTRIBUTIONS:

Contributions Ranging From	To	Number	Total Contributions
0	99	1,842	102,999
100	499	369	93,032
500	999	142	99,816
1000	1999	110	160,066
2000	4999	109	360,945
5000	9999	80	563,436
10000	19999	56	816,898
20000	99999	23	680,442
TOTAL		2,731	2,877,634

PLAN A - REGULAR RETIREES:

Age	Number Male	Number Female	Total Number	Average Benefit	Total Benefit
41 - 45	5	0	5	25,590	127,950
46 - 50	7	5	12	30,290	363,476
51 - 55	94	42	136	25,994	3,535,132
56 - 60	159	75	234	28,315	6,625,686
61 - 65	285	115	400	23,810	9,523,969
66 - 70	323	167	490	19,382	9,497,068
71 - 75	311	112	423	16,021	6,776,816
76 - 80	233	93	326	15,196	4,953,740
81 - 85	153	55	208	13,836	2,877,921
86 - 90	73	38	111	12,930	1,435,223
91 - 99	35	17	52	10,902	566,889
TOTAL	1,678	719	2,397	19,309	46,283,870

PLAN A - DISABILITY RETIREES:

Age	Number Male	Number Female	Total Number	Average Benefit	Total Benefit
41 - 45	4	0	4	12,369	49,477
46 - 50	4	3	7	14,055	98,388
51 - 55	21	2	23	12,339	283,799
56 - 60	33	12	45	12,638	568,705
61 - 65	30	13	43	10,285	442,265
66 - 70	24	5	29	10,328	299,526
71 - 75	6	7	13	8,248	107,223
76 - 80	8	2	10	6,860	68,601
81 - 85	3	0	3	8,164	24,493
86 - 90	0	2	2	4,614	9,228
TOTAL	133	46	179	10,903	1,951,705

PLAN A - SURVIVORS:

Age	Number Male	Number Female	Total Number	Average Benefit	Total Benefit
0 - 25	1	4	5	9,093	45,465
26 - 30	1	1	2	8,688	17,375
31 - 35	1	2	3	6,556	19,668
36 - 40	2	1	3	6,666	19,997
41 - 45	1	5	6	8,227	49,364
46 - 50	4	10	14	6,869	96,166
51 - 55	9	26	35	8,316	291,068
56 - 60	2	41	43	10,670	458,811
61 - 65	8	56	64	10,982	702,865
66 - 70	5	62	67	10,825	725,293
71 - 75	7	109	116	10,421	1,208,779
76 - 80	7	107	114	9,648	1,099,875
81 - 85	2	107	109	8,693	947,553
86 - 90	1	68	69	9,022	622,545
91 - 99	3	33	36	6,970	250,936
TOTAL	54	632	686	9,557	6,555,760

PLAN A - ACTIVE MEMBERS:

Attained Ages	Completed Years of Service											Total			
	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30&Over				
0 - 20	24	2													26
21 - 25	100	70	35	19	5	5									234
26 - 30	108	88	46	45	34	34	3								385
31 - 35	88	58	51	35	34	48	4								414
36 - 40	85	49	37	22	32	56	33	4							417
41 - 45	65	56	30	27	27	53	58	77	4						495
46 - 50	60	57	48	34	30	121	89	92	43	7					640
51 - 55	84	58	53	38	42	149	92	100	55	65					809
56 - 60	51	42	34	40	30	134	88	90	69	54					726
61 - 65	18	17	25	26	21	93	72	60	39	31					476
66 - 70	11	6	7	4	8	49	38	19	21	13					195
71 & Over	4	2	1	5	6	21	18	18	5	16					109
Totals	698	505	367	295	269	926	527	457	460	236	186				4926

PLAN A - AVERAGE ANNUAL SALARY OF ACTIVE MEMBERS:

Attained Ages	Completed Years of Service											Average Salary			
	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30&Over				
0 - 20	20,132	19,464													20,081
21 - 25	21,326	24,857	24,945	29,398	23,653	31,850									23,854
26 - 30	25,556	24,892	29,998	29,742	30,527	28,404	27,468								27,329
31 - 35	26,516	27,553	31,985	38,368	30,962	34,135	39,986	32,715							32,090
36 - 40	23,443	31,455	29,752	28,829	34,670	34,084	35,434	37,314	43,984						31,521
41 - 45	27,130	28,862	29,115	32,556	31,236	33,653	38,793	41,401	43,861	57,443					35,026
46 - 50	29,989	26,572	28,817	32,324	36,806	33,277	36,289	41,040	47,400	50,136	49,985				36,855
51 - 55	27,277	26,281	30,634	28,425	37,499	32,434	37,730	37,079	42,964	52,959	51,653	36,677			36,677
56 - 60	28,423	32,386	28,655	32,124	35,660	32,658	37,920	37,016	46,155	50,711	53,495	38,393			38,393
61 - 65	35,414	35,960	30,891	30,544	31,747	36,833	36,398	39,960	43,514	49,637	54,444	39,327			39,327
66 - 70	20,315	29,727	20,889	25,019	36,407	37,760	44,418	33,669	54,531	50,854	43,058	39,902			39,902
71 & Over	48,329	45,952	49,569	27,851	34,329	31,955	35,023	38,233	32,686	37,538	47,062	36,766			36,766
Average	25,874	27,734	29,449	31,358	33,734	33,503	37,818	38,722	44,782	50,800	51,594	34,923			34,923

PLAN A - TERMINATED MEMBERS DUE A DEFERRED RETIREMENT BENEFIT:

Attained Ages	Years Until Retirement Eligibility											Total	
	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30&Over		
0 - 25													0
26 - 30											1		1
31 - 35											2		2
36 - 40									5				5
41 - 45								12					12
46 - 50							31						31
51 - 55	2					50							52
56 - 60	7	13	16	13	14								63
61 - 65	9												9
66 - 70	2												2
71 - 75	5												5
76 & Over													0
Totals	25	13	16	13	14	50	31	12	5	2	1		182

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

Attained Ages	Years Until Retirement Eligibility											Average Benefit	
	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30&Over		
0 - 25													0
26 - 30											10,256		10,256
31 - 35										12,452			12,452
36 - 40									10,145				10,145
41 - 45								12,664					12,664
46 - 50						14,153	12,658						12,658
51 - 55	41,146												15,191
56 - 60	12,124	13,697	14,560	11,616	13,729								13,319
61 - 65	11,672												11,672
66 - 70	2,954												2,954
71 - 75	4,114												4,114
76 & Over													0
Average	11,947	13,697	14,560	11,616	13,729	14,153	12,658	12,664	10,145	12,452	10,256		13,136

PLAN A - SERVICE RETIREES:

Attained Ages	Completed Years Since Retirement											Total				
	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30&Over					
0 - 50	11		1	1	3	1										17
51 - 55	20	17	21	6	16	43	13									136
56 - 60	25	33	22	19	20	87	25	2						1		234
61 - 65	54	59	40	41	43	98	54	10						1		400
66 - 70	39	25	36	43	47	186	85	27	1					1		490
71 - 75	10	10	14	17	34	119	151	43	20					4	1	423
76 - 80	7	2	4	8	5	50	83	107	35					23	2	326
81 - 85	3	2	3	3	1	13	29	63	59					25	7	208
86 - 90	1				1	5	9	11	36					39	9	111
91 & Over						2	3	2	3					24	18	52
Totals	170	148	141	138	170	604	452	265	154	118	37					2397

PLAN A - AVERAGE ANNUAL BENEFITS PAYABLE TO SERVICE RETIREES:

Attained Ages	Completed Years Since Retirement											Average Benefit				
	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30&Over					
0 - 50	31,842		12,739	25,208	25,767	25,913										28,907
51 - 55	35,668	29,101	25,233	27,895	28,769	22,247	16,375									25,994
56 - 60	33,949	34,832	35,141	32,072	26,614	25,329	18,740	16,321						8,000		28,315
61 - 65	21,766	22,217	25,640	24,915	23,728	24,502	24,807	22,221						7,344		23,810
66 - 70	21,103	18,195	23,154	19,069	15,703	17,709	21,650	24,483						6,109		19,382
71 - 75	18,425	16,524	16,213	15,043	13,172	14,308	15,313	20,982	26,401					18,729		16,021
76 - 80	11,546	9,798	25,327	12,734	15,462	14,692	12,621	14,048	24,846					22,626		15,196
81 - 85	34,659	5,339	13,482	7,244	5,846	9,142	9,933	12,655	21,583					17,837		13,836
86 - 90	43,929				13,601	10,948	9,009	12,472	13,889					11,152		12,930
91 & Over						7,195	6,989	7,020	11,826					12,147		10,902
Average	25,434	24,360	25,132	21,904	19,840	19,050	16,839	16,113	17,540	15,162	14,534					19,309

PLAN A - SURVIVING BENEFICIARIES OF FORMER MEMBERS:

Completed Years Since Retirement

Attained Ages	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30&Over	Total
0 - 20		1		1	1	1		1				5
21 - 25												0
26 - 30						1	1					2
31 - 35	1	1				1						3
36 - 40					1	1	1					3
41 - 45			1			1	2					6
46 - 50		1			1	4	3	1	1	1	3	14
51 - 55	3			3	4	7	8	4	5		1	35
56 - 60	2	2	1	2	1	7	7	9	6	5	1	43
61 - 65	2	2	2	3	1	18	15	8	9	6		64
66 - 70		2		1	2	12	16	18	10	6		67
71 - 75	1	1			2	21	24	28	20	15	4	116
76 - 80	1					11	16	30	33	19	4	114
81 - 85						1	10	15	33	26	24	109
86 - 90					2		2	6	10	29	20	69
91 & Over					1				1	11	23	36
Totals	10	8	4	10	16	86	105	121	128	118	80	686

PLAN A - AVERAGE ANNUAL BENEFITS PAYABLE TO SURVIVORS OF FORMER MEMBERS:

Completed Years Since Retirement

Attained Ages	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30&Over	Average Benefit
0 - 20		18,188		11,084	6,151	5,620		4,422				9,093
21 - 25						7,577	9,798					0
26 - 30		7,862			8,845	7,577	5,025					8,687
31 - 35	4,229					6,127	7,234	3,675				6,556
36 - 40			3,997			19,969	4,174	7,536	7,255			6,666
41 - 45					5,202	10,666	7,606	8,412		1,900	821	8,227
46 - 50		23,878		12,319	12,484	7,986	16,097	8,501	5,139		4,849	6,869
51 - 55	7,745		23,479	9,412	32,369	8,712	11,947	11,944	6,400	3,449	6,402	8,316
56 - 60	13,802	22,160	8,324	17,959	25,698	12,606	12,743	13,148	5,387	4,255		10,670
61 - 65	15,479	11,046		28,414	8,983	10,313	13,626	10,585	5,995	5,425		10,982
66 - 70		46,965			10,698	10,547	13,626	10,585	8,432	5,960	7,265	10,825
71 - 75	8,430					8,483	8,555	9,419	11,056	10,785		10,421
76 - 80	2,937				4,046	6,483	9,109	6,038	8,607	11,174	3,599	9,648
81 - 85					7,469		16,288	13,541	6,968	10,578	7,704	8,693
86 - 90									8,032	8,211	6,210	9,022
91 & Over											6,309	6,970
Average	9,739	20,413	11,031	14,915	11,445	10,214	11,295	9,990	8,399	8,976	6,392	9,557

**EXHIBIT IX
PLAN A: YEAR-TO-YEAR COMPARISON**

	Fiscal 2015	Fiscal 2014	Fiscal 2013	Fiscal 2012
Number of Active Members	4,926	4,894	4,939	5,021
Number of Retirees & Survivors	3,262	3,177	3,106	3,040
Number of Terminated Due Deferred Benefits	182	184	193	181
Number Terminated Due Refunds	2,731	2,667	2,672	2,632
Active Lives Payroll	\$ 172,033,158	\$ 167,852,836	\$ 167,422,222	\$ 167,511,550
Retiree Benefits in Payment	\$ 54,791,335	\$ 51,636,071	\$ 48,994,132	\$ 46,224,138
Market Value of Assets (MVA)	\$ 698,984,365	\$ 730,072,543	\$ 657,723,192	\$ 639,209,518
Actuarial Value of Assets (AVA)	\$ 770,402,847	\$ 751,235,484	\$ 717,816,409	\$ 721,475,280
Entry Age Normal Accrued Liability	\$1,038,155,304	\$ 967,584,136	\$ 948,970,683	\$ 925,638,084
Ratio of AVA to EAN Accrued Liability	74.21%	77.64%	75.64%	77.94%
Unfunded Actuarial Accrued Liability	\$ 73,553,869	\$ 74,454,702	\$ 75,038,341	\$ 75,337,890
Present Value of Future Employer Normal Cost	\$ 287,312,026	\$ 235,357,990	\$ 249,506,497	\$ 225,090,618
Present Value of Future Employee Contrib.	\$ 101,854,569	\$ 97,716,362	\$ 97,624,041	\$ 95,445,659
Funding Deposit Account Credit Balance	\$ 7,833,707	\$ 8,930,139	\$ 8,287,832	\$ 7,691,723
Present Value of Future Benefits	\$1,225,289,604	\$1,149,834,399	\$ 1,131,697,456	\$ 1,109,657,724

	Fiscal 2016	Fiscal 2015	Fiscal 2014	Fiscal 2013
Employee Contribution Rate	9.50%	9.50%	9.50%	9.25%
Estimated Tax Contribution as % of Payroll	3.64%	3.52%	3.36%	3.13%
Actuarially Required Net Direct Employer Contribution Rate	22.92%	19.48%	20.62%	18.67%
Actual Employer Contribution Rate	19.75%	20.75% [†]	18.75%	17.00%

[†] Includes 1% from Funding Deposit Account

Fiscal 2011	Fiscal 2010	Fiscal 2009	Fiscal 2008	Fiscal 2007	Fiscal 2006
5,029	5,068	5,052	5,030	4,965	5,109
3,001	2,907	2,861	2,794	2,721	2,588
174	183	172	184	209	179
2,594	2,590	2,596	2,561	2,553	2,148
\$ 164,262,655	\$ 162,546,523	\$ 157,082,727	\$ 148,644,512	\$ 141,232,448	\$ 140,773,796
\$ 44,218,709	\$ 41,527,971	\$ 39,834,118	\$ 37,650,335	\$ 34,978,923	\$ 32,315,373
\$ 679,285,361	\$ 624,427,505	\$ 568,167,813	\$ 666,534,551	\$ 667,345,480	\$ 567,015,013
\$ 723,942,801	\$ 704,735,602	\$ 670,910,030	\$ 671,721,084	\$ 624,442,059	\$ 565,604,518
\$ 903,431,729	\$ 876,252,316	\$ 812,467,140	\$ 770,668,381	\$ 728,638,097	\$ 697,663,933
80.13%	80.43%	82.58%	87.16%	85.70%	81.07%
\$ 75,313,546	\$ 75,064,492	\$ 74,616,607	\$ 73,993,478	\$ 73,216,582	\$ 72,305,460
\$ 201,003,138	\$ 192,786,430	\$ 154,002,240	\$ 102,751,307	\$ 106,821,650	\$ 138,753,419
\$ 92,535,571	\$ 92,383,724	\$ 88,362,181	\$ 84,164,497	\$ 81,084,751	\$ 82,859,110
\$ 7,121,966	\$ 6,594,413	\$ 6,105,938	N/A	N/A	N/A
\$ 1,085,673,090	\$ 1,058,375,835	\$ 981,785,120	\$ 932,630,366	\$ 885,565,042	\$ 859,522,507

Fiscal 2012	Fiscal 2011	Fiscal 2010	Fiscal 2009	Fiscal 2008	Fiscal 2007
9.25%	9.25%	9.25%	9.25%	9.25%	9.25%
3.09%	3.07%	3.07%	2.82%	2.62%	2.56%
17.08%	16.41%	13.78%	10.25%	11.17%	13.89%
16.75%	14.25%	13.50%	13.50%	13.50%	16.25%

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EXHIBIT X
PLAN B: ANALYSIS OF ACTUARIALLY REQUIRED CONTRIBUTIONS

1.	Present Value of Future Benefits.....	\$ 260,953,455
2.	Funding Deposit Account Credit Balance.....	\$ 3,008,116
3.	Frozen Unfunded Actuarial Accrued Liability.....	\$ 3,088,551
4.	Actuarial Value of Assets.....	\$ 165,154,609
5.	Present Value of Future Employee Contributions.....	\$ 22,770,216
6.	Present Value of Future Employer Normal Costs (1 + 2 – 3 – 4 – 5).....	\$ 72,948,195
7.	Present Value of Future Salaries	\$ 514,240,205
8.	Employer Normal Cost Accrual Rate (6 ÷ 7).....	14.185627%
9.	Projected Fiscal 2016 Salary for Current Membership.....	\$ 64,885,567
10.	Employer Normal Cost as of July 1, 2015 (8 × 9)	\$ 9,204,425
11.	Amortization Payment on Frozen Unfunded Accrued Liability with Payments Decreasing at 2% per year.....	\$ 537,204
12.	TOTAL Employer Normal Cost & Amortization Payment (10 + 11)	\$ 9,741,629
13.	Employer Normal Cost and Amortization Payment Interest Adjusted for Midyear Payment	\$ 10,100,336
14.	Estimated Administrative Cost for Fiscal 2016	\$ 443,847
15.	TOTAL Employer Actuarially Required Contribution for Fiscal 2016 (13 + 14)	\$ 10,544,183
16.	Projected Ad Valorem Tax Contributions for Fiscal 2016.....	\$ 2,561,002
17.	Projected Revenue Sharing Funds for Fiscal 2016	\$ 52,772
18.	Net Direct Employer Actuarially Required Contribution for Fiscal 2016 (15 – 16 – 17)	\$ 7,930,409
19.	Projected Payroll for Fiscal 2016	\$ 71,832,388
20.	Employers' Net Direct Actuarially Required Contribution as a % of Projected Payroll for 2016 (18 ÷ 19).....	11.04%
21.	Actual Employer Contribution Rate for Fiscal 2016	9.50%
22.	Contribution Shortfall (Excess) as a Percentage of Payroll (20 – 21)	1.54%
23.	Increase (Reduction) to Following Year Payment for Contribution Shortfall (Excess)	0.19%
24.	Minimum Recommended Net Direct Employer Contribution Rate for Fiscal 2017 (20 + 23, Rounded to Nearest 0.25%)	11.25%

EXHIBIT XI
PLAN B: PRESENT VALUE OF FUTURE BENEFITS

PRESENT VALUE OF FUTURE BENEFITS FOR ACTIVE MEMBERS:

Retirement Benefits.....	\$143,506,697
Survivor Benefits	2,946,112
Disability Benefits.....	7,106,740
Vested Termination Benefits.....	7,430,973
Refunds of Contributions	4,135,124

TOTAL Present Value of Future Benefits for Active Members..... \$ 165,125,646

PRESENT VALUE OF FUTURE BENEFITS FOR TERMINATED MEMBERS:

Terminated Vested Members Due Benefits at Retirement	\$ 3,891,296
Terminated Members with Reciprocals	
Due Benefits at Retirement.....	750,498
Terminated Members Due a Refund.....	788,007

TOTAL Present Value of Future Benefits for Terminated Members \$ 5,429,801

PRESENT VALUE OF FUTURE BENEFITS FOR PENSIONERS:

Regular Retirees by Option Selected:

Maximum.....	\$ 34,400,487
Option 2	26,004,589
Option 3	9,341,714

TOTAL Regular Retirees \$ 69,746,790

TOTAL Disability Retirees \$ 6,812,820

TOTAL Survivors & Widows \$ 13,012,349

Reserve for Accrued Retiree DROP Account Balances \$ 826,049

TOTAL Present Value of Future Benefits for Retirees & Survivors \$ 90,398,008

TOTAL Present Value of Future Benefits..... \$ 260,953,455

**EXHIBIT XII – SCHEDULE A
PLAN B – MARKET VALUE OF ASSETS**

CURRENT ASSETS:

Cash in Banks	\$ 4,037,060
Contributions and Taxes Receivable.....	784,991
Accrued Interest and Dividends	257,366
Investments Receivable.....	489,575
Due (to) from Other Funds	538,283
Due from Plan B	159,924
Other Income	137,698

TOTAL CURRENT ASSETS..... \$ 6,404,897

Property Plant & Equipment..... \$ 310,775

INVESTMENTS:

Cash Equivalents.....	\$ 7,620,715
Equities	68,316,845
Fixed Income	12,101,463
Real Estate	20,743,480
Hedge Fund Investments.....	24,136,810
Private Equity	12,075,295

TOTAL INVESTMENTS..... \$ 144,994,608

TOTAL ASSETS

\$ 151,710,280

CURRENT LIABILITIES:

Accounts Payable	\$ 60,441
Refunds Payable.....	83,445
Investments Payable.....	43,894
Other Current Liabilities	463,995

TOTAL CURRENT LIABILITIES

\$ 651,775

OTHER CONTROLLING INTEREST

\$ (1,789,510)

MARKET VALUE OF ASSETS..... \$ 149,268,995

**EXHIBIT XII – SCHEDULE B
PLAN B – ACTUARIAL VALUE OF ASSETS**

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

Fiscal year 2015	\$ (16,980,623)
Fiscal year 2014	5,602,846
Fiscal year 2013	(4,984,469)
Fiscal year 2012	(18,345,178)
Fiscal year 2011	<u>3,285,686</u>
Total for five years	\$ (31,421,738)

Deferral of excess (shortfall) of invested income:

Fiscal year 2015 (80%)	\$ (13,584,498)
Fiscal year 2014 (60%)	3,361,708
Fiscal year 2013 (40%)	(1,993,788)
Fiscal year 2012 (20%)	(3,669,036)
Fiscal year 2011 (0%)	<u>0</u>
Total deferred for year	\$ (15,885,614)

Market value of plan net assets, end of year..... \$ 149,268,995

Preliminary actuarial value of plan assets, end of year \$ 165,154,609

Actuarial value of assets corridor

85% of market value, end of year	\$ 126,878,646
115% of market value, end of year	\$ 171,659,344

Final actuarial value of plan net assets, end of year \$ 165,154,609

EXHIBIT XIII
PLAN B: PRESENT VALUE OF FUTURE CONTRIBUTIONS

Employee Contributions to the Annuity Savings Fund	\$	22,770,216
Employer Normal Contributions to the Pension Accumulation Fund.....		72,948,195
Employer Amortization Payments to the Pension Accumulation Fund		3,088,551
Funding Deposit Account Credit Balance		(3,008,116)
TOTAL PRESENT VALUE OF FUTURE CONTRIBUTIONS	\$	95,798,846

EXHIBIT XIV
PLAN B: CHANGE IN FROZEN UNFUNDED ACTUARIAL ACCRUED LIABILITY

Prior Year Frozen Unfunded Accrued Liability	\$	3,421,001
Interest on Frozen Unfunded Accrued Liability	\$	265,128
Employer Normal Cost for Prior Year.....	7,720,629	
Interest on Normal Cost.....	598,349	
Administrative Expenses	551,946	
Interest on Expenses	20,989	
TOTAL Interest Adjusted Cost Elements.....	\$	9,157,041
Gross Employer Contributions	\$	6,589,957
Interest on Employer Contributions.....	250,597	
Ad Valorem Taxes and Revenue Sharing.....	2,403,252	
Interest on Ad Valorem Taxes and Revenue Sharing Funds	91,388	
Contribution Shortfall (Excess)	(191,568)	
Interest on Contribution Shortfall (Excess)	(14,845)	
Withdrawals from Funding Deposit Account.....	347,496	
Interest on Withdrawal from FDA.....	13,214	
TOTAL Interest Adjusted Employer Contributions	\$	9,489,491
NET Change in Frozen Unfunded Accrued Liability	\$	(332,450)
CURRENT YEAR FROZEN UNFUNDED ACCRUED LIABILITY	\$	3,088,551

EXHIBIT XV
PLAN B: ANALYSIS OF CHANGE IN ASSETS

Actuarial Value of Assets (June 30, 2014)	\$	161,992,280
INCOME:		
Member Contributions	\$	3,296,735
Employer Contributions		6,589,957
Irregular Contributions		441,059
Tax Revenue		2,403,252
Total Contributions	\$	12,731,003
Net (Depreciation) in Fair Value of Investments	\$(5,326,972)	
Net (Income) Attributable to Non-Controlling Interests	(170,297)	
Interest & Dividend Income	311,950	
Alternative Investment Income.....	937,203	
Miscellaneous Income	24,637	
Investment Expense	(709,490)	
Net Investment Income.....	\$	(4,932,969)
TOTAL Income	\$	7,798,034
EXPENSES:		
Retirement Benefits	\$	9,574,849
DROP Disbursements	1,880,650	
Refunds of Contributions.....	1,113,933	
Funds Transferred to another System	336,731	
Transfers between Plans	1,730,326	
Administrative Expenses	551,946	
TOTAL Expenses	\$	15,188,435
Net Market Value Income for Fiscal 2015 (Income – Expenses).....	\$	(7,390,401)
Unadjusted Fund Balance as of June 30, 2015 (Fund Balance Previous Year + Net Income).....	\$	154,601,879
Adjustment for Actuarial Smoothing.....	\$	10,552,730
Actuarial Value of Assets (June 30, 2015)	\$	165,154,609

EXHIBIT XVI – Schedule A
PLAN B: PENSION BENEFIT OBLIGATION

Present Value of Credited Projected Benefits Payable to Current Employees	\$	110,295,428
Present Value of Benefits Payable to Terminated Employees		5,429,801
Present Value of Benefits Payable to Current Retirees and Beneficiaries		90,398,008
TOTAL PENSION BENEFIT OBLIGATION	\$	206,123,237
NET ACTUARIAL VALUE OF ASSETS	\$	165,154,609
Ratio of Net Actuarial Value of Assets to Pension Benefit Obligation.....		80.12%

EXHIBIT XVI – Schedule B
ENTRY AGE NORMAL ACCRUED LIABILITIES

Accrued Liability for Active Employees	\$	117,134,086
Accrued Liability for Terminated Employees		5,429,801
Accrued Liability for Current Retirees and Beneficiaries		90,398,008
TOTAL ENTRY AGE NORMAL ACCRUED LIABILITY	\$	212,961,895
NET ACTUARIAL VALUE OF ASSETS.....	\$	165,154,609
Ratio of Net Actuarial Value of Assets to Entry Age Normal Accrued Liability		77.55%

EXHIBIT XVII
CENSUS DATA – PLAN B

	Active	Terminated with Funds on Deposit	DROP	Retired	Total
Number of members as of June 30, 2014	2,080	1,244	88	916	4,328
Additions to Census					
Initial membership	360	29			389
Omitted in error last year				19	19
Death of Another Member				(7)	(7)
Change in Status during Year					
Actives terminating service	(76)	76			
Actives who retired	(45)			45	
Actives entering DROP	(29)		29		
Term. members rehired	5	(5)			
Term. members who retire		(11)		11	
Retirees who are rehired					
Refunded who are rehired	8				8
DROP participants retiring			(23)	23	
DROP returned to work	18		(18)		
Omitted in error last year					
Eliminated from Census					
Refund of contributions	(187)	(40)			(227)
Deaths	(10)	(4)		(48)	(62)
Included in error last year					
Adjustment for multiple records					
Number of members as of June 30, 2015	2,124	1,289	76	959	4,448

PLAN B - ACTIVES CENSUS BY AGE:

Age	Number Male	Number Female	Total Number	Average Salary	Total Salary
16 - 20	12	2	14	19,808	277,308
21 - 25	77	10	87	21,069	1,832,964
26 - 30	99	33	132	24,812	3,275,215
31 - 35	117	57	174	28,749	5,002,412
36 - 40	129	59	188	30,775	5,785,643
41 - 45	143	69	212	30,880	6,546,518
46 - 50	178	95	273	33,440	9,129,207
51 - 55	245	119	364	32,824	11,948,070
56 - 60	237	136	373	34,579	12,897,835
61 - 65	164	64	228	35,358	8,061,709
66 - 70	61	25	86	34,476	2,964,908
71 - 75	37	10	47	30,855	1,450,170
76 - 80	12	3	15	32,122	481,833
81 - 85	3	2	5	49,560	247,799
86 - 90	2	0	2	3,970	7,939
TOTAL	1,516	684	2,200	31,777	69,909,530

THE ACTIVE CENSUS INCLUDES 785 ACTIVES WITH VESTED BENEFITS, INCLUDING 76 DROP PARTICIPANTS AND 75 ACTIVE FORMER DROP PARTICIPANTS.

PLAN B - TERMINATED MEMBERS DUE A DEFERRED RETIREMENT BENEFIT:

Age	Number Male	Number Female	Total Number	Average Benefit	Total Benefit
36 - 40	2	0	2	11,393	22,785
41 - 45	3	4	7	12,646	88,523
46 - 50	9	2	11	7,008	77,090
51 - 55	13	13	26	12,998	337,939
56 - 60	14	7	21	7,973	167,438
61 - 65	2	0	2	6,215	12,429
66 - 70	0	1	1	5,041	5,041
71 - 75	1	0	1	494	494
TOTAL	44	27	71	10,024	711,739

PLAN B - TERMINATED MEMBERS DUE A REFUND OF CONTRIBUTIONS:

Contributions Ranging From	To	Number	Total Contributions
0 -	99	764	22,762
100 -	499	234	53,429
500 -	999	70	48,432
1000 -	1999	60	84,463
2000 -	4999	50	163,350
5000 -	9999	28	192,172
10000 -	19999	9	115,890
20000 -	99999	3	66,245
TOTAL		1,218	746,743

PLAN B - REGULAR RETIREES:

Age	Number Male	Number Female	Total Number	Average Benefit	Total Benefit
51 - 55	6	5	11	19,811	217,916
56 - 60	20	7	27	19,306	521,266
61 - 65	75	31	106	14,717	1,559,993
66 - 70	100	41	141	13,082	1,844,557
71 - 75	87	37	124	10,357	1,284,302
76 - 80	87	35	122	9,370	1,143,157
81 - 85	54	22	76	9,165	696,562
86 - 90	30	10	40	7,025	280,987
91 - 99	12	2	14	5,675	79,452
TOTAL	471	190	661	11,540	7,628,192

PLAN B - DISABILITY RETIREES:

Age	Number Male	Number Female	Total Number	Average Benefit	Total Benefit
41 - 45	3	0	3	7,097	21,290
46 - 50	2	0	2	8,716	17,432
51 - 55	10	2	12	10,369	124,425
56 - 60	11	4	15	10,853	162,802
61 - 65	18	2	20	11,123	222,469
66 - 70	7	2	9	8,513	76,616
71 - 75	2	0	2	8,345	16,689
76 - 80	2	0	2	6,709	13,418
81 - 85	1	0	1	10,484	10,484
TOTAL	56	10	66	10,085	665,625

PLAN B - SURVIVORS:

Age	Number Male	Number Female	Total Number	Average Benefit	Total Benefit
26 - 30	0	1	1	2,245	2,245
36 - 40	1	0	1	10,042	10,042
41 - 45	0	2	2	5,594	11,188
46 - 50	2	3	5	2,889	14,445
51 - 55	1	10	11	7,166	78,821
56 - 60	2	15	17	7,396	125,732
61 - 65	3	18	21	10,022	210,456
66 - 70	0	24	24	6,249	149,987
71 - 75	1	32	33	7,198	237,542
76 - 80	1	44	45	7,049	317,202
81 - 85	1	33	34	7,361	250,284
86 - 90	0	26	26	5,812	151,108
91 - 99	1	11	12	5,401	64,816
TOTAL	13	219	232	6,999	1,623,868

PLAN B - ACTIVE MEMBERS:

Attained Ages	Completed Years of Service											Total	
	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30&Over		
0 - 20	14												14
21 - 25	43	20	9	10	3	2							87
26 - 30	42	24	14	15	8	28	1						132
31 - 35	44	21	18	10	9	45	23	4					174
36 - 40	40	23	21	16	10	42	18	17	1				188
41 - 45	31	16	14	13	8	58	31	20	19	2			212
46 - 50	38	23	21	9	14	62	38	31	23	12	2		273
51 - 55	46	28	27	25	13	87	47	32	26	10	23		364
56 - 60	35	19	16	16	18	70	50	38	48	27	36		373
61 - 65	17	11	7	12	13	46	39	23	23	16	21		228
66 - 70	6	4	3	3	5	27	21	6	9	5	5		86
71 & Over	3	4	3	1	2	14	7	11	7	10	7		69
Totals	359	193	153	127	103	481	275	182	156	82	89		2200

PLAN B - AVERAGE ANNUAL SALARY OF ACTIVE MEMBERS:

Attained Ages	Completed Years of Service											Average Salary	
	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30&Over		
0 - 20	19,808												19,808
21 - 25	20,216	20,321	21,401	25,626	19,313	25,222							21,069
26 - 30	21,208	24,380	25,650	24,004	28,606	29,660	20,843						24,812
31 - 35	25,616	24,285	25,195	23,540	27,103	33,606	34,590	31,166					28,749
36 - 40	25,992	21,842	29,041	23,583	38,550	36,670	35,425	38,967	30,667				30,775
41 - 45	24,419	26,717	29,263	29,781	36,092	31,110	31,458	36,734	36,514	34,242			30,880
46 - 50	23,919	28,293	28,189	25,963	29,150	36,496	35,124	37,878	38,287	47,711	55,486		33,440
51 - 55	26,214	27,060	25,141	30,431	29,206	33,836	35,531	33,271	40,008	44,807	43,419		32,824
56 - 60	24,284	27,837	25,374	23,116	28,306	30,321	38,702	36,507	40,373	39,498	49,568		34,579
61 - 65	29,801	24,095	29,594	29,438	28,799	35,692	36,803	31,958	41,052	40,188	45,516		35,358
66 - 70	33,085	31,811	22,799	29,799	32,283	33,839	37,373	33,701	30,972	45,981			34,476
71 & Over	19,335	24,648	31,293	29,927	24,298	35,934	46,830	32,411	13,757	29,806	39,569		31,706
Average	24,203	25,179	26,608	26,486	29,967	33,524	36,062	35,394	37,836	40,567	46,370		31,777

PLAN B - TERMINATED MEMBERS DUE A DEFERRED RETIREMENT BENEFIT:

Attained Ages	Years Until Retirement Eligibility											Total
	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30&Over	
0 - 35												0
36 - 40									2			2
41 - 45								7				7
46 - 50							11					11
51 - 55						26						26
56 - 60	5	3	6	3	4							21
61 - 65	2											2
66 - 70	1											1
71 - 75	1											1
76 & Over												0
Totals	9	3	6	3	4	26	11	7	2	0	0	71

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

Attained Ages	Years Until Retirement Eligibility											Average Benefit
	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30&Over	
0 - 35												0
36 - 40									11,393			11,393
41 - 45								12,646				12,646
46 - 50							7,008					7,008
51 - 55						12,998						12,998
56 - 60	4,523	8,459	9,606	5,334	11,452							7,973
61 - 65	6,214											6,214
66 - 70	5,041											5,041
71 - 75	494											494
76 & Over												0
Average	4,509	8,459	9,606	5,334	11,452	12,998	7,008	12,646	11,393	0	0	10,024

PLAN B - DISABILITY RETIREES:

Attained Ages	Completed Years Since Retirement											Total	
	0	1	2	3	4	5- 9	10-14	15-19	20-24	25-29	30&Over		
0 - 40													0
41 - 45			1		1								3
46 - 50		1					1						2
51 - 55	1	1	1	1	1	4	2		1				12
56 - 60	2	4	3	1	4	2	1	1	1				15
61 - 65				3		8	3	1	1				20
66 - 70						3	1	3	2				9
71 - 75								1			1		2
76 - 80									1		1		2
81 - 85									1				1
86 & Over													0
Totals	3	6	5	5	6	18	8	6	7	0	2		66

PLAN B - AVERAGE ANNUAL BENEFITS PAYABLE TO DISABILITY RETIREES:

Attained Ages	Completed Years Since Retirement											Average Benefit	
	0	1	2	3	4	5- 9	10-14	15-19	20-24	25-29	30&Over		
0 - 40													0
41 - 45			8,094		6,324	6,872	7,217						7,097
46 - 50		10,215			10,680	14,681	9,128		4,766				8,716
51 - 55	8,016	6,832	11,013	6,138	10,680	13,296	9,379	5,821	5,071				10,369
56 - 60	14,775	13,352	6,944	12,150	16,737	11,882	6,385	4,633	4,605				10,853
61 - 65				10,689		11,234	6,074	6,282	8,997				11,123
66 - 70								10,507					8,513
71 - 75									9,802		6,183		8,345
76 - 80									10,484		3,616		6,709
81 - 85													10,484
86 & Over													0
Average	12,522	11,743	7,987	10,071	13,992	12,275	7,510	6,635	7,532	0	4,899		10,085

PLAN B - SURVIVING BENEFICIARIES OF FORMER MEMBERS:

Completed Years Since Retirement

Attained Ages	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30&Over	Total
0 - 25												0
26 - 30								1				1
31 - 35												0
36 - 40				1								1
41 - 45	1							1				2
46 - 50	1								1			5
51 - 55		2		2		1	1	1		1		11
56 - 60		1	1	2	1	4	3	2	3	2		17
61 - 65				2	1	5	5	5	1		2	21
66 - 70			2	1	1	8	7	3	3			24
71 - 75				1		4	10	11	6	1		33
76 - 80	1					1	16	10	12	4	1	45
81 - 85						2	2	9	9	10	2	34
86 - 90					1	2	1	1	3	12	6	26
91 & Over						2	1	1	2	4	5	12
Totals	3	3	3	8	3	28	47	47	40	34	16	232

PLAN B - AVERAGE ANNUAL BENEFITS PAYABLE TO SURVIVORS OF FORMER MEMBERS:

Completed Years Since Retirement

Attained Ages	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30&Over	Average Benefit
0 - 25												0
26 - 30								2,245				2,245
31 - 35												0
36 - 40				10,042				4,280				10,042
41 - 45	6,909							1,677	1,386			5,594
46 - 50	6,270							5,324				2,889
51 - 55		5,174		12,465		2,757	2,357	898				7,166
56 - 60		15,910	5,426	9,272	22,180	1,520	10,159	3,856	8,652	3,997		7,396
61 - 65				14,218	13,849	5,964	3,713	10,635	6,888			10,022
66 - 70			6,278	7,288		6,125	7,681	3,492	5,632			6,249
71 - 75				8,962		5,358	8,344	6,142	8,274			6,249
76 - 80	29,105					13,528	7,939	5,416	4,996	6,493		7,198
81 - 85					4,586	6,427	7,024	5,977	8,471	6,846	6,051	7,049
86 - 90						6,648	1,906	2,415	6,743	6,207	12,561	7,361
91 & Over								2,131	1,514	10,539	3,500	5,812
Average	14,095	8,753	5,994	11,116	13,539	7,402	7,482	5,750	6,506	6,695	5,671	6,999

EXHIBIT XVIII
PLAN B: YEAR-TO-YEAR COMPARISON

	Fiscal 2015	Fiscal 2014	Fiscal 2013	Fiscal 2012
Number of Active Members	2,200	2,168	2,128	2,155
Number of Retirees & Survivors	959	916	900	879
Number of Terminated Due Deferred Benefits	71	74	61	61
Number Terminated Due Refunds	1,218	1,170	1,155	1,100
Active Lives Payroll	\$ 69,909,530	\$ 67,939,158	\$ 65,928,929	\$ 66,409,896
Retiree Benefits in Payment	\$ 9,917,688	\$ 9,141,803	\$ 8,793,050	\$ 8,285,257
Market Value of Assets (MVA)	\$ 149,268,995	\$ 156,659,396	\$ 140,744,063	\$ 137,164,489
Actuarial Value of Assets (AVA)	\$ 165,154,609	\$ 161,992,280	\$ 153,851,774	\$ 154,451,871
Entry Age Normal Accrued Liability	\$ 212,961,895	\$ 199,762,726	\$ 192,160,973	\$ 187,178,650
Ratio of AVA to EAN Accrued Liability	77.55%	81.09%	80.06%	82.52%
Unfunded Actuarial Accrued Liability	\$ 3,088,551	\$ 3,421,001	\$ 3,740,857	\$ 4,049,257
Present Value of Future Employer Normal Cost	\$ 72,948,195	\$ 60,613,662	\$ 60,012,141	\$ 54,153,087
Present Value of Future Employee Contrib.	\$ 22,770,216	\$ 21,982,912	\$ 21,589,199	\$ 21,845,625
Funding Deposit Account Credit Balance	\$ 3,008,116	\$ 3,126,521	\$ 2,901,644	\$ 2,692,941
Present Value of Future Benefits	\$ 260,953,455	\$ 244,883,334	\$ 236,292,327	\$ 231,806,899

	Fiscal 2016	Fiscal 2015	Fiscal 2014	Fiscal 2013
Employee Contribution Rate	5.00%	5.00%	5.00%	5.00%
Estimated Tax Contribution as % of Payroll	3.64%	3.41%	3.38%	3.14%
Actuarially Required Net Direct Employer Contribution Rate	11.04%	9.60%	9.82%	8.72%
Actual Employer Contribution Rate	9.50%	10.00% [†]	8.75%	8.00%

[†] Includes 1% from Funding Deposit Account

Fiscal 2011	Fiscal 2010	Fiscal 2009	Fiscal 2008	Fiscal 2007	Fiscal 2006
2,175	2,197	2,269	2,191	2,153	2,060
865	836	833	793	794	763
62	72	67	68	74	77
1,062	1,062	1,022	998	928	777
\$ 65,427,477	\$ 65,241,810	\$ 64,816,945	\$ 59,233,705	\$ 54,572,935	\$ 51,055,201
\$ 7,953,795	\$ 7,339,269	\$ 7,149,177	\$ 6,625,934	\$ 6,328,157	\$ 5,872,330
\$ 144,028,034	\$ 130,596,777	\$ 117,258,410	\$ 134,832,148	\$ 132,326,073	\$ 111,581,452
\$ 152,966,837	\$ 147,046,143	\$ 138,441,127	\$ 136,207,119	\$ 124,483,332	\$ 111,404,638
\$ 181,142,563	\$ 175,023,271	\$ 159,960,891	\$ 149,264,791	\$ 138,533,272	\$ 132,804,556
84.45%	84.02%	86.55%	91.25%	89.86%	83.89%
\$ 4,346,525	\$ 4,633,960	\$ 4,912,541	\$ 5,183,177	\$ 5,446,715	\$ 5,703,945
\$ 49,451,626	\$ 48,645,557	\$ 38,895,181	\$ 26,827,388	\$ 26,365,299	\$ 32,959,966
\$ 21,582,459	\$ 21,546,957	\$ 21,769,886	\$ 19,992,613	\$ 18,627,179	\$ 17,883,419
\$ 2,493,464	\$ 2,308,763	\$ 1,806,555	N/A	N/A	N/A
\$ 225,853,983	\$ 219,563,854	\$ 202,212,180	\$ 188,210,297	\$ 174,922,525	\$ 167,951,968

Fiscal 2012	Fiscal 2011	Fiscal 2010	Fiscal 2009	Fiscal 2008	Fiscal 2007
5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
3.10%	3.07%	3.06%	2.82%	2.60%	2.54%
7.89%	7.78%	5.95%	4.50%	5.06%	7.08%
8.00%	6.75%	6.75%	6.75%	6.75%	9.75%

SUMMARY OF PRINCIPAL PLAN PROVISIONS

All members of the Municipal Employees' Retirement System are participants in either Plan A or B according to the provisions of the agreement entered into by their employer. All employees of a participating employer must participate in the same plan. The principal provisions of each plan are given below. The following summary of plan provisions is for general informational purposes only and does not constitute a guarantee of benefits.

MEMBERSHIP – All persons who are actively employed by a participating employer on a permanent, regularly scheduled basis of at least an average of thirty-five hours per week are members of this system. Excluded from membership are members of city councils, alderman, town councilmen, and constables; the exclusion does not apply to persons serving in excluded positions on January 1, 1997.

PLAN A PROVISIONS:

CONTRIBUTION RATES – The Board of Trustees may set the employee contribution rate not less than 9.25% nor more than 10.00%. In addition, each sheriff and ex officio tax collector deducts one-fourth of one percent of the aggregate amount of the tax shown to be collected by the tax roll of each respective parish, excepting Orleans Parish, and remits the money to the system on an annual basis. Taxes are apportioned between Plan A and Plan B in proportion to salaries of plan participants. Taxes received from East Baton Rouge Parish are apportioned between the Municipal Employees' Retirement System and the Employees' Retirement System of the City of Baton Rouge. The system also receives revenue sharing funds each year as appropriated by the legislature. The remaining employer contributions are determined according to actuarial requirements and are set annually.

RETIREMENT BENEFITS (Tier 1) – Members with ten years of creditable service may retire at age sixty; members with twenty-five years of service may retire regardless of age. The monthly retirement allowance is equal to three percent of the member's final compensation multiplied by his years of creditable service; elected officials receive an additional one-half percent of final compensation for each year of such elected service. However, the accrued retirement benefits for those employees who were members of only the supplemental plan prior to October 1, 1978, are based on one percent of final compensation plus two dollars per month for each year of service credited prior to October 1, 1978. The retirement allowance may not exceed the greater of final annual salary or one hundred percent of the member's final average compensation. Members with twenty years of service credit, not otherwise eligible for normal retirement, are eligible for a modified actuarially reduced early retirement.

RETIREMENT BENEFITS (Tier 2) – Employees whose first employment making them eligible for membership occurs on or after January 1, 2013 become members of Tier 2. Normal retirement eligibility in Tier 2 is at age 65 with seven years of service credit, at age 62 with ten years of service credit, or age 55 with thirty years of service credit. Members are eligible for an actuarially reduced early retirement at twenty-five years of service credit. Retirement benefits are based on a 3% accrual rate. Employee contributions are set by the Board of Trustees within a range of 8% to 10%.

DISABILITY BENEFITS – Five years of creditable service are required in order to be eligible for disability benefits. Twenty years of creditable service are required in order for a member to have a vested disability benefit. A disabled member receives a normal retirement allowance if eligible under

regular retirement provisions; if he is not eligible for a normal retirement, he receives a disability benefit equal to the lesser of:

- 1) Forty-five percent of his final average compensation or three percent of his final average compensation multiplied by his years of creditable service, whichever is greater; or
- 2) Three percent of his final average compensation multiplied by his years of creditable service projected to his earliest normal retirement age.

SURVIVOR BENEFITS – Five years of creditable service are required in order to be eligible for survivor benefits. If the member is eligible for normal retirement at the time of death, the surviving spouse receives an automatic option two benefit. If the member is not eligible for a normal retirement, the surviving spouse with minor children receives sixty percent of final compensation payable until no child in her care satisfies the definition of minor child. The surviving spouse with no minor children receives forty percent of final compensation payable upon attainment of age sixty by the spouse, or the actuarial equivalent of this amount payable immediately (such equivalent not to be less than 20% of final compensation). Minor children with no surviving unmarried parent receive thirty percent of final compensation each not to exceed a total of sixty percent of final compensation. Survivor benefits are also payable to the surviving spouses of former members who have not withdrawn their accumulated contributions and who have at least twenty years of creditable service. The benefits payable are the actuarial equivalent of the Option 2 benefits that would have become payable to the surviving spouse at the time the former member would have begun receiving deferred normal retirement benefits, had the member survived until that date, elected Option 2, and died at that time.

PLAN B PROVISIONS:

CONTRIBUTION RATES – The Board of Trustees may set the employee contribution rate not less than 5.00% nor more than 6.00%. In addition, each sheriff and ex officio tax collector deducts one-fourth of one percent of the aggregate amount of the tax shown to be collected by the tax roll of each respective parish, excepting Orleans Parish, and remits the money to the system on an annual basis. Taxes are apportioned between Plan A and Plan B in proportion to salaries of plan participants. Taxes received from East Baton Rouge Parish are apportioned between the Municipal Employees' Retirement System and the Employees' Retirement System of the City of Baton Rouge. The system also receives revenue sharing funds each year as appropriated by the legislature. The remaining employer contributions are determined according to actuarial requirements and are set annually.

RETIREMENT BENEFITS (Tier 1) – Members with ten years of creditable service may retire at age sixty; members with thirty years of service may retire at any age. The monthly retirement allowance is equal to two percent of the member's final compensation multiplied by his years of creditable service; elected officials receive an additional one-half percent of final compensation for each year of such elected service.

RETIREMENT BENEFITS (Tier 2) – Employees whose first employment making them eligible for membership occurs on or after January 1, 2013 will become members of Tier 2. Normal retirement eligibility in Tier 2 is at age 65 with seven years of service credit, at age 62 with ten years of service credit, or age 55 with thirty years of service credit. Members are eligible for an actuarially reduced

early retirement at twenty-five years of service credit. Retirement benefits are based on a 2% accrual rate. Employee contributions are set by the Board of Trustees within a range of 4% to 6%.

DISABILITY BENEFITS – Ten years of creditable service are required in order to be eligible for disability benefits. Twenty years of creditable service are required in order for a member to have a vested disability benefit. A disabled member receives a normal retirement allowance if eligible under regular retirement provisions; if he is not eligible for a normal retirement allowance, he receives a disability benefit equal to the lesser of:

- 1) Thirty percent of his final average compensation or two percent of his final average compensation multiplied by his years of creditable service, whichever is greater; and
- 2) Two percent of his final average compensation multiplied by his years of creditable service projected to his earliest normal retirement age.

SURVIVOR BENEFITS – The surviving spouse of a member who was eligible for normal retirement at the time of death receives an automatic option two benefit. The surviving spouse of a member with five or more years of creditable service and not eligible for normal retirement at the time of death receives either 30% of the member's final compensation payable to the spouse when they attain age 60 or an actuarial equivalent of 30% of the deceased member's final compensation, but not less than 15% of such final compensation. Survivor benefits are also payable to the surviving spouses of former members who have not withdrawn their accumulated contributions and who have at least twenty years of creditable service. The benefits payable are the actuarial equivalent of the Option 2 benefits that would have become payable to the surviving spouse at the time the former member would have begun receiving deferred normal retirement benefits, had the member survived until that date, elected Option 2, and died at that time.

PROVISIONS APPLICABLE TO BOTH PLAN A AND B:

FINAL AVERAGE COMPENSATION –For a member whose first employment making him eligible for membership in the system began after June 30, 2006, final average compensation is based on the average monthly earnings during the highest sixty consecutive months or joined months if service was interrupted. The earnings to be considered for each twelve month period within the sixty month period may not exceed 115% of the preceding twelve month period.

Effective January 1, 2013, for a member whose first employment making him eligible for membership in the system began before July 1, 2006, final average compensation was redefined to be thirty-six months plus the number of whole months since January 1, 2013 not to exceed sixty months. However, the actual monthly final average compensation used to determine the member's benefit cannot be less than the thirty-six month final average compensation as of January 1, 2013. The earnings to be considered for each twelve month period within the final average compensation period may not exceed 115% of the preceding twelve month period.

UNUSED SICK & ANNUAL LEAVE – All unused sick and annual leave is credited at the time of retirement to the member if the employer so elects for his employees. The actuarial cost of providing this conversion is borne solely by the employer and must be paid to the board within thirty days of the member's retirement date.

OPTIONAL ALLOWANCES – Members may receive their benefits as a life annuity, or in lieu of such a reduced benefit according to the option selected which is the actuarial equivalent of the maximum benefit.

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.

DEFERRED RETIREMENT OPTION PLAN – In lieu of terminating employment and accepting a service retirement allowance, any member of Plan A or B who is eligible for a normal retirement may elect to participate in the Deferred Retirement Option Plan (DROP) for up to three years and defer the receipt of benefits. Upon commencement of participation in the plan, membership in the system terminates. During participation in the plan, employer contributions are payable but employee contributions cease. The monthly retirement benefits that would have been payable, had the person elected to cease employment and receive a service retirement allowance, are paid into the DROP account. After a member terminates his participation in DROP his account will earn interest at the actual rate of return earned on the funds left on deposit as certified by the custodian of the system's assets. This interest will be credited to the individual member's account balance on a daily basis beginning July 1, 2006. In addition, no cost of living increases are payable to participants until employment which made them eligible to become members of the system has been terminated for at least one full year.

Upon termination of employment prior to, or at the end of, the specified period of participation, a participant in the plan may receive, at his option, a lump sum payment from the account equal to the payments into the account, a true annuity based upon his account balance in that fund, or any other method of payment if approved by the board of trustees. The monthly benefits that were being paid into the DROP account will begin to be paid to the retiree. If a participant dies during the participation in the plan, a lump sum equal to his account balance in the plan fund shall be paid to his named beneficiary or, if none, to his estate. If employment is not terminated at the end of the three years, payments into the plan fund cease and the person resumes active contributing membership in the system. For any member hired prior to July 1, 2006, additional accrued benefits are based on final average compensation used to calculate the member's original benefit unless the additional period of service is at least thirty-six months. For any member hired on or after July 1, 2006, whose period of additional service after their DROP participation period ends is less than sixty months, the final compensation figure used to calculate the additional benefit will be that used to calculate the original benefit. If their period of additional service is sixty months or more, the final compensation figure used

to calculate the additional benefit will be based on their compensation during the period of additional service.

COST OF LIVING INCREASES – The board of trustees is authorized to grant retired members, and widows of members, who have been retired for at least one full year an annual cost of living increase of two percent of their original benefit and all retired members and widows who are sixty-five years of age and older a two percent increase in their original benefit (or their benefit as of October 1, 1977, if they retired prior to that time). 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 on investments. In lieu of other cost of living increases the board may grant an increase to retirees in the form " $X \times (A \& B)$ " where "A" is equal to the number of years of credited service accrued as retirement or death of the member or retiree and "B" is equal to the number of years since death of the member or retiree to June 30 of the initial year of increase and "X" is equal to any amount available for funding such increase up to a maximum of \$1.00.

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 effect of emerging experience on the fund is illustrated by the following chart.

Factor	Increase in Factor Results in
Investment Earnings Rate	Decrease in Cost
Annual Rate of Salary Increase	Increase in Cost
Rates of Retirement	Increase in Cost
Rates of Termination	Decrease in Cost
Rates of Disability	Increase in Cost
Rates of Mortality	Decrease in Cost

ACTUARIAL COST METHOD: Frozen Attained Age Normal Actuarial Cost Method with allocation based on earnings. The frozen actuarial accrued liabilities were calculated on the projected unit credit cost method.

ACTUARIAL ASSET VALUES: Invested assets are valued at market value adjusted to defer four-fifths of all earnings above or below the valuation interest rate in the valuation year, three-fifths of all earnings above or below the valuation interest rate in the prior year, two-fifths of all earnings above or below the valuation interest rate from two years prior, and one-fifth of all earnings above or below the valuation interest rate from three years prior. The resulting smoothed values are subject to a corridor of 85% to 115% of the market value of assets. If the smoothed value falls outside the corridor, the actuarial value is set equal to the average of the corridor limit and the smoothed value.

VALUATION INTEREST RATE: 7.5% (Net of Investment Expense)

ANNUAL SALARY INCREASE RATE: 5.0% (2.875% Inflation / 2.125% Merit)

ACTIVE MEMBER MORTALITY: RP 2000 Employee Table set back two years for males and females

ANNUITANT, AND BENEFICIARY MORTALITY: RP 2000 Healthy Annuitant Table set forward 2 years and projected to 2028 using Scale AA for males and set forward 1 year and projected to 2028 using Scale AA 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.

RATES OF RETIREMENT: The table of these rates is included later in the report. These rates apply only to those individuals eligible to retire. Members are assumed to retire no earlier than normal retirement age.

RETIREMENT LIMITATIONS: Projected retirement benefits are not subjected 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 in DROP.

DROP PARTICIPATION PERIOD: DROP participants are assumed to participate for 3 years. At the end of the DROP participation period, one half of participants are assumed to retire; the other half are assumed to work one additional year.

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

<u>Ages</u>	<u>Plan A</u>	<u>Plan B</u>
Below 86	0.21	0.17
86 & Above	1.00	1.00

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

<u>Service</u>	<u>Plan A</u>	<u>Plan B</u>
0	0.20	0.23
1	0.17	0.20
2	0.14	0.15
3	0.12	0.13
4	0.10	0.10
5	0.09	0.09
6	0.08	0.08
7	0.07	0.07
8	0.06	0.06
9	0.06	0.05
10	0.05	0.04
11	0.05	0.04
12	0.04	0.03

13	0.04	0.03
14	0.03	0.03
15	0.03	0.03
16	0.02	0.03
17	0.02	0.03
18	0.02	0.03
Over 18	0.02	0.02

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

RATES OF DISABILITY – Plan A: 25% of the disability rates used for the 21st valuation of the Railroad Retirement System for individuals with 10 – 19 years of service.

RATES OF DISABILITY – Plan B: 60% of the disability rates used for the 21st valuation of the Railroad Retirement System for individuals with 10 – 19 years of service.

MARRIAGE STATISTICS: 70% of the members are assumed to be married; husbands are assumed to be three years older than wives.

FAMILY STATISTICS: Assumptions utilized in determining the costs of various survivor benefits as listed below, are derived from the information provided in the 2010 U. S. Census:

Member's <u>Age</u>	% With <u>Children</u>	Number of <u>Children</u>	Average <u>Age</u>
25	70%	1.84	5
35	86%	2.13	9
45	75%	1.70	12
55	22%	1.42	14
65	4%	1.45	15

DISABLED LIVES MORTALITY: RP-2000 Disabled Lives Mortality Tables set back 5 years for males and set back 3 years for females

VESTING ELECTING PERCENTAGE: 60% of members with less than 20 years of service are assumed to elect a deferred benefit in lieu of a refund of contributions. 100% of members with 20 or more years of service are assumed to elect the deferred benefit.

PLAN A – ACTUARIAL TABLES AND RATES

Age	Retired Male Mortality Rates	Retired Female Mortality Rates	Active Male Mortality Rates	Active Female Mortality Rates	Male Disabled Mortality Rates	Female Disabled Mortality Rates	Retirement Rates Tier 1	Retirement Rates Tier 2
18	0.00020	0.00011	0.00028	0.00018	0.02257	0.00745	0.00000	0.00000
19	0.00021	0.00011	0.00030	0.00018	0.02257	0.00745	0.00000	0.00000
20	0.00021	0.00011	0.00032	0.00019	0.02257	0.00745	0.00000	0.00000
21	0.00022	0.00012	0.00033	0.00019	0.02257	0.00745	0.00000	0.00000
22	0.00023	0.00012	0.00035	0.00019	0.02257	0.00745	0.00000	0.00000
23	0.00025	0.00013	0.00036	0.00019	0.02257	0.00745	0.00000	0.00000
24	0.00026	0.00014	0.00037	0.00019	0.02257	0.00745	0.00000	0.00000
25	0.00029	0.00016	0.00037	0.00020	0.02257	0.00745	0.00000	0.00000
26	0.00033	0.00019	0.00038	0.00020	0.02257	0.00745	0.00000	0.00000
27	0.00036	0.00020	0.00038	0.00021	0.02257	0.00745	0.00000	0.00000
28	0.00039	0.00022	0.00038	0.00021	0.02257	0.00745	0.00000	0.00000
29	0.00043	0.00023	0.00038	0.00022	0.02257	0.00745	0.00000	0.00000
30	0.00049	0.00027	0.00039	0.00024	0.02257	0.00745	0.00000	0.00000
31	0.00055	0.00030	0.00041	0.00025	0.02257	0.00745	0.00000	0.00000
32	0.00061	0.00034	0.00044	0.00026	0.02257	0.00745	0.00000	0.00000
33	0.00067	0.00038	0.00050	0.00031	0.02257	0.00745	0.00000	0.00000
34	0.00073	0.00041	0.00056	0.00035	0.02257	0.00745	0.00000	0.00000
35	0.00079	0.00045	0.00063	0.00039	0.02257	0.00745	0.00000	0.00000
36	0.00084	0.00048	0.00070	0.00044	0.02257	0.00745	0.00000	0.00000
37	0.00089	0.00052	0.00077	0.00047	0.02257	0.00745	0.00000	0.00000
38	0.00091	0.00055	0.00084	0.00051	0.02257	0.00745	0.00000	0.00000
39	0.00094	0.00058	0.00090	0.00055	0.02257	0.00745	0.00000	0.00000
40	0.00097	0.00062	0.00096	0.00060	0.02257	0.00745	0.00000	0.00000
41	0.00101	0.00066	0.00102	0.00065	0.02257	0.00745	0.06000	0.00000
42	0.00105	0.00071	0.00108	0.00071	0.02257	0.00745	0.06000	0.00000
43	0.00111	0.00075	0.00114	0.00077	0.02257	0.00745	0.06000	0.00000
44	0.00115	0.00080	0.00122	0.00085	0.02257	0.00745	0.06000	0.00000
45	0.00120	0.00085	0.00130	0.00094	0.02257	0.00745	0.06000	0.00000
46	0.00125	0.00089	0.00140	0.00103	0.02257	0.00745	0.06000	0.00000
47	0.00131	0.00094	0.00151	0.00112	0.02257	0.00745	0.06000	0.00000
48	0.00340	0.00099	0.00162	0.00122	0.02257	0.00745	0.06000	0.00000
49	0.00342	0.00145	0.00173	0.00133	0.02257	0.00818	0.06000	0.00000
50	0.00339	0.00148	0.00186	0.00143	0.02257	0.00896	0.06000	0.00000
51	0.00334	0.00155	0.00200	0.00155	0.02385	0.00978	0.06000	0.00000
52	0.00329	0.00164	0.00214	0.00168	0.02512	0.01063	0.06000	0.00000
53	0.00335	0.00181	0.00229	0.00181	0.02640	0.01154	0.06000	0.00000
54	0.00348	0.00201	0.00245	0.00197	0.02769	0.01248	0.06000	0.00000
55	0.00377	0.00229	0.00262	0.00213	0.02897	0.01346	0.06000	0.06000
56	0.00415	0.00264	0.00281	0.00232	0.03027	0.01446	0.06000	0.06000
57	0.00463	0.00304	0.00303	0.00253	0.03156	0.01550	0.06000	0.06000
58	0.00522	0.00352	0.00331	0.00276	0.03286	0.01654	0.06000	0.06000
59	0.00573	0.00395	0.00363	0.00301	0.03415	0.01760	0.06000	0.06000
60	0.00631	0.00440	0.00400	0.00329	0.03544	0.01865	0.12000	0.12000
61	0.00717	0.00504	0.00441	0.00360	0.03673	0.01971	0.12000	0.12000
62	0.00794	0.00557	0.00488	0.00393	0.03803	0.02077	0.12000	0.12000
63	0.00904	0.00633	0.00538	0.00429	0.03933	0.02184	0.12000	0.12000
64	0.01002	0.00698	0.00592	0.00466	0.04067	0.02294	0.12000	0.12000
65	0.01109	0.00769	0.00647	0.00504	0.04204	0.02408	0.18000	0.18000
66	0.01262	0.00869	0.00703	0.00543	0.04347	0.02529	0.18000	0.18000
67	0.01394	0.00955	0.00757	0.00582	0.04498	0.02660	0.18000	0.18000
68	0.01496	0.01021	0.00810	0.00621	0.04658	0.02803	0.18000	0.18000
69	0.01656	0.01128	0.00860	0.00658	0.04831	0.02959	0.18000	0.18000
70	0.01787	0.01217	0.00907	0.00695	0.05017	0.03132	0.18000	0.18000
71	0.01990	0.01353	0.00951	0.00729	0.05221	0.03323	0.18000	0.18000
72	0.02220	0.01504	0.00992	0.00761	0.05445	0.03533	0.12000	0.12000
73	0.02478	0.01667	0.02457	0.01858	0.05691	0.03764	0.12000	0.12000
74	0.02762	0.01841	0.02728	0.02067	0.05961	0.04014	0.12000	0.12000
75	0.03161	0.02087	0.03039	0.02297	0.06258	0.04285	0.12000	0.12000

PLAN A – ACTUARIAL TABLES AND RATES (Continued)

Age	DROP Entry Rates	DROP Entry Rates	Disability	Remarriage
	Tier 1	Tier 2	Rates	Rates
18	0.00000	0.00000	0.00038	0.06124
19	0.00000	0.00000	0.00038	0.06124
20	0.00000	0.00000	0.00038	0.06124
21	0.00000	0.00000	0.00038	0.05818
22	0.00000	0.00000	0.00038	0.05524
23	0.00000	0.00000	0.00038	0.05242
24	0.00000	0.00000	0.00038	0.04971
25	0.00000	0.00000	0.00038	0.04566
26	0.00000	0.00000	0.00038	0.04335
27	0.00000	0.00000	0.00038	0.04114
28	0.00000	0.00000	0.00038	0.03902
29	0.00000	0.00000	0.00038	0.03698
30	0.00000	0.00000	0.00038	0.03502
31	0.00000	0.00000	0.00038	0.03314
32	0.00000	0.00000	0.00038	0.03134
33	0.00000	0.00000	0.00038	0.02961
34	0.00000	0.00000	0.00038	0.02795
35	0.00000	0.00000	0.00043	0.02636
36	0.00000	0.00000	0.00048	0.02483
37	0.00000	0.00000	0.00053	0.02336
38	0.00000	0.00000	0.00060	0.02195
39	0.00000	0.00000	0.00068	0.02060
40	0.00000	0.00000	0.00078	0.01930
41	0.18000	0.00000	0.00088	0.01805
42	0.18000	0.00000	0.00098	0.01686
43	0.18000	0.00000	0.00110	0.01571
44	0.18000	0.00000	0.00125	0.01461
45	0.18000	0.00000	0.00143	0.01355
46	0.18000	0.00000	0.00163	0.01253
47	0.18000	0.00000	0.00183	0.01156
48	0.18000	0.00000	0.00208	0.01063
49	0.18000	0.00000	0.00235	0.00973
50	0.27000	0.00000	0.00268	0.00887
51	0.27000	0.00000	0.00305	0.00804
52	0.27000	0.00000	0.00345	0.00725
53	0.27000	0.00000	0.00392	0.00649
54	0.27000	0.00000	0.00445	0.00576
55	0.27000	0.00000	0.00505	0.00000
56	0.27000	0.25000	0.00575	0.00000
57	0.27000	0.25000	0.00653	0.00000
58	0.27000	0.25000	0.00740	0.00000
59	0.27000	0.25000	0.00843	0.00000
60	0.24000	0.40000	0.01220	0.00000
61	0.16000	0.20000	0.01220	0.00000
62	0.16000	0.20000	0.01220	0.00000
63	0.16000	0.20000	0.01220	0.00000
64	0.16000	0.20000	0.01220	0.00000
65	0.16000	0.20000	0.01220	0.00000
66	0.16000	0.10000	0.01220	0.00000
67	0.16000	0.10000	0.01220	0.00000
68	0.16000	0.10000	0.01220	0.00000
69	0.16000	0.10000	0.01220	0.00000
70	0.09000	0.10000	0.01220	0.00000
71	0.09000	0.10000	0.01220	0.00000
72	0.09000	0.10000	0.01220	0.00000
73	0.09000	0.10000	0.01220	0.00000
74	0.09000	0.10000	0.01220	0.00000
75	0.09000	0.10000	0.01220	0.00000
75	0.09000	0.09000	0.01220	0.00000

PLAN B – ACTUARIAL TABLES AND RATES

Age	Retired Male Mortality Rates	Retired Female Mortality Rates	Active Male Mortality Rates	Active Female Mortality Rates	Male Disabled Mortality Rates	Female Disabled Mortality Rates	Retirement Rates Tier 1	Retirement Rates Tier 2
18	0.00020	0.00011	0.00028	0.00018	0.02257	0.00745	0.00000	0.00000
19	0.00021	0.00011	0.00030	0.00018	0.02257	0.00745	0.00000	0.00000
20	0.00021	0.00011	0.00032	0.00019	0.02257	0.00745	0.00000	0.00000
21	0.00022	0.00012	0.00033	0.00019	0.02257	0.00745	0.00000	0.00000
22	0.00023	0.00012	0.00035	0.00019	0.02257	0.00745	0.00000	0.00000
23	0.00025	0.00013	0.00036	0.00019	0.02257	0.00745	0.00000	0.00000
24	0.00026	0.00014	0.00037	0.00019	0.02257	0.00745	0.00000	0.00000
25	0.00029	0.00016	0.00037	0.00020	0.02257	0.00745	0.00000	0.00000
26	0.00033	0.00019	0.00038	0.00020	0.02257	0.00745	0.00000	0.00000
27	0.00036	0.00020	0.00038	0.00021	0.02257	0.00745	0.00000	0.00000
28	0.00039	0.00022	0.00038	0.00021	0.02257	0.00745	0.00000	0.00000
29	0.00043	0.00023	0.00038	0.00022	0.02257	0.00745	0.00000	0.00000
30	0.00049	0.00027	0.00039	0.00024	0.02257	0.00745	0.00000	0.00000
31	0.00055	0.00030	0.00041	0.00025	0.02257	0.00745	0.00000	0.00000
32	0.00061	0.00034	0.00044	0.00026	0.02257	0.00745	0.00000	0.00000
33	0.00067	0.00038	0.00050	0.00031	0.02257	0.00745	0.00000	0.00000
34	0.00073	0.00041	0.00056	0.00035	0.02257	0.00745	0.00000	0.00000
35	0.00079	0.00045	0.00063	0.00039	0.02257	0.00745	0.00000	0.00000
36	0.00084	0.00048	0.00070	0.00044	0.02257	0.00745	0.00000	0.00000
37	0.00089	0.00052	0.00077	0.00047	0.02257	0.00745	0.00000	0.00000
38	0.00091	0.00055	0.00084	0.00051	0.02257	0.00745	0.00000	0.00000
39	0.00094	0.00058	0.00090	0.00055	0.02257	0.00745	0.00000	0.00000
40	0.00097	0.00062	0.00096	0.00060	0.02257	0.00745	0.00000	0.00000
41	0.00101	0.00066	0.00102	0.00065	0.02257	0.00745	0.00000	0.00000
42	0.00105	0.00071	0.00108	0.00071	0.02257	0.00745	0.00000	0.00000
43	0.00111	0.00075	0.00114	0.00077	0.02257	0.00745	0.00000	0.00000
44	0.00115	0.00080	0.00122	0.00085	0.02257	0.00745	0.00000	0.00000
45	0.00120	0.00085	0.00130	0.00094	0.02257	0.00745	0.00000	0.00000
46	0.00125	0.00089	0.00140	0.00103	0.02257	0.00745	0.08000	0.00000
47	0.00131	0.00094	0.00151	0.00112	0.02257	0.00745	0.08000	0.00000
48	0.00340	0.00099	0.00162	0.00122	0.02257	0.00745	0.08000	0.00000
49	0.00342	0.00145	0.00173	0.00133	0.02257	0.00818	0.08000	0.00000
50	0.00339	0.00148	0.00186	0.00143	0.02257	0.00896	0.08000	0.00000
51	0.00334	0.00155	0.00200	0.00155	0.02385	0.00978	0.08000	0.00000
52	0.00329	0.00164	0.00214	0.00168	0.02512	0.01063	0.08000	0.00000
53	0.00335	0.00181	0.00229	0.00181	0.02640	0.01154	0.08000	0.00000
54	0.00348	0.00201	0.00245	0.00197	0.02769	0.01248	0.08000	0.00000
55	0.00377	0.00229	0.00262	0.00213	0.02897	0.01346	0.20000	0.20000
56	0.00415	0.00264	0.00281	0.00232	0.03027	0.01446	0.08000	0.08000
57	0.00463	0.00304	0.00303	0.00253	0.03156	0.01550	0.08000	0.08000
58	0.00522	0.00352	0.00331	0.00276	0.03286	0.01654	0.08000	0.08000
59	0.00573	0.00395	0.00363	0.00301	0.03415	0.01760	0.08000	0.08000
60	0.00631	0.00440	0.00400	0.00329	0.03544	0.01865	0.08000	0.08000
61	0.00717	0.00504	0.00441	0.00360	0.03673	0.01971	0.08000	0.08000
62	0.00794	0.00557	0.00488	0.00393	0.03803	0.02077	0.12000	0.12000
63	0.00904	0.00633	0.00538	0.00429	0.03933	0.02184	0.12000	0.12000
64	0.01002	0.00698	0.00592	0.00466	0.04067	0.02294	0.12000	0.12000
65	0.01109	0.00769	0.00647	0.00504	0.04204	0.02408	0.12000	0.12000
66	0.01262	0.00869	0.00703	0.00543	0.04347	0.02529	0.12000	0.12000
67	0.01394	0.00955	0.00757	0.00582	0.04498	0.02660	0.12000	0.12000
68	0.01496	0.01021	0.00810	0.00621	0.04658	0.02803	0.12000	0.12000
69	0.01656	0.01128	0.00860	0.00658	0.04831	0.02959	0.12000	0.12000
70	0.01787	0.01217	0.00907	0.00695	0.05017	0.03132	0.12000	0.12000
71	0.01990	0.01353	0.00951	0.00729	0.05221	0.03323	0.12000	0.12000
72	0.02220	0.01504	0.00992	0.00761	0.05445	0.03533	0.12000	0.12000
73	0.02478	0.01667	0.02457	0.01858	0.05691	0.03764	0.12000	0.12000
74	0.02762	0.01841	0.02728	0.02067	0.05961	0.04014	0.12000	0.12000
75	0.03161	0.02087	0.03039	0.02297	0.06258	0.04285	0.12000	0.12000

PLAN B – ACTUARIAL TABLES AND RATES (Continued)

Age	DROP Entry Rates Tier 1	DROP Entry Rates Tier 2	Disability Rates	Remarriage Rates
18	0.00000	0.00000	0.00090	0.06124
19	0.00000	0.00000	0.00090	0.06124
20	0.00000	0.00000	0.00090	0.06124
21	0.00000	0.00000	0.00090	0.05818
22	0.00000	0.00000	0.00090	0.05524
23	0.00000	0.00000	0.00090	0.05242
24	0.00000	0.00000	0.00090	0.04971
25	0.00000	0.00000	0.00090	0.04566
26	0.00000	0.00000	0.00090	0.04335
27	0.00000	0.00000	0.00090	0.04114
28	0.00000	0.00000	0.00090	0.03902
29	0.00000	0.00000	0.00090	0.03698
30	0.00000	0.00000	0.00090	0.03502
31	0.00000	0.00000	0.00090	0.03314
32	0.00000	0.00000	0.00090	0.03134
33	0.00000	0.00000	0.00090	0.02961
34	0.00000	0.00000	0.00090	0.02795
35	0.00000	0.00000	0.00102	0.02636
36	0.00000	0.00000	0.00114	0.02483
37	0.00000	0.00000	0.00126	0.02336
38	0.00000	0.00000	0.00144	0.02195
39	0.00000	0.00000	0.00162	0.02060
40	0.00000	0.00000	0.00186	0.01930
41	0.00000	0.00000	0.00210	0.01805
42	0.00000	0.00000	0.00234	0.01686
43	0.00000	0.00000	0.00264	0.01571
44	0.00000	0.00000	0.00300	0.01461
45	0.00000	0.00000	0.00342	0.01355
46	0.33000	0.00000	0.00390	0.01253
47	0.33000	0.00000	0.00438	0.01156
48	0.33000	0.00000	0.00498	0.01063
49	0.33000	0.00000	0.00564	0.00973
50	0.33000	0.00000	0.00642	0.00887
51	0.33000	0.00000	0.00732	0.00804
52	0.33000	0.00000	0.00828	0.00725
53	0.33000	0.00000	0.00942	0.00649
54	0.33000	0.00000	0.01068	0.00576
55	0.25000	0.25000	0.01212	0.00000
56	0.25000	0.25000	0.01380	0.00000
57	0.25000	0.25000	0.01566	0.00000
58	0.25000	0.25000	0.01776	0.00000
59	0.25000	0.25000	0.02022	0.00000
60	0.40000	0.40000	0.02928	0.00000
61	0.20000	0.20000	0.02928	0.00000
62	0.20000	0.20000	0.02928	0.00000
63	0.20000	0.20000	0.02928	0.00000
64	0.20000	0.20000	0.02928	0.00000
65	0.20000	0.20000	0.02928	0.00000
66	0.10000	0.10000	0.02928	0.00000
67	0.10000	0.10000	0.02928	0.00000
68	0.10000	0.10000	0.02928	0.00000
69	0.10000	0.10000	0.02928	0.00000
70	0.10000	0.10000	0.02928	0.00000
71	0.10000	0.10000	0.02928	0.00000
72	0.10000	0.10000	0.02928	0.00000
73	0.10000	0.10000	0.02928	0.00000
74	0.10000	0.10000	0.02928	0.00000
75	0.10000	0.10000	0.02928	0.00000

PRIOR YEAR ASSUMPTIONS

VALUATION INTEREST RATE:	7.75% (Net of Investment Expense)
ANNUAL SALARY INCREASE RATE:	5.75% (3.00% inflation / 2.75% merit)
ACTIVE MEMBER MORTALITY:	RP 2000 Employee Table for males and females
ANNUITANT, AND BENEFICIARY MORTALITY:	RP 2000 Healthy Annuitant Table for males and females
RETIREMENT RATES FOR ACTIVE FORMER DROP PARTICIPANTS:	Retirement rates for active former DROP participants are as follows:

Ages	Retirement Rates
Below 89	0.19
90	1.00

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

<u>Service</u>	<u>Plan A</u>	<u>Plan B</u>
0	0.24	0.26
1	0.19	0.20
2	0.16	0.15
3	0.12	0.15
4	0.10	0.10
5	0.08	0.10
6	0.08	0.09
7	0.08	0.09
8	0.06	0.06
9	0.06	0.05
10	0.06	0.05
11	0.05	0.05
12	0.05	0.05
13	0.05	0.05
14	0.03	0.05
15	0.03	0.05
16	0.03	0.03
17	0.01	0.03
18	0.01	0.03
19	0.01	0.03
20	0.01	0.02
over 20	0.01	0.02

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

RATES OF DISABILITY: 20% of the disability rates used for the 21st valuation of the Railroad Retirement System for individuals with 10 – 19 years of service.

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

FAMILY STATISTICS: Assumptions utilized in determining the costs of various survivor benefits as listed below, are derived from the information provided in the 2000 U. S. Census:

<u>Member's Age</u>	<u>% With Children</u>	<u>Number of Children</u>	<u>Average Age</u>	<u>Remarriage Rates</u>
25	62%	1.7	6	0.04070
35	82%	2.1	10	0.03409
45	66%	1.8	13	0.01400
55	19%	1.4	15	N/A
65	2%	1.4	15	N/A

DISABLED LIVES MORTALITY: RP-2000 Disabled Lives Mortality Tables for Males and Females

VESTING ELECTING PERCENTAGE: 30% of those members under age 40 who are terminated vested elect deferred benefits in lieu of contribution refunds. 45% of those who are between the ages of 40 - 49 who are terminated vested elect deferred benefits in lieu of contribution refunds. 60% of those who are at least age 50 who are terminated vested elect deferred benefits in lieu of contribution refunds.

PLAN A – PRIOR ACTUARIAL TABLES AND RATES

Age	Retired Male Mortality Rates	Retired Female Mortality Rates	Active Male Mortality Rates	Active Female Mortality Rates	Retirement Rates	DROP Entry Rates	Disability Rates	Remarriage Rates
18	0.00032	0.00019	0.00032	0.00019	0.00000	0.00000	0.00030	0.05665
19	0.00033	0.00019	0.00033	0.00019	0.00000	0.00000	0.00030	0.05665
20	0.00035	0.00019	0.00035	0.00019	0.00000	0.00000	0.00030	0.05665
21	0.00036	0.00019	0.00036	0.00019	0.00000	0.00000	0.00030	0.05213
22	0.00037	0.00019	0.00037	0.00019	0.00000	0.00000	0.00030	0.04834
23	0.00037	0.00020	0.00037	0.00020	0.00000	0.00000	0.00030	0.04522
24	0.00038	0.00020	0.00038	0.00020	0.00000	0.00000	0.00030	0.04270
25	0.00038	0.00021	0.00038	0.00021	0.00000	0.00000	0.00030	0.04070
26	0.00038	0.00021	0.00038	0.00021	0.00000	0.00000	0.00030	0.03915
27	0.00038	0.00022	0.00038	0.00022	0.00000	0.00000	0.00030	0.03799
28	0.00039	0.00024	0.00039	0.00024	0.00000	0.00000	0.00030	0.03714
29	0.00041	0.00025	0.00041	0.00025	0.00000	0.00000	0.00030	0.03654
30	0.00044	0.00026	0.00044	0.00026	0.00000	0.00000	0.00030	0.03611
31	0.00050	0.00031	0.00050	0.00031	0.00000	0.00000	0.00030	0.03578
32	0.00056	0.00035	0.00056	0.00035	0.00000	0.00000	0.00030	0.03549
33	0.00063	0.00039	0.00063	0.00039	0.00000	0.00000	0.00030	0.03515
34	0.00070	0.00044	0.00070	0.00044	0.00000	0.00000	0.00030	0.03471
35	0.00077	0.00047	0.00077	0.00047	0.00000	0.00000	0.00034	0.03409
36	0.00084	0.00051	0.00084	0.00051	0.00000	0.00000	0.00038	0.03286
37	0.00090	0.00055	0.00090	0.00055	0.00000	0.00000	0.00042	0.03139
38	0.00096	0.00060	0.00096	0.00060	0.00000	0.00000	0.00048	0.02973
39	0.00102	0.00065	0.00102	0.00065	0.00000	0.00000	0.00054	0.02787
40	0.00108	0.00071	0.00108	0.00071	0.00000	0.00000	0.00062	0.02585
41	0.00114	0.00077	0.00114	0.00077	0.06000	0.27000	0.00070	0.02352
42	0.00122	0.00085	0.00122	0.00085	0.06000	0.27000	0.00078	0.02111
43	0.00130	0.00094	0.00130	0.00094	0.06000	0.27000	0.00088	0.01868
44	0.00140	0.00103	0.00140	0.00103	0.06000	0.27000	0.00100	0.01629
45	0.00151	0.00112	0.00151	0.00112	0.06000	0.27000	0.00114	0.01400
46	0.00162	0.00122	0.00162	0.00122	0.06000	0.27000	0.00130	0.01208
47	0.00173	0.00133	0.00173	0.00133	0.06000	0.27000	0.00146	0.01034
48	0.00186	0.00143	0.00186	0.00143	0.06000	0.27000	0.00166	0.00879
49	0.00200	0.00155	0.00200	0.00155	0.06000	0.27000	0.00188	0.00744
50	0.00535	0.00234	0.00214	0.00168	0.06000	0.27000	0.00214	0.00629
51	0.00553	0.00246	0.00229	0.00181	0.06000	0.27000	0.00244	0.00551
52	0.00564	0.00265	0.00245	0.00197	0.06000	0.27000	0.00276	0.00493
53	0.00572	0.00290	0.00262	0.00213	0.06000	0.27000	0.00314	0.00451
54	0.00580	0.00319	0.00281	0.00232	0.06000	0.27000	0.00356	0.00423
55	0.00590	0.00353	0.00303	0.00253	0.06000	0.27000	0.00404	0.00406
56	0.00612	0.00393	0.00331	0.00276	0.06000	0.27000	0.00460	0.00000
57	0.00644	0.00438	0.00363	0.00301	0.06000	0.27000	0.00522	0.00000
58	0.00690	0.00492	0.00400	0.00329	0.06000	0.27000	0.00592	0.00000
59	0.00749	0.00553	0.00441	0.00360	0.06000	0.27000	0.00674	0.00000
60	0.00820	0.00620	0.00488	0.00393	0.14000	0.27000	0.00976	0.00000
61	0.00900	0.00692	0.00538	0.00429	0.14000	0.12000	0.00976	0.00000
62	0.00991	0.00769	0.00592	0.00466	0.14000	0.12000	0.00976	0.00000
63	0.01095	0.00851	0.00647	0.00504	0.14000	0.12000	0.00976	0.00000
64	0.01212	0.00939	0.00703	0.00543	0.14000	0.12000	0.00976	0.00000
65	0.01342	0.01036	0.00757	0.00582	0.14000	0.12000	0.00976	0.00000
66	0.01487	0.01141	0.00810	0.00621	0.14000	0.12000	0.00976	0.00000
67	0.01646	0.01254	0.00860	0.00658	0.14000	0.12000	0.00976	0.00000
68	0.01820	0.01377	0.00907	0.00695	0.14000	0.12000	0.00976	0.00000
69	0.02011	0.01515	0.00951	0.00729	0.14000	0.12000	0.00976	0.00000
70	0.02221	0.01674	0.00992	0.00761	0.14000	0.12000	0.00976	0.00000
71	0.02457	0.01858	0.02457	0.01858	0.14000	0.12000	0.00976	0.00000
72	0.02728	0.02066	0.02728	0.02067	0.14000	0.12000	0.00976	0.00000
73	0.03039	0.02297	0.03039	0.02297	0.14000	0.12000	0.00976	0.00000
74	0.03390	0.02546	0.03390	0.02546	0.14000	0.12000	0.00976	0.00000
75	0.03783	0.02811	0.03783	0.02811	0.14000	0.12000	0.00976	0.00000

PLAN B – PRIOR ACTUARIAL TABLES AND RATES

Age	Retired Male Mortality Rates	Retired Female Mortality Rates	Active Male Mortality Rates	Active Female Mortality Rates	Retirement Rates	DROP Entry Rates	Disability Rates	Remarriage Rates
18	0.00032	0.00019	0.00032	0.00019	0.00000	0.00000	0.00030	0.05665
19	0.00033	0.00019	0.00033	0.00019	0.00000	0.00000	0.00030	0.05665
20	0.00035	0.00019	0.00035	0.00019	0.00000	0.00000	0.00030	0.05665
21	0.00036	0.00019	0.00036	0.00019	0.00000	0.00000	0.00030	0.05213
22	0.00037	0.00019	0.00037	0.00019	0.00000	0.00000	0.00030	0.04834
23	0.00037	0.00020	0.00037	0.00020	0.00000	0.00000	0.00030	0.04522
24	0.00038	0.00020	0.00038	0.00020	0.00000	0.00000	0.00030	0.04270
25	0.00038	0.00021	0.00038	0.00021	0.00000	0.00000	0.00030	0.04070
26	0.00038	0.00021	0.00038	0.00021	0.00000	0.00000	0.00030	0.03915
27	0.00038	0.00022	0.00038	0.00022	0.00000	0.00000	0.00030	0.03799
28	0.00039	0.00024	0.00039	0.00024	0.00000	0.00000	0.00030	0.03714
29	0.00041	0.00025	0.00041	0.00025	0.00000	0.00000	0.00030	0.03654
30	0.00044	0.00026	0.00044	0.00026	0.00000	0.00000	0.00030	0.03611
31	0.00050	0.00031	0.00050	0.00031	0.00000	0.00000	0.00030	0.03578
32	0.00056	0.00035	0.00056	0.00035	0.00000	0.00000	0.00030	0.03549
33	0.00063	0.00039	0.00063	0.00039	0.00000	0.00000	0.00030	0.03515
34	0.00070	0.00044	0.00070	0.00044	0.00000	0.00000	0.00030	0.03471
35	0.00077	0.00047	0.00077	0.00047	0.00000	0.00000	0.00034	0.03409
36	0.00084	0.00051	0.00084	0.00051	0.00000	0.00000	0.00038	0.03286
37	0.00090	0.00055	0.00090	0.00055	0.00000	0.00000	0.00042	0.03139
38	0.00096	0.00060	0.00096	0.00060	0.00000	0.00000	0.00048	0.02973
39	0.00102	0.00065	0.00102	0.00065	0.00000	0.00000	0.00054	0.02787
40	0.00108	0.00071	0.00108	0.00071	0.00000	0.00000	0.00062	0.02585
41	0.00114	0.00077	0.00114	0.00077	0.00000	0.00000	0.00070	0.02352
42	0.00122	0.00085	0.00122	0.00085	0.00000	0.00000	0.00078	0.02111
43	0.00130	0.00094	0.00130	0.00094	0.00000	0.00000	0.00088	0.01868
44	0.00140	0.00103	0.00140	0.00103	0.00000	0.00000	0.00100	0.01629
45	0.00151	0.00112	0.00151	0.00112	0.00000	0.00000	0.00114	0.01400
46	0.00162	0.00122	0.00162	0.00122	0.06000	0.24000	0.00130	0.01208
47	0.00173	0.00133	0.00173	0.00133	0.06000	0.24000	0.00146	0.01034
48	0.00186	0.00143	0.00186	0.00143	0.06000	0.24000	0.00166	0.00879
49	0.00200	0.00155	0.00200	0.00155	0.06000	0.24000	0.00188	0.00744
50	0.00535	0.00234	0.00214	0.00168	0.06000	0.24000	0.00214	0.00629
51	0.00553	0.00246	0.00229	0.00181	0.06000	0.24000	0.00244	0.00551
52	0.00564	0.00265	0.00245	0.00197	0.06000	0.24000	0.00276	0.00493
53	0.00572	0.00290	0.00262	0.00213	0.06000	0.24000	0.00314	0.00451
54	0.00580	0.00319	0.00281	0.00232	0.06000	0.24000	0.00356	0.00423
55	0.00590	0.00353	0.00303	0.00253	0.36000	0.38000	0.00404	0.00000
56	0.00612	0.00393	0.00331	0.00276	0.22000	0.38000	0.00460	0.00000
57	0.00644	0.00438	0.00363	0.00301	0.22000	0.38000	0.00522	0.00000
58	0.00690	0.00492	0.00400	0.00329	0.22000	0.38000	0.00592	0.00000
59	0.00749	0.00553	0.00441	0.00360	0.22000	0.16000	0.00674	0.00000
60	0.00820	0.00620	0.00488	0.00393	0.12000	0.16000	0.00976	0.00000
61	0.00900	0.00692	0.00538	0.00429	0.12000	0.16000	0.01060	0.00000
62	0.00991	0.00769	0.00592	0.00466	0.12000	0.16000	0.01156	0.00000
63	0.01095	0.00851	0.00647	0.00504	0.12000	0.16000	0.01110	0.00000
64	0.01212	0.00939	0.00703	0.00543	0.12000	0.16000	0.00702	0.00000
65	0.01342	0.01036	0.00757	0.00582	0.12000	0.16000	0.00126	0.00000
66	0.01487	0.01141	0.00810	0.00621	0.12000	0.16000	0.00976	0.00000
67	0.01646	0.01254	0.00860	0.00658	0.12000	0.16000	0.00976	0.00000
68	0.01820	0.01377	0.00907	0.00695	0.12000	0.16000	0.00976	0.00000
69	0.02011	0.01515	0.00951	0.00729	0.12000	0.16000	0.00976	0.00000
70	0.02221	0.01674	0.00992	0.00761	0.12000	0.16000	0.00976	0.00000
71	0.02457	0.01858	0.02457	0.01858	0.12000	0.16000	0.00976	0.00000
72	0.02728	0.02066	0.02728	0.02067	0.12000	0.16000	0.00976	0.00000
73	0.03039	0.02297	0.03039	0.02297	0.12000	0.16000	0.00976	0.00000
74	0.03390	0.02546	0.03390	0.02546	0.12000	0.16000	0.00976	0.00000
75	0.03783	0.02811	0.03783	0.02811	0.12000	0.16000	0.00976	0.00000

GLOSSARY

Accrued Benefit – The pension benefit that an individual has earned as of a specific date based on the provisions of the plan and the individual's age, service, and salary as of that date.

Actuarial Accrued Liability – The actuarial present value of benefits payable to members of the fund less the present value of future normal costs attributable to the members.

Actuarial Assumptions – Assumptions as to the occurrence of future events affecting pension costs. These assumptions include rates of mortality, withdrawal, disablement, and retirement. Also included are rates of investment earnings, changes in compensation, as well as statistics related to marriage and family composition.

Actuarial Cost Method – A procedure for determining the portion of the cost of a pension plan to be allocated to each year. Each cost method allocates a certain portion of the actuarial present value of benefits between the actuarial accrued liability and future normal costs. Once this allocation is made, a determination of the normal cost attributable to a specific year can be made along with the payment to amortize any unfunded actuarial accrued liability. To the extent that a particular funding method allocates a greater (lesser) portion of the actual present value of benefits to the actuarial accrued liability it will allocate less (more) to future normal costs.

Actuarial Equivalence – Payments or receipts with equal actuarial value on a given date when valued using the same set of actuarial assumptions.

Actuarial Gain (Loss) – The financial effect on the fund of the difference between the expected and actual experience of the fund. The experience may be related to investment earnings above (or below) those expected or changes in the liability structure due to fewer (or greater) than the expected numbers of retirements, deaths, disabilities, or withdrawals. In addition, other factors such as pay increases above (or below) those forecast can result in actuarial gains or losses. The effect of such gains (or losses) is to decrease (or increase) future costs.

Actuarial Present Value – The value, as of a specified date, of an amount or series of amounts payable or receivable thereafter, with each amount adjusted to reflect the time value of money (through accrual of interest) and the probability of payments. For example: if \$600 invested today will be worth \$1,000 in 10 years and there is a 50% probability that a person will live 10 years, then the actuarial present value of \$1,000 payable to that person if he should survive 10 years is \$300.

Actuarial Value of Assets – The value of cash, investments, and other property belonging to the pension plan as used by the actuary for the purpose of the actuarial valuation. This may correspond to the book value, market value, or some modification involving either or both book and market value. Adjustments to market values are often made to reduce the volatility of asset values.

Asset Gain (Loss) – That portion of the actuarial gain attributable to investment performance above (below) the expected rate of return in the actuarial assumptions.

Amortization Payment – That portion of the pension plan contribution designated to pay interest and reduce the outstanding principal balance of unfunded actuarial accrued liability. If the amortization payment is less than the accrued interest on the unfunded actuarial accrued liability the outstanding principal balance will increase.

Contribution Shortfall (Excess) – The difference between contributions recommended in the prior valuation and the actual amount received.

Decrements – Events which result in the termination of membership in the system such as retirement, disability, withdrawal, or death.

Employer Normal Cost – That portion of the normal cost not attributable to employee contributions. It includes both direct contributions made by the employer and contributions from other non-employee sources such as revenue sharing and revenues related to taxes.

Funded Ratio – A measure of the ratio of assets to liabilities of the system according to a specific definition of those two values. Typically the assets used in the measure are the actuarial value of assets; the liabilities are defined by reference to some recognized actuarial funding method. Thus the funded ratio of a plan depends not only on the financial strength of the plan but also on the funding method used to determine the liabilities and the asset valuation method used to determine the assets in the ratio.

Normal Cost – That portion of the actuarial present value of pension plan benefits and expenses allocated to a valuation year by the actuarial cost method. This is analogous to one year's insurance premium.

Pension Benefit Obligation – The actuarial present value of benefits earned or credited to date based on the members expected final average compensation at retirement. For current retirees or terminated members this is equivalent to the actuarial present value of their accrued benefit.

Projected Benefits – The benefits expected to be paid in the future based on the provisions of the plan and the actuarial assumptions. The projected values are based on anticipated future advancement in age and accrual of service as well as increases in salary paid to the participant.

Unfunded Actuarial Accrued Liability – The excess of the actuarial accrued liability over the actuarial value of assets.

Vested Benefits – Benefits that the members are entitled to even if they withdraw from service.

NOTES