

**MUNICIPAL POLICE EMPLOYEES'
RETIREMENT SYSTEM**

ACTUARIAL VALUATION AS OF
JUNE 30, 2013

G. S. CURRAN & COMPANY, LTD.

Actuarial Services

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November 19, 2013

Board of Trustees
Municipal Police Employees' Retirement System
7722 Office Park Boulevard, Suite 200
Baton Rouge, Louisiana 70809

Ladies and Gentlemen:

We are pleased to present our report on the actuarial valuation of the Municipal Police Employees' Retirement System for the fiscal year ending June 30, 2013. 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 Municipal Police Employees' Retirement System of the State of Louisiana. The primary purposes of the report are to determine the actuarially required contribution for the retirement system for the fiscal year ending June 30, 2014, to recommend the net direct employer contribution rate for fiscal 2015, and to provide information for the system's financial statements. This report was prepared exclusively for Municipal Police Employees' Retirement System for a specific limited purpose. It is not for the use or benefit of any third party for any purpose.


Please note that significant changes in the accounting standards affecting retirement systems have been approved by the Governmental Accounting Standards Board. These changes, which are included in GASB Statement 67 will not be effective until the June 30, 2014 valuation. This report was prepared in accordance with the currently effective GASB Statement 25. GASB 67 will require the reporting of an alternative calculation of liabilities based upon a funding method and interest rate that may differ with those used for funding purposes. It is important to note that the liability numbers within this report are not necessarily a reasonable approximation of the liability numbers that will be reported under GASB 67.

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 POLICE EMPLOYEES' RETIREMENT SYSTEM

Valuation Date:	June 30, 2013	June 30, 2012
Census Summary:		
Active Contributing Members	5,602	5,779
Retired Members and Beneficiaries	4,340	4,230
DROP Participants	314	284
Terminated Due a Deferred Benefit	145	130
Terminated Due a Refund	1,252	1,176
Payroll (excludes DROP Participants):	\$ 264,711,491	\$ 272,606,934
Benefits in Payment:	\$ 110,735,234	\$ 104,988,503
Market Value of Assets:	\$ 1,600,532,779	\$ 1,406,662,003
Unfunded Actuarial Accrued Liability:	\$ 860,157,735	\$ 931,247,979
Actuarial Asset Value:	\$ 1,539,218,085	\$ 1,382,503,860
Actuarial Accrued Liability:	\$ 2,399,375,820	\$ 2,313,751,839

Ratio of Actuarial Value of Assets to Actuarial Accrued Liabilities:	64.15%	59.75%
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	FISCAL 2014	FISCAL 2013
Normal Cost as of July 1:	\$ 44,231,463	\$ 45,263,337
Amortization Cost (Credit) as of July 1:	\$ 78,078,232	\$ 77,273,677
Total Actuarially Required Contribution		
Inclusive of Estimated Administrative Costs:	\$ 128,119,166	\$ 128,413,205
Expected Insurance Premium Taxes	\$ 16,628,926	\$ 15,794,377
Net Direct Combined Actuarially Req'd Contributions	\$ 111,490,240	\$ 112,618,828
Actual Net Direct Combined Contribution Rate:	41.00%	41.00%
Actuarially Required Net Direct Combined Cont. Rate:	41.53%	41.03%

Minimum Recommended Net Direct Employer Cont. Rate

For Employees with Earnings Below Poverty Level-	Fiscal 2015: 34.00%	Fiscal 2014: 33.50%
For Employees with Earnings Above Poverty Level -	Fiscal 2015: 31.50%	Fiscal 2014: 31.00%
For Employees in the Non-Hazardous Subplan -	Fiscal 2015: 33.50%	Fiscal 2014: 33.00%

Employee Contribution Rate: 7.50% of payroll below poverty level/10.00% above poverty level/8.00% Non-Hazardous

Actuarial Cost Method: Individual Entry Age Normal with allocation of cost based on earnings.

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

Exclusions from Census: None

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

Changes in Valuation Methods, Assumptions, and/or Amortization Periods: DROP entry and retirement rats were extended to lower eligible ages and changes were made to several variables related to family statistics.

Method of Recognizing Gains and Losses: Gains and losses are amortized over 30 years, with the exception of contribution surpluses or shortfalls which are amortized over 15 years.

COMMENTS ON DATA

For the valuation, the administrator of the system furnished a census on CD derived from the system's master data processing file indicating each active covered employee's sex, date of birth, service credit, annual salary, and accumulated contributions. Information on retirees detailing dates of birth of retirees and beneficiaries, sex, as well as option categories and benefit amounts, was provided in like manner. In addition, data was supplied on former employees who are vested or who have contributions remaining on deposit. As illustrated in Exhibit IX, there are 5,916 active contributing members in the system of whom 2,506 have vested retirement benefits; in addition, there are 314 participants in the Deferred Retirement Option Plan (DROP); 4,340 former system members or their beneficiaries are receiving retirement benefits. An additional 1,397 members have contributions remaining on deposit with the system; of this number, 145 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 that have no corresponding current record are identified. This portion of the review indicates the annual flow of members from one status to another and is used to check some of the actuarial assumptions such as retirement rates, rates of withdrawal, and mortality. In addition, the census is checked for reasonableness in several areas such as age, service, salary, and current benefits. The records identified by this review as questionable are checked against data from prior valuations; those not recently verified are included in a detailed list of items sent to the system's administrative staff for verification and/or correction. Once the identified data has been researched and verified or corrected, it is returned to us for use in the valuation. Occasionally some requested information is either unavailable or impractical to obtain. In such cases, values may be assigned to missing data. The assigned values are based on information from similar records or based on information implied from other data in the record.

In addition to the statistical information provided on the system's participants, the system's administrator furnished general information related to other aspects of the system's expenses, benefits and funding. Valuation asset values as well as income and expenses for the fiscal year were based on information furnished by the system's auditor, the firm of Duplantier, Hrapmann, Hogan & Maher, Certified Public Accountants. As indicated in the system's financial statements, the net market value of the system's assets was \$1,600,532,779 as of June 30, 2013. Net investment income for fiscal 2013 measured on a market value basis amounted to a gain of \$192,188,753. Contributions to the system for fiscal 2013 totaled \$125,857,922; benefits and expenses amounted to \$124,175,899.

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

COMMENTS ON ACTUARIAL METHODS AND ASSUMPTIONS

This valuation is based on the Entry Age Normal actuarial cost method. Prior to fiscal 2002, experience gains and losses as well as contribution gains and losses were amortized over fifteen years with level amortization payments. Act 1079 of 2003 explicitly changed the amortization period for experience gains and losses, changes in assumptions, changes in methods, cost of living increases, and changes in plan benefit provisions to thirty years with level amortization payments.

Since it was not practical to perform a detailed analysis of plan experience, the assumptions utilized for the fiscal 2011 report, with the exception of active and healthy annuitant mortality, were designed to match, to the extent possible, those used by the prior actuary for the fiscal 2010 valuation. Adjustments to some non-mortality decrements were necessary due to differences in software design. For the 2012 valuation, technical changes were made to several assumptions. First, the salary increase assumption was simplified and smoothed to reduce fluctuations at several points on the scale. Disability rates were also rescaled to conform to a standard table. The DROP entry and retirement rates were recalibrated to more closely reflect recent plan experience. For the fiscal 2013 valuation, DROP entry and retirement rates were extended to lower eligible ages. Also, changes were made to several variables related to family statistics and several technical program improvements. The net effect of all such changes made in fiscal 2013 was an increase in the actuarial accrued liability of \$3,313,267. This resulted in an interest adjusted amortization payment of \$270,575, or 0.10% of projected payroll.

The method for determining the actuarial value of assets was changed with respect to the fiscal 2011 valuation. The prior valuation utilized a four year phase-in of all unrealized capital gains and losses at 25% per year. With the fiscal 2011 valuation, we began to transition to a five year phase-in of all market earnings above or below the valuation interest rate, subject to a corridor with a maximum of 115% of the market value of assets and a minimum of 85% of the market value of assets. In the event that the preliminary value of the actuarial value of assets falls outside of the corridor, the final value will be determined by averaging the preliminary value with the nearest corridor limit. In order to transition to the new method for calculating the actuarial value of assets, the deferral of capital gains for all years before fiscal 2011 was based upon the prior method. The deferral of all gains and losses for fiscal 2011 and later was based on the new method.

The current year actuarial assumptions utilized for the report are outlined on pages forty through forty-five. All assumptions are within our "best estimate range" 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.

CHANGES IN PLAN PROVISIONS

The following changes in plan provisions were enacted during the 2013 Regular Session of the Louisiana Legislature:

Act 170 allows statewide retirement system boards to make an irrevocable election to have future benefit increases for retirees that are now governed by R.S. 11:242 (Target Ratio Method) to instead require testing under a new method outlined in R.S. 11:243. Under R.S. 11:243 systems may grant a Cost of Living Adjustment (COLA) if any of the following apply: a) The system has a funded ratio of

90% or more and has not granted a COLA in the most recent fiscal year; b) The system has a funded ratio of 80% or more and has not granted a COLA in either of the two most recent fiscal years; c) The system has a funded ratio of 70% or more and has not granted a COLA in any of the three most recent fiscal years.

Act 236 changes the definition of “employee” to include any legal investigator employed by the City of Baton Rouge and Parish of East Baton Rouge in the parish attorney’s office who receives state supplemental pay and who transferred into the Municipal Police Employees’ Retirement System on the date of February 26, 2000, as a result of the merger agreement between the system and the city-parish. Such legal investigators with a break in service thereafter retain system retiree status only to the extent of their deferred vested benefit for time prior to the break in service.

Act 365 gives members of statewide retirement systems the option to purchase the accrual rate of the receiving system at time of transfer if said accrual rate is greater than the accrual rate of the transferring system. It also allows said members to execute a reverse transfer only one time, at the time of retirement or during active service if submitted to the receiving system on or before December 31, 2013.

ASSET EXPERIENCE

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

	<u>Market Value</u>	<u>Actuarial Value</u>
2004	12.9%	7.8%
2005	9.3%	9.4%
2006	8.7%	13.2%
2007	16.5%	13.6%
2008	- 7.6%	6.4%
2009	-24.2%	-16.7%
2010	12.4%	-0.8%
2011	23.5%	3.9% *
2012	-2.1%	7.8%
2013	13.7%	11.2%

* Includes the effect of transition to a new method for calculating the actuarial value of assets. The new method for calculating the actuarial value of assets is based on the market value of investment securities adjusted to phase in asset earnings above or below the assumed rate of return over a five-year period with limits set at 85% and 115% of the market value of assets. When the adjusted value falls outside of the limits, the actuarial value is set equal to the average of the limited and adjusted value.

The market rate of return gives a measure of investment return on a total return basis and includes realized and unrealized capital gains and losses as well as interest income. 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 2013, the fund earned \$37,076,179 of dividends, interest and other recurring income. In addition, the Fund had net realized and unrealized capital gains on investments of \$161,858,537. Investment expenses amounted to \$6,745,963. The geometric mean of the market value rate of return was 5.4% measured over the last ten years.

The actuarial rate of return is presented for comparison to the assumed long-term rate of return of 7.5% used for the valuation. For fiscal 2013, this rate adjusted for elimination of the effect of merger payments was 11.2%. DROP accounts should be credited with 10.7% (i.e. 11.2% less 0.5%). The actuarial rate of return is calculated based on the actuarial value of assets and all interest, dividends, and recognized capital gains as given in Exhibit VI. Investment income used to calculate this yield is based upon a smoothing of investment returns above or below the valuation interest rate over a four year period (five year period after the transition period is completed) subject to constraints. The difference between rates of return on an actuarial and market value basis results from the smoothing of gains or losses on investments relative to the valuation interest rate. Yields in excess of the 7.5% assumption will reduce future costs; yields below 7.5% will increase future costs. For fiscal 2013, the system experienced net actuarial investment earnings of \$51,282,477 above the actuarial assumed earnings rate of 7.5% which produced an actuarial gain and decreased the interest-adjusted amortization payments on the system's UAL by \$ 4,187,942 or 1.56% of projected payroll.

PLAN DEMOGRAPHICS AND LIABILITY EXPERIENCE

The average active contributing member is 40 years old with 10.85 years of service credit and an annual salary of \$47,253. The system's active contributing membership experienced a decrease of 177 members during fiscal 2013. The number of DROP participants increased by 30. Over the last five years active membership has decreased by 306 members.

The average service retiree is 65 years old with a monthly benefit of \$2,562. The number of retirees and beneficiaries receiving benefits from the system increased by 110 during the fiscal year. Over the last five years, the number of retirees increased by 444 with annual benefits in payment increasing by \$24,887,174.

Liability experience for the year was favorable. The number of retirements was below projected levels. Salary increases were also below expected levels. Withdrawals and deaths were above projected levels. These factors tend to reduce costs. DROP entries were above projected levels. This partially offset other gains. Other factors were largely neutral. The overall liability experience gain was \$12,531,528. The interest adjusted amortization payment on this gain was \$1,023,378, or 0.38% of projected payroll.

FUNDING ANALYSIS AND RECOMMENDATIONS

Actuarial funding of a retirement system is a process whereby funds are accumulated over the working lifetimes of employees in such a manner as to have sufficient assets available at retirement to pay for the lifetime benefits accrued by each member of the system. The required contributions are determined by an actuarial valuation based on rates of mortality, termination, disability, and retirement, as well as investment return and other statistical measures specific to the particular group. Each year a determination is made of two cost components, and the actuarially required contributions are based on the sum of these two components plus administrative expenses. These two components are the normal cost and the amortization payments on the unfunded actuarial accrued liability. The normal cost refers to the annual cost for active members allocated to each year by the particular cost method utilized. The term unfunded accrued liability (UAL) refers to the excess of the present value of plan benefits over the sum of current assets and future normal costs. Each year the UAL grows with interest and is reduced by payments. In addition it may be increased or diminished by plan experience,

changes in assumptions, or changes in benefits including COLA's. Contributions in excess of or less than the actuarially required amount can also decrease or increase the UAL balance. New entrants to the system can also increase or lower costs as a percent of payroll depending upon their demographic distribution. Finally, payroll growth affects plan costs since payments on the system's unfunded liability are on a fixed, level schedule. If payroll increases, these costs are reduced as a percentage of payroll.

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

The derivation of the actuarially required contribution for the current fiscal year is given in Exhibit I. The normal cost for fiscal 2014 as of July 1, 2013 is \$44,231,463. The amortization payments on the system's unfunded actuarial accrued liability as of July 1, 2013 total \$78,078,232. The total actuarially required contribution is determined by adjusting the sum of these two values for interest (since payments are made throughout the fiscal year) and adding estimated administrative expenses. As given in line 11 of Exhibit I the total actuarially required contribution for fiscal 2014 is \$128,119,166. We estimate insurance premium taxes of \$16,628,926 will be paid to the system in fiscal 2014. Hence, the total actuarially required net direct combined contribution (consisting of employee contributions and the net direct employer contribution) for fiscal 2014 amounts to \$111,490,240 or 41.53% of payroll.

An explanation of the change in costs related to asset and liability gains and losses as well as changes in demographics and assumptions is given in prior sections of the report. In addition to these components, variances in contribution levels and payroll also affect costs. For fiscal 2013 contributions totaled \$2,636,098 less than required; the interest-adjusted amortization payment on the contribution shortfall for fiscal 2013 is \$288,030 or 0.11% of payroll. Two amortization bases were fully amortized by the end of fiscal 2013 increasing contributions by 2.04% of the projected payroll. In addition, for fiscal 2013 the net effect of the change in payroll on amortization costs was to decrease such costs by 0.11% of payroll.

A reconciliation of the change in costs is given below. Values listed in dollars are interest adjusted for payment throughout the fiscal year. Percentages are based on the projected payroll for fiscal 2014 except for those items labeled fiscal 2013.

	Dollars	Percentage of Payroll
Normal Cost for Fiscal 2013	\$ 46,930,027	17.10%
Cost of Demographic and Salary Changes	\$ (1,369,634)	(0.13%)
Cost of Assumption Change	\$ 299,764	0.11%
Normal Cost for Fiscal 2014	\$ 45,860,157	17.08%
UAL Payments for Fiscal 2013	\$ 80,119,054	29.19%
Change due to change in payroll	N/A	0.65%
Change due to elimination of Amortization	\$ 5,486,895	2.04%

Additional Amortization Expenses for Fiscal 2014:		
Assumption Loss (Gain)	\$ 270,575	0.10%
Asset Experience Loss (Gain)	\$ (4,187,942)	(1.56%)
Contribution Loss (Gain)	\$ 288,030	0.11%
Liability Experience Loss (Gain)	<u>\$ (1,023,378)</u>	<u>(0.38%)</u>
Net Amortization Expense (Credit) for Fiscal 2014	\$ (4,652,715)	(1.73%)
Estimated Administrative Cost for Fiscal 2014	\$ 1,305,775	0.49%
Total Normal Cost & Amortization Payments	\$ 128,119,166	47.72%

After the Total Normal Cost and Amortization Payments are reduced for projected Insurance Premium Taxes for Fiscal 2014 of \$16,628,926, or 6.19% of payroll, the Net Direct Actuarially Required Contributions as a Percent of Projected Payroll for Fiscal 2014 is 41.53%. This level of Insurance Premium Taxes represents a 0.44% increase over the prior year as a percentage of payroll. Therefore, the amount of Insurance Premium Taxes helped to partially offset increases in costs. Since the actual net direct combined contribution rate for fiscal 2014 is 41.00% of payroll, there will be a contribution shortfall of 0.53% of payroll. This shortfall will increase the actuarially required contribution by 0.06% for fiscal 2015. The statutes require rounding the net direct employer contribution rate to the nearest 0.25%. Therefore, we recommend a combined employee and net direct employer contribution rate of 41.50% for fiscal 2015. For members with earnings less than or equal to the Department of HHS poverty guidelines, employee contributions will be set equal to 7.50% of payroll. The recommended employer contribution rate to be applied to the earnings of such members is 34.00% of payroll. For members with earnings greater than the Department of HHS poverty guidelines, employee contributions will be set equal to 10.00% of payroll. The recommended employer contribution rate to be applied to the earnings of such members is 31.50% of payroll. The employee contribution rate for members of the Nonhazardous Subplan is 8.00%; hence the employer contribution rate for this group for fiscal 2015 is 33.50%.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions, changes in economic or demographic assumptions, completion of amortization payments or credit schedules, and changes in plan provisions or applicable law. Analysis of the effect of all these factors is beyond the scope of this report. We have, however, calculated the sensitivity of the plan's costs to a change in two factors. First, we have determined that based on current assets and demographics, for each percentage under (over) the assumed rate of return on the actuarial value of assets, there will be a corresponding increase (reduction) in the actuarially required contribution as a percentage of projected payroll of 0.47%. In addition, we have determined that a 1% reduction in the valuation interest rate for the Fund would increase the actuarially required contribution rate for fiscal 2014 by 9.86%.

COST OF LIVING INCREASES

During fiscal 2013, the actual cost of living (as measured by the US Department of Labor CPI-U) increased by 1.75%. Cost of living provisions for the system are detailed in R.S. 11:2225(A)(7)(b) and R.S. 11:246. The former statute allows the board to use interest earnings in excess of the normal requirements to grant annual cost of living increases of 3% of each retiree's original or current benefit. R. S. 11:2225(A)(7)(c) and (d) provide that the board of trustees is authorized to provide a one-time cost of living adjustment of 3% of each retiree's normal monthly benefit (not to be less than \$20 per

month) from excess interest earnings without regard to the provisions of R.S. 11:242 (which describes the target ratio). R.S. 11:246 provides cost of living increases to retirees and beneficiaries over the age of 65 equal to 2% of the benefit in payment on October 1, 1977, or the date the benefit was originally received if retirement commenced after that date. R.S. 11:241 provides that cost of living benefits shall be in the form (unless the board otherwise specifies) of $\$X \times (A+B)$ where X is at most \$1 and "A" represents the number of years of credited service accrued at retirement or at death of the member or retiree and "B" is equal to the number of years since retirement or since death of the member or retiree to June 30th of the initial year of such increase. The provisions of this subpart do not repeal provisions relative to cost of living adjustments contained within the individual laws governing systems; however, they are to be controlling in cases of conflict.

All of the above provisions require that the system's investments produce sufficient excess interest earnings to fund the increases. In addition, the ratio of the plan's assets to benefit obligations must meet the criteria established in R.S. 11:242. This section sets forth a minimum "target ratio" of the actuarial value of assets to the actuarial accrued liability. We have determined that for fiscal 2013 the plan has not met the necessary target ratio. Hence the system is unable to grant a COLA under R.S. 11:2225(A)(7)(b) or R.S. 11:246. However, R.S. 11:2225 (A)(7)(c) does not require the system to meet the target ratio and the system has earned sufficient excess interest to pay the COLA authorized by that provision. The excess interest earned by the system in fiscal 2013 amounts to \$51,282,477.

The estimated impact of granting the COLA described above is as follows:

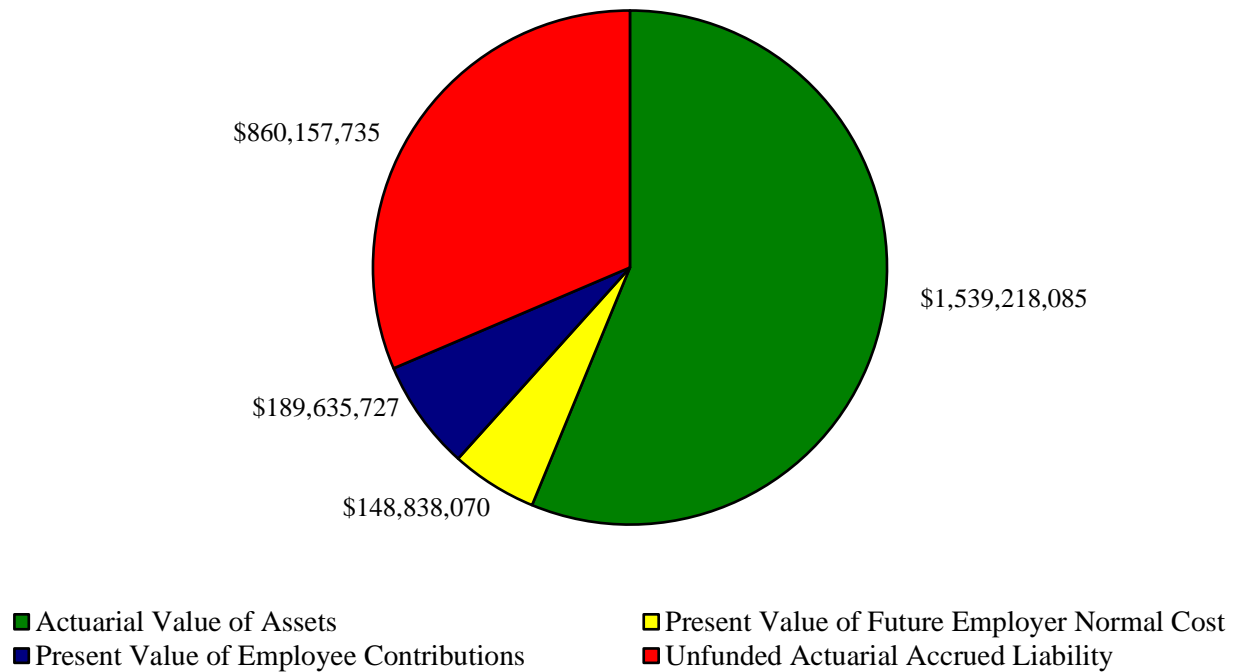
	<u>Increase In Annual Benefits</u>	<u>Increase In Present Value</u>
R.S. 11:2225 (A)(7)(c)	\$ 3,262,895	\$ 32,980,741

Should the Board of Trustees elect to have the system covered under the provisions of R. S. 11:243, the system would be exempt from the provisions of R. S. 11:242. Instead, the system would only be authorized to grant a COLA under R. S. 11:241, R.S. 11:246, or R. S. 11: 2225(A)(7)(b) in fiscal years in which the rate of return on an actuarial basis exceeds the valuation interest rate and one of the following applies:

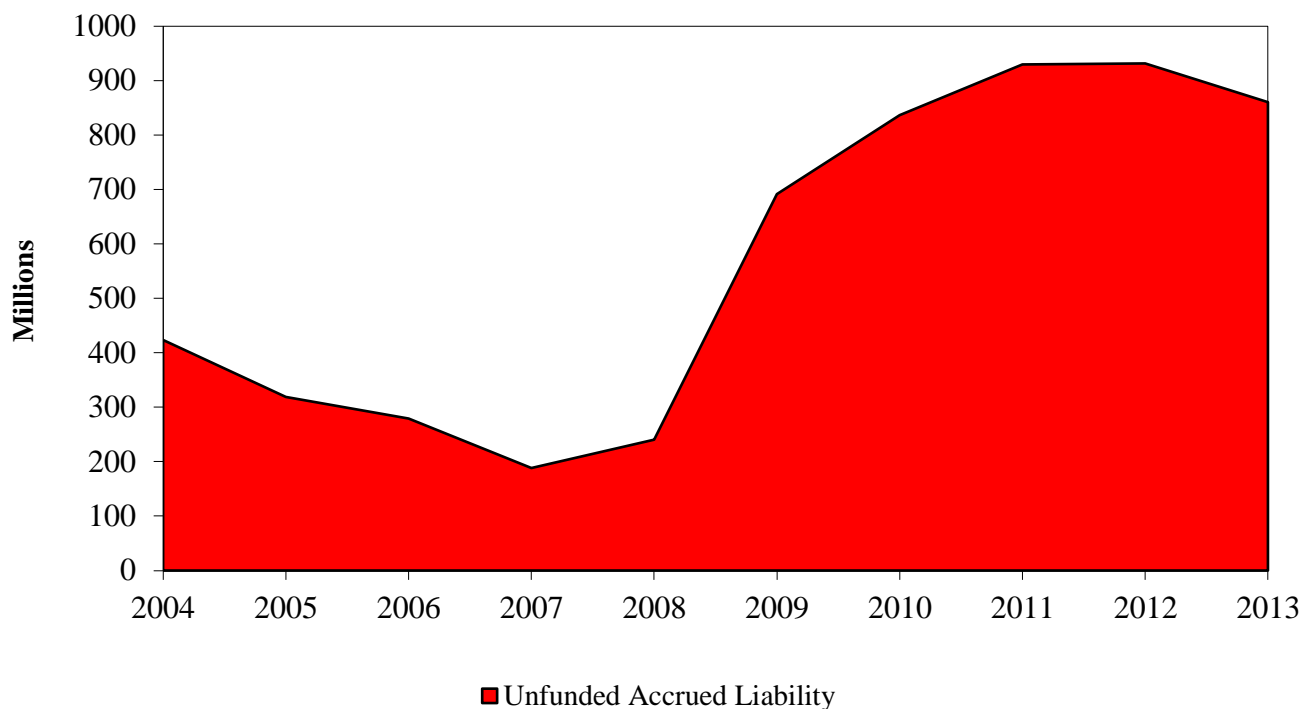
1. The system has a funded ratio of 90% or more and has not granted a benefit increase to retirees, survivors, and beneficiaries in the most recent fiscal year.
2. The system has a funded ratio of 80% or more and has not granted a benefit increase to retirees, survivors, and beneficiaries in the two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

In addition to the funding and CPI requirements there may be other legal requirements which must be fulfilled before the above described COLA's can be granted.

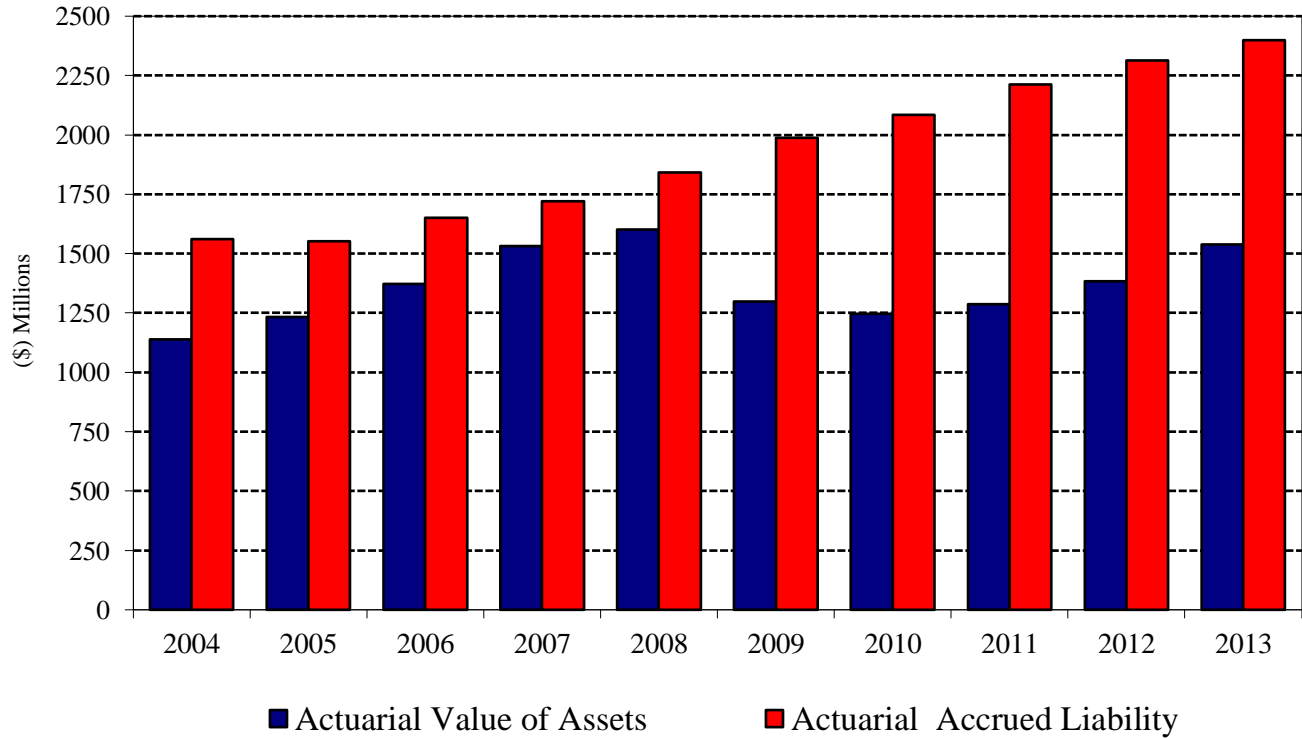
Components of Present Value of Future Benefits June 30, 2013



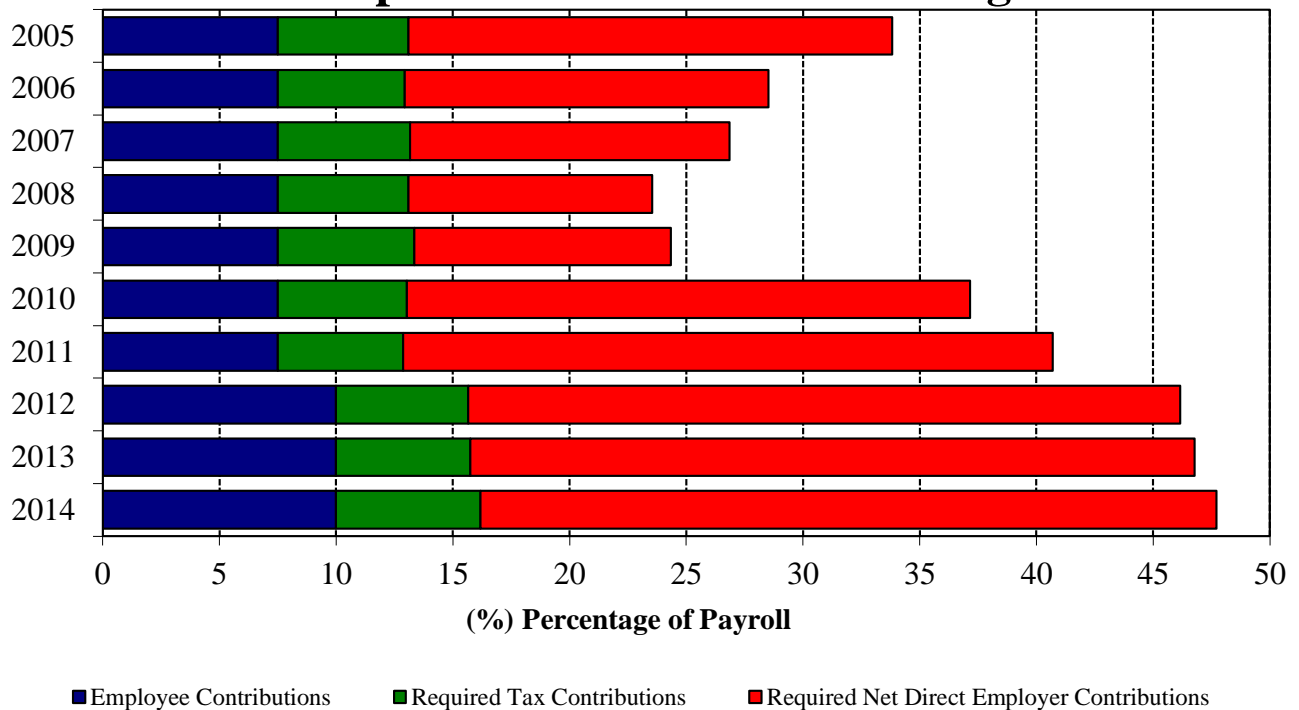
Unfunded Accrued Liability



Actuarial Value of Assets vs. Actuarial Accrued Liability

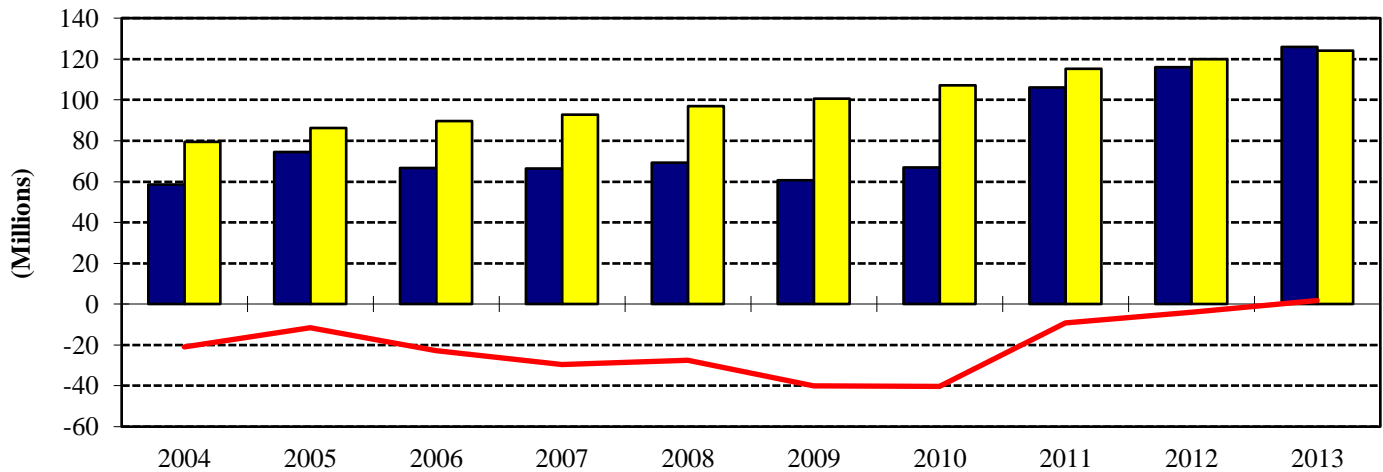


Components of Actuarial Funding



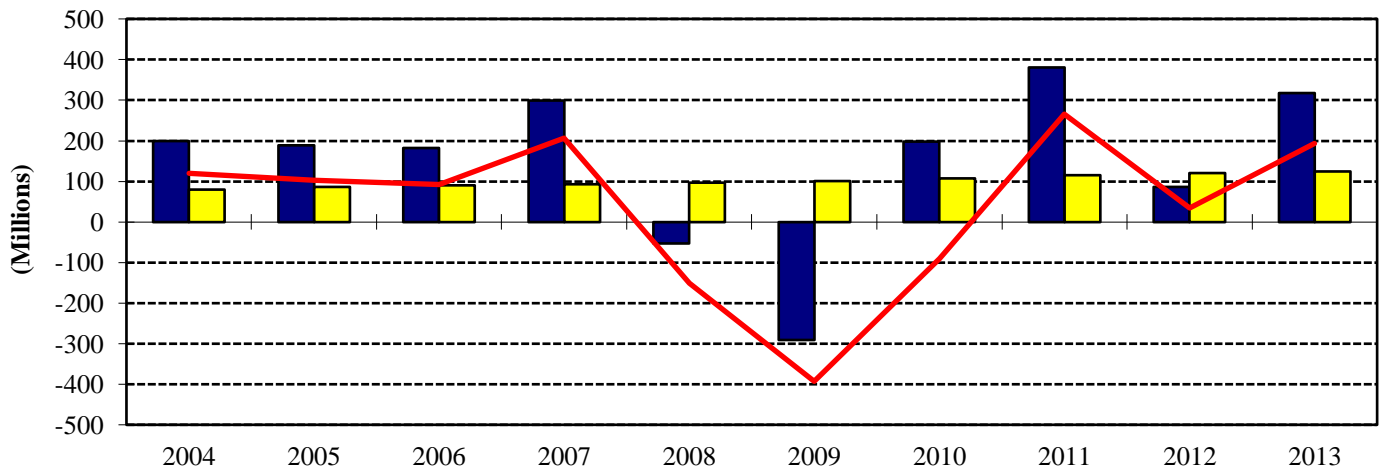
(2012 through 2014 employee contribution level is based on members with earnings above the poverty level)

Net Non-Investment Income



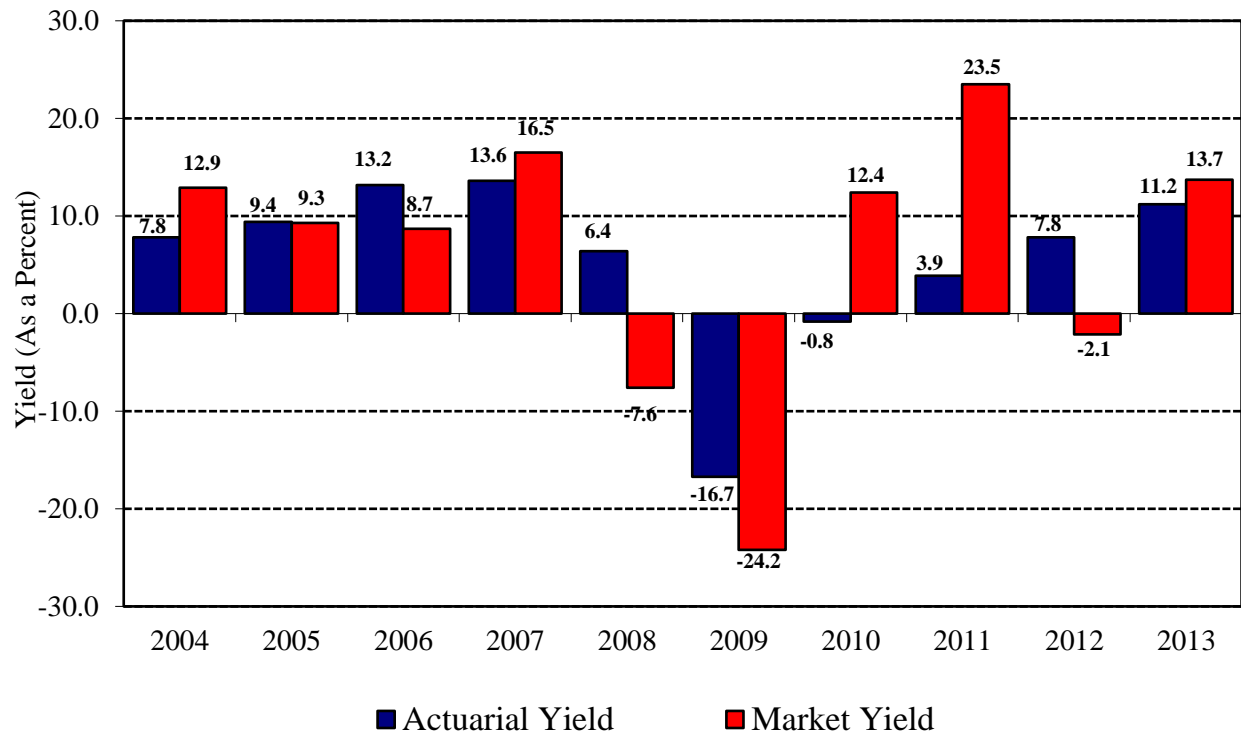
		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Non-Investment Income (\$Mil)	■	58.7	74.6	66.7	66.3	69.3	60.6	67.0	106.1	116.0	125.9
Benefits and Expenses (\$Mil)	■	79.6	86.2	89.6	92.9	96.9	100.7	107.2	115.3	120.0	124.2
Net Non-Investment Income (\$Mil)	—	-20.9	-11.6	-22.9	-29.6	-27.6	-40.1	-40.2	-9.2	-4.0	1.7

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



		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Total Income (\$Mil)	■	199.6	188.6	181.6	299.2	-53.6	-291.8	198.1	381.0	85.9	318.0
Benefits and Expenses (\$Mil)	■	79.6	86.2	89.6	92.9	96.9	100.7	107.2	115.3	120.0	124.2
Net Change in MVA (\$Mil)	—	120.0	102.4	92.0	206.3	-150.5	-392.5	90.9	265.7	34.1	193.8

Historical Asset Yields



EXHIBITS

EXHIBIT I
ANALYSIS OF ACTUARIALLY REQUIRED CONTRIBUTIONS

1.	Normal Cost of Retirement Benefits.....	\$ 33,305,616
2.	Normal Cost of Death Benefits.....	\$ 1,479,328
3.	Normal Cost of Disability Benefits.....	\$ 2,295,259
4.	Normal Cost of Deferred Retirement Benefits	\$ 1,454,057
5.	Normal Cost of Contribution Refunds	\$ 5,697,203
6.	TOTAL Normal Cost as of July 1, 2013 (1+2+3+4+5).....	\$ 44,231,463
7.	Amortization of Unfunded Accrued Liability of \$860,157,735	\$ 78,078,232
8.	TOTAL Normal Cost & Amortization Payments (6+7)	\$ 122,309,695
9.	Normal Cost and Amortization Payments Interest Adjusted for Midyear Payment	\$ 126,813,391
10.	Estimated Administrative Cost for Fiscal 2014	\$ 1,305,775
11.	TOTAL Administrative and Interest Adjusted Actuarial Costs (9+10).....	\$ 128,119,166
12.	Expected Insurance Premium Taxes due in Fiscal 2014.....	\$ 16,628,926
13.	Net Direct Combined Actuarially Req'd Contributions for Fiscal 2014 (11-12) ..	\$ 111,490,240
14.	Projected Payroll For Contributing Members July 1, 2013 through June 30, 2014	\$ 268,473,798
15.	Net Direct Combined Actuarially Required Contributions as a % of Projected Payroll for Fiscal 2014 (13 ÷ 14)	41.53%
16.	Actual Net Direct Combined Contribution Rate for Fiscal 2014.....	41.00%
17.	Contribution Gain (Loss) as a Percentage of Payroll (16 – 15)	(0.53%)
18.	Adjustment to Following Year Payment for Contribution Gain (Loss).....	(0.06%)
19.	Recommended Net Direct Combined Contribution Rate for Fiscal 2015 (15 – 18) (Rounded to nearest 0.25%)	41.50%
20.	Recommended Net Direct Employee Contribution Rate (for members with earnings less than or equal to the DHHS poverty guidelines)	7.50%
21.	Recommended Net Direct Employer Contribution Rate (for members with earnings less than or equal to the DHHS poverty guidelines)	34.00%
22.	Recommended Net Direct Employee Contribution Rate (for members with earnings more than the DHHS poverty guidelines and Hazardous Subplan)	10.00%
23.	Recommended Net Direct Employer Contribution Rate (for members with earnings more than the DHHS poverty guidelines and Hazardous Subplan)	31.50%
24.	Recommended Net Direct Employee Contribution Rate (Non-Hazardous Subplan)	8.00%
25.	Recommended Net Direct Employer Contribution Rate (Non-Hazardous Subplan)	33.50%

EXHIBIT II

PRESENT VALUE OF FUTURE BENEFITS

Present Value of Future Benefits for Active Members:

Retirement Benefits.....	\$ 1,369,025,465
Survivor Benefits	19,560,727
Disability Benefits.....	43,302,420
Vested Deferred Termination Benefits	29,176,213
Contribution Refunds	55,198,696

TOTAL Present Value of Future Benefits for Active Members..... \$ 1,516,263,521

Present Value of Future Benefits for Terminated Members:

Terminated Vested Members Due Benefits at Retirement	\$ 21,877,529
Terminated Members with Reciprocals Due Benefits at Retirement.....	0
Terminated Members Due a Refund.....	5,270,645

TOTAL Present Value of Future Benefits for Terminated Members \$ 27,148,174

Present Value of Future Benefits for Retirees:

Regular Retirees.....	\$ 968,707,476
Disability Retirees	46,313,646
Survivors & Widows	122,412,025
Retiree DROP & IBO Account Balance.....	57,004,775

TOTAL Present Value of Future Benefits for Retirees & Survivors \$ 1,194,437,922

TOTAL Present Value of Future Benefits..... \$ 2,737,849,617

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

Current Assets:

Cash & Cash Equivalents in Banks	\$ 28,357,679	
Contributions Receivable from Members	2,010,984	
Contributions Receivable from Employers	6,363,287	
Accrued Interest and Dividends on Investments	3,975,125	
Investments Receivables	4,603,768	
Other Receivables	129,098	
Due From Merged Systems	91,366	
TOTAL CURRENT ASSETS		\$ 45,531,307

Property, Plant and Equipment (Net of accumulated depreciation)	\$ 2,233,526
Other Assets	\$ 6,000

Investments:

Marketable Securities - Domestic	\$562,467,039	
Marketable Securities - International	319,510,824	
Bonds – Domestic & Foreign	221,028,570	
Real Estate Fund	131,855,492	
Other Investments	122,759,777	
Mutual Funds	43,215,452	
Pooled Bond Fund.....	75,558,999	
Cash & Cash Equivalents.....	43,805,428	
Investment in Partnership	47,760,351	
Real Estate – Olde Oaks Development.....	2,000,298	
Real Estate – Olde Oaks Golf Course.....	599,800	
Real Estate – The Golf Club at Stone Bridge	399,902	
Real Estate – Land & Rental.....	703,125	
TOTAL INVESTMENTS		\$ 1,571,665,057
TOTAL ASSETS		\$ 1,619,435,890

Current Liabilities:

Investment Payables.....	\$ 9,665,072
Obligations Under Securities Lending Program	7,161,398
Accounts Payable	840,949
Refunds Payable.....	414,520
Other Post-Employment Benefits	450,395
Deferred Contributions	107,147
Capital Lease Payable	120,866
Accrued Payroll & Taxes.....	60,709
Other Liabilities	82,055

TOTAL CURRENT LIABILITIES \$ 18,903,111

NET MARKET VALUE OF ASSETS \$ 1,600,532,779

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

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

Fiscal year 2013	\$ 86,627,167
Fiscal year 2012	(138,057,227)
Fiscal year 2011	187,118,241
Fiscal year 2010 Unrealized Capital Gain (Loss)	89,331,921
Fiscal year 2009 Unrealized Capital Gain (Loss)	N/A
Total for five years	\$ 225,020,102

Deferral of excess (shortfall) of invested income:

Fiscal year 2013 (80%)	\$ 69,301,734
Fiscal year 2012 (60%)	(82,834,336)
Fiscal year 2011 (40%)	74,847,296
Fiscal year 2010 (0%)	0
Fiscal year 2009 (0%)	N/A
Total deferred for year	\$ 61,314,694

Market value of plan net assets, end of year..... \$ 1,600,532,779

Preliminary actuarial value of plan assets, end of year \$ 1,539,218,085

Actuarial value of assets corridor

85% of market value, end of year	\$ 1,360,452,862
115% of market value, end of year	\$ 1,840,612,696

Final actuarial value of plan net assets, end of year \$ 1,539,218,085

EXHIBIT IV
PRESENT VALUE OF FUTURE CONTRIBUTIONS

Employee Contributions to the Annuity Savings Fund	\$ 189,635,727
Employer Normal Contributions to the Pension Accumulation Fund	148,838,070
Employer Payments on the Unfunded Actuarial Accrued Liability	860,157,735
TOTAL PRESENT VALUE OF FUTURE CONTRIBUTIONS	\$ 1,198,631,532

EXHIBIT V - SCHEDULE A
ACTUARIAL ACCRUED LIABILITIES

LIABILITY FOR ACTIVE MEMBERS	
Accrued Liability for Retirement Benefits	\$ 1,111,325,446
Accrued Liability for Survivor Benefits	8,628,867
Accrued Liability for Disability Benefits	26,179,516
Accrued Liability for Vested Termination Benefits	18,307,027
Accrued Liability for Refunds of Contributions	13,348,868
TOTAL Actuarial Accrued Liability for Active Members	\$ 1,177,789,724
LIABILITY FOR TERMINATED MEMBERS	\$ 27,148,174
LIABILITY FOR RETIREES AND SURVIVORS	\$ 1,194,437,922
TOTAL ACTUARIAL ACCRUED LIABILITY	\$ 2,399,375,820
ACTUARIAL VALUE OF ASSETS	\$ 1,539,218,085
UNFUNDED ACTUARIAL ACCRUED LIABILITY	\$ 860,157,735

EXHIBIT V - SCHEDULE B
CHANGE IN UNFUNDED ACTUARIAL ACCRUED LIABILITY

Prior Year Unfunded Accrued Liability	\$ 931,247,979
Interest on Unfunded Accrued Liability	\$ 69,843,598
Normal Cost for Prior Year	45,263,337
Interest on the Normal Cost	3,394,750
Administrative Expenses	1,351,321
Interest on Expenses	49,759
TOTAL Increases to Unfunded Accrued Liability	\$ 119,902,765
Required Contributions for Prior Year with interest	\$ 133,128,369
Contribution Excess (Shortfall) with accrued interest	(2,636,098)
Investment Gains (Losses)	51,282,477
Liability Experience Gains (Losses)	12,531,528
Liability Assumption Gains (Losses)	(3,313,267)
TOTAL Decreases to Unfunded Accrued Liability	\$ 190,993,009
CURRENT YEAR UNFUNDED ACCRUED LIABILITY	\$ 860,157,735

EXHIBIT V - SCHEDULE C
AMORTIZATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITY
JUNE 30, 2013

FISCAL YEAR	DESCRIPTION	AMORT. PERIOD	INITIAL BALANCE	YEARS REMAINING	REMAINING BALANCE	AMORT. PAYMENTS
1999	Contribution Loss (Gain)	15	89,574	1	9,344	9,344
1999	Change In Liability	15	(45,292,161)	1	(4,724,769)	(4,724,769)
2000	Contribution Loss (Gain)	15	15,208	2	3,068	1,589
2000	Change In Liability	15	(4,827,975)	2	(973,920)	(504,561)
2001	Contribution Loss (Gain)	15	(65,357)	3	(19,128)	(6,842)
2001	Change In Liability	15	90,820,890	3	26,581,101	9,508,310
2002	Contribution Loss (Gain)	15	(88,166)	4	(33,291)	(9,247)
2002	Change In Liability	30	207,093,231	19	174,127,890	16,264,500
2003	Contribution Loss (Gain)	15	(225,280)	5	(102,928)	(23,666)
2003	Change In Liability	30	184,314,964	20	158,797,310	14,490,024
2004	Contribution Loss (Gain)	15	13,640,571	6	7,242,044	1,435,238
2004	Change In Liability	30	31,940,093	21	28,136,266	2,513,402
2005	Contribution Loss (Gain)	15	(2,113,182)	7	(1,267,988)	(222,694)
2005	Change In Liability	30	(99,765,418)	22	(89,686,186)	(7,857,917)
2006	Contribution Loss (Gain)	15	(2,889,137)	8	(1,917,109)	(304,467)
2006	Change In Liability	30	(35,359,493)	23	(32,354,493)	(2,785,053)
2007	Contribution Loss (Gain)	15	(4,778,013)	9	(3,452,814)	(503,523)
2007	Change In Liability	30	(84,963,993)	24	(79,011,532)	(6,692,099)
2008	Contribution Loss (Gain)	15	(11,106,672)	10	(8,636,690)	(1,170,459)
2008	Change In Liability	30	63,387,672	25	59,826,913	4,992,663
2009	Contribution Loss (Gain)	15	3,102,817	11	2,571,442	326,989
2009	Change In Liability	30	448,280,459	26	428,888,437	35,308,335
2010	Contribution Loss (Gain)	15	36,539,742	12	32,020,079	3,850,685
2010	Change In Liability	30	113,378,069	27	109,835,669	8,930,103
2011	Contribution Loss (Gain)	15	11,941,362	13	10,992,668	1,258,422
2011	Change In Liability	30	88,934,043	28	87,149,331	7,004,796
2012	Assumption Loss (Gain)	30	1,590,422	29	1,575,041	125,268
2012	Liability Experience Loss (Gain)	30	4,302,454	29	4,260,844	338,878
2012	Asset Experience Loss (Gain)	30	(3,880,660)	29	(3,843,129)	(305,656)
2012	Contribution Loss (Gain)	15	12,507,797	14	12,028,908	1,318,115
2013	Assumption Loss (Gain)	30	3,313,267	30	3,313,267	260,966
2013	Liability Experience Loss (Gain)	30	(12,531,528)	30	(12,531,528)	(987,033)
2013	Asset Experience Loss (Gain)	30	(51,282,477)	30	(51,282,477)	(4,039,210)
2013	Contribution Loss (Gain)	15	2,636,098	15	2,636,098	277,801

TOTAL Unfunded Actuarial Accrued Liability

\$ 860,157,735

TOTAL Fiscal 2014 Amortization Payments

\$ 78,078,232

EXHIBIT VI

ANALYSIS OF INCREASE IN ASSETS

Actuarial Value of Assets (June 30, 2012) \$ 1,382,503,860

Income:

Regular Member Contributions.....	\$ 26,428,188	
Regular Employer Contributions.....	83,635,357	
Insurance Premium Taxes	15,794,377	
TOTAL CONTRIBUTIONS.....		\$ 125,857,922

Net Appreciation of Fair Value of Investments.....	\$ 161,858,537	
Dividends – Stock.....	20,446,568	
Interest – Notes, Bonds, Etc.	12,545,888	
Dividends – Commingled Funds	3,196,871	
Interest – Securities Lending	802,386	
Miscellaneous	57,373	
Contributions from Mergers	13,733	
Interest – Cash Equivalents	13,360	
Investment Expenses	(6,745,963)	
SUBTOTAL OF ALL MARKET INVESTMENT INCOME		\$ 192,188,753

TOTAL Income \$ 318,046,675

Expenses:

Benefits	\$ 118,731,642
Refunds of Contributions.....	3,849,552
Administrative Expenses	1,269,817
Transfers to Other Systems.....	243,384
Depreciation.....	81,504

TOTAL Expenses \$ 124,175,899

Net Market Income for Fiscal 2013 (Income - Expenses)..... \$ 193,870,776

Adjustments to Income for Actuarial Smoothing..... \$ 37,156,551

Actuarial Value of Assets (June 30, 2013) \$ 1,539,218,085

EXHIBIT VII
FUND BALANCE

Present Assets of the System Creditable to:

Annuity Savings Fund	\$ 186,399,863
Annuity Reserve Fund	1,137,433,147
Pension Accumulation Fund.....	176,350,078
Deferred Retirement Option Plan Account	99,565,647
Initial Benefit Option Account	784,044
 NET MARKET VALUE OF ASSETS.....	 \$ 1,600,532,779
ADJUSTMENT FOR ACTUARIAL SMOOTHING	(61,314,694)
NET ACTUARIAL VALUE OF ASSETS	\$ 1,539,218,085

EXHIBIT VIII **COST OF LIVING ADJUSTMENTS - TARGET RATIO**

Actuarial Value of Assets Divided by AAL as of Fiscal 1986:.....	93.19%
Amortization of Unfunded Balance over 30 years:	6.13%
Adjustments in Funded Ratio Due to Mergers or Changes in Assumption(s):	
Changes for Fiscal 1987	(8.84%)
Changes for Fiscal 1988	12.27%
Changes for Fiscal 1991	(0.91%)
Changes for Fiscal 1993	(1.35%)
Changes for Fiscal 1996	(1.67%)
Changes for Fiscal 1999	(0.57%)
Changes for Fiscal 2000	(5.72%)
Changes for Fiscal 2004	(0.96%)
Changes for Fiscal 2005	3.94%
Changes for Fiscal 2009	(1.09%)
Changes for Fiscal 2011	(0.04%)
Changes for Fiscal 2012	(0.04%)
Changes for Fiscal 2013	(0.09%)
TOTAL Adjustments.....	(5.07%)
Amortization of Adjustments in Funded Ratio over 30 years:	
Changes for Fiscal 1987	7.66%
Changes for Fiscal 1988	(10.23%)
Changes for Fiscal 1991	0.67%
Changes for Fiscal 1993	0.90%
Changes for Fiscal 1996	0.95%
Changes for Fiscal 1999	0.27%
Changes for Fiscal 2000	2.48%
Changes for Fiscal 2004	0.29%
Changes for Fiscal 2005	(1.05%)
Changes for Fiscal 2009	0.15%
Changes for Fiscal 2011	0.00%
Changes for Fiscal 2012	0.00%
Changes for Fiscal 2013	0.00%
TOTAL Amortization of Adjustments	2.09%
Target Ratio for Current Fiscal Year	96.34%
Actuarial Value of Assets Divided by Actuarial Accrued Liability as of Fiscal 2013	64.15%

**EXHIBIT IX
CENSUS DATA**

	Active	Terminated with Funds on Deposit	DROP	Retired	Total
Number of members as of June 30, 2012	5,779	1,306	284	4,230	11,599
Additions to Census					
Initial membership	449	51			500
Death of another member			(2)	55	53
Omitted in error last year				8	8
Adjustment for multiple records				8	8
Change in Status during Year					
Actives terminating service	(234)	234			
Actives who retired	(90)			90	
Actives entering DROP	(118)		118		
Term. members rehired	30	(30)			
Term. members who retire		(9)		9	
Retirees who are rehired					
Refunded who are rehired	15	3			18
DROP participants retiring			(62)	62	
DROP returned to work	24		(24)		
Omitted in error last year					
Eliminated from Census					
Refund of contributions	(250)	(153)			(403)
Deaths	(3)	(5)		(122)	(130)
Included in error last year					
Suspended Benefits					
Adjustment for Multiple Records					
Number of members as of June 30, 2013	5,602	1,397	314	4,340	11,653

ACTIVES CENSUS BY AGE:

Age	Number Male	Number Female	Total Number	Average Salary	Total Salary
16 - 20	6	1	7	26,450	185,147
21 - 25	231	74	305	32,523	9,919,404
26 - 30	624	163	787	39,341	30,961,667
31 - 35	756	236	992	43,166	42,820,384
36 - 40	720	221	941	47,323	44,530,809
41 - 45	847	187	1,034	50,925	52,656,098
46 - 50	674	184	858	53,752	46,119,555
51 - 55	319	92	411	54,873	22,552,734
56 - 60	135	54	189	55,135	10,420,466
61 - 65	35	17	52	57,428	2,986,266
66 - 70	18	3	21	62,851	1,319,874
71 - 75	2	1	3	37,039	111,116
76 - 80	1	0	1	60,192	60,192
81 - 85	1	0	1	67,779	67,779
TOTAL	4,369	1,233	5,602	47,253	264,711,491

THE ACTIVE CENSUS INCLUDES 2,506 ACTIVES WITH VESTED BENEFITS, INCLUDING 145 ACTIVE FORMER DROP PARTICIPANTS. THE 314 CURRENT DROP PARTICIPANTS ARE EXCLUDED.

DROP PARTICIPANTS:

Age	Number Male	Number Female	Total Number	Average Benefit	Total Benefit
41 - 45	1	0	1	49,620	49,620
46 - 50	51	4	55	57,649	3,170,692
51 - 55	107	27	134	56,731	7,602,019
56 - 60	78	17	95	49,764	4,727,564
61 - 65	16	9	25	38,841	971,031
66 - 70	1	3	4	24,544	98,175
TOTAL	254	60	314	52,927	16,619,101

TERMINATED MEMBERS DUE A DEFERRED RETIREMENT BENEFIT:

Age	Number Male	Number Female	Total Number	Average Benefit	Total Benefit
31 - 35	1	0	1	20,427	20,427
36 - 40	22	1	23	22,671	521,437
41 - 45	38	4	42	22,030	925,263
46 - 50	37	9	46	25,724	1,183,295
51 - 55	26	6	32	19,097	611,109
56 - 60	0	1	1	16,455	16,455
TOTAL	124	21	145	22,607	3,277,986

TERMINATED MEMBERS DUE A REFUND OF CONTRIBUTIONS:

Contributions Ranging		Number	Total Contributions
From	To		
0	- 99	189	7,929
100	- 499	306	78,783
500	- 999	144	101,891
1000	- 1999	126	183,334
2000	- 4999	139	449,393
5000	- 9999	129	931,450
10000	- 19999	157	2,284,932
20000	- 119999	62	1,618,571
TOTAL		1,252	5,656,283

REGULAR RETIREES:

Age	Number Male	Number Female	Total Number	Average Benefit	Total Benefit
41 - 45	4	0	4	26,198	104,791
46 - 50	51	7	58	41,037	2,380,163
51 - 55	234	46	280	43,587	12,204,392
56 - 60	519	100	619	37,598	23,273,315
61 - 65	601	74	675	31,561	21,303,639
66 - 70	577	65	642	25,978	16,678,141
71 - 75	322	26	348	24,205	8,423,356
76 - 80	176	13	189	22,285	4,211,946
81 - 85	97	7	104	20,029	2,083,000
86 - 90	51	4	55	19,359	1,064,753
91 - 99	14	3	17	13,907	236,413
TOTAL	2,646	345	2,991	30,747	91,963,909

DISABILITY RETIREES:

Age	Number Male	Number Female	Total Number	Average Benefit	Total Benefit
31 - 35	4	1	5	20,164	100,822
36 - 40	5	8	13	16,650	216,444
41 - 45	20	5	25	16,096	402,398
46 - 50	17	15	32	19,370	619,846
51 - 55	35	8	43	14,940	642,404
56 - 60	43	12	55	17,173	944,507
61 - 65	42	9	51	14,287	728,613
66 - 70	28	3	31	15,657	485,373
71 - 75	14	4	18	14,420	259,557
76 - 80	8	0	8	12,104	96,833
81 - 85	4	0	4	9,947	39,789
TOTAL	220	65	285	15,918	4,536,586

SURVIVORS:

Age	Number Male	Number Female	Total Number	Average Benefit	Total Benefit
0 - 25	48	50	98	7,574	742,291
26 - 30	1	1	2	9,678	19,355
31 - 35	0	3	3	20,579	61,738
36 - 40	0	11	11	17,433	191,767
41 - 45	1	18	19	14,781	280,836
46 - 50	0	38	38	17,954	682,261
51 - 55	2	46	48	19,958	958,007
56 - 60	8	62	70	16,985	1,188,964
61 - 65	4	104	108	15,625	1,687,512
66 - 70	10	121	131	14,845	1,944,658
71 - 75	3	136	139	13,282	1,846,254
76 - 80	7	137	144	12,172	1,752,735
81 - 85	5	117	122	10,984	1,340,068
86 - 90	4	88	92	12,255	1,127,478
91 - 99	2	37	39	10,534	410,817
TOTAL	95	969	1,064	13,379	14,234,741

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	5	2										7
21 - 25	143	77	40	30	12	3						305
26 - 30	133	90	79	97	143	237	8					787
31 - 35	79	68	47	80	104	457	155	2				992
36 - 40	39	33	23	38	50	252	353	150	3			941
41 - 45	35	28	28	29	39	150	232	331	159	3		1,034
46 - 50	22	17	12	18	22	109	132	197	257	71	1	858
51 - 55	3	4	2	5	11	47	64	84	90	74	27	411
56 - 60		2		1	1	12	33	44	23	33	40	189
61 - 65					1	3	7	7	7	7	20	52
66 - 70								2	1	4	14	21
71 & Over									2	1	2	5
Totals	459	321	231	298	383	1270	984	817	542	193	104	5602

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	25,990	27,599										26,450
21 - 25	29,867	32,807	35,257	38,309	38,339	34,210						32,523
26 - 30	31,849	33,449	36,406	40,696	42,359	44,327	41,103					39,341
31 - 35	34,044	34,516	34,139	38,553	42,540	45,410	50,416	52,112				43,166
36 - 40	34,822	36,145	41,547	40,082	39,148	44,762	50,772	54,355	62,696			47,323
41 - 45	35,042	34,556	36,074	38,144	41,912	44,380	48,994	56,726	60,986	71,509		50,925
46 - 50	34,448	36,219	40,829	40,764	41,049	42,355	47,347	55,290	60,737	72,659	92,198	53,752
51 - 55	32,025	29,872	31,757	38,252	32,713	41,865	45,841	53,993	60,970	66,249	70,218	54,873
56 - 60		44,116		25,615	48,610	47,590	41,851	52,024	58,933	60,818	66,358	55,135
61 - 65					52,385	51,406	43,059	49,236	49,823	56,817	69,356	57,428
66 - 70								46,560	54,000	48,208	69,994	62,851
71 & Over									39,827	30,331	64,552	47,817
Average	32,168	34,027	36,407	39,466	41,508	44,572	49,084	55,310	60,553	66,858	68,640	47,253

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 - 30												0
31 - 35									1			1
36 - 40								23				23
41 - 45						4	38					42
46 - 50		4	1	3	2	36						46
51 - 55	2	3	11	7	9							32
56 - 60				1								1
61 & Over												0
Totals	2	7	12	11	11	40	38	23	1	0	0	145

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 - 30												0
31 - 35									20,427			20,427
36 - 40								22,671				22,671
41 - 45						33,388	20,834					22,030
46 - 50		36,526	41,771	48,076	40,235	21,409						25,724
51 - 55	24,620	15,820	20,071	18,547	18,200							19,097
56 - 60				16,455								16,455
61 & Over												0
Average	24,620	27,652	21,880	26,410	22,206	22,607	20,834	22,671	20,427	0	0	22,607

SERVICE RETIREES:

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 - 50	24	11	9	7	4	7						62
51 - 55	46	52	56	31	26	65	4					280
56 - 60	57	48	74	36	58	261	78	7				619
61 - 65	11	30	30	20	28	237	229	83	7			675
66 - 70	4	4	10	8	12	81	206	252	27	5	33	642
71 - 75	1	2	3	1	1	22	34	101	113	10	60	348
76 - 80				2		3	7	20	33	53	71	189
81 - 85						2	4	7	9	16	66	104
86 - 90							1	2	4	7	41	55
91 & Over							1			2	14	17
Totals	143	147	182	105	129	678	564	472	193	93	285	2991

AVERAGE ANNUAL BENEFITS PAYABLE TO SERVICE RETIREES:

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 - 50	43,277	44,562	42,225	37,027	32,107	26,926						40,080
51 - 55	48,437	48,990	45,840	42,009	37,449	38,186	25,936					43,587
56 - 60	46,187	43,343	40,571	37,922	37,776	36,324	31,102	13,583				37,598
61 - 65	32,659	34,300	36,325	36,833	39,274	32,628	30,244	25,806	26,975			31,561
66 - 70	38,857	33,738	31,427	37,473	28,026	28,149	24,809	26,796	26,296	32,246	12,813	25,978
71 - 75	1,658	24,772	23,221	46,547	40,534	21,911	22,909	26,184	27,793	27,026	14,982	24,205
76 - 80				62,309		41,842	18,212	19,177	27,548	26,684	15,880	22,285
81 - 85						9,906	29,057	34,708	14,134	28,025	17,097	20,029
86 - 90							40,820	17,934	20,329	31,184	16,792	19,359
91 & Over							6,365			16,871	14,022	13,907
Average	44,865	43,072	40,786	39,374	36,974	33,616	27,723	26,052	26,721	27,378	15,657	30,747

DISABILITY RETIREES:

Attained Ages	Completed Years Since Retirement											Total
	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30&Over	
0 - 30												0
31 - 35	2		1	1	1							5
36 - 40		2	4	1	1	3	2					13
41 - 45	3	1	5	1	1	9	4	1				25
46 - 50	2	1	2	3	1	8	8	5	2			32
51 - 55	2	2	3	1		7	16	6	5	1		43
56 - 60	1	1	6	4	1		10	12	9	4		55
61 - 65						4	8	14	15	6	4	51
66 - 70					1	1	2	4	9	3	11	31
71 - 75								3	5	3	7	18
76 - 80									1			8
81 - 85											4	4
86 & Over												0
Totals	10	7	21	11	6	39	50	45	46	17	33	285

AVERAGE ANNUAL BENEFITS PAYABLE TO DISABILITY RETIREES:

Attained Ages	Completed Years Since Retirement											Average Benefit
	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30&Over	
0 - 30												0
31 - 35	17,392		10,746	14,947	40,345							20,164
36 - 40		18,661	16,256	18,479	14,013	19,944	10,888					16,650
41 - 45	17,160	14,743	16,459	16,230	27,726	16,795	11,748	11,779				16,096
46 - 50	23,606	35,982	19,181	28,123	42,542	22,428	12,735	10,468	18,869			19,370
51 - 55	21,918	23,861	26,935	20,038		16,595	12,953	12,936	7,426	11,844		14,940
56 - 60	13,512	15,496	18,679	21,124	13,441	18,497	23,669	15,162	12,647	10,888		17,173
61 - 65						19,565	12,795	16,955	13,656	10,469	10,740	14,287
66 - 70					11,676	13,160	16,521	19,878	17,462	12,321	13,988	15,657
71 - 75								8,946	12,644	16,175	17,282	14,420
76 - 80									7,522		12,759	12,104
81 - 85											9,947	9,947
86 & Over												0
Average	19,082	21,609	18,538	21,687	24,957	18,653	15,000	14,831	13,509	11,983	13,542	15,918

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	3	5	6	11	2	29	13	13	1	1		84
21 - 25			1	1	1	4	2	5				14
26 - 30		1						1				2
31 - 35						2			1			3
36 - 40		1	1	1	1	4	1				2	11
41 - 45		1	1	4	1	4	6	4	1	1		19
46 - 50		1	2	4		16	7	10	6	2	2	38
51 - 55				1		9	12	12	5	2	2	48
56 - 60	1		2	2	1	15	18	18	8	9	5	70
61 - 65	1			1		11	24	26	15	11	19	108
66 - 70	3			1		7	11	34	30	7	37	131
71 - 75	1		3	1	1	1	6	21	25	19	63	139
76 - 80		2			1		5	8	13	19	96	144
81 - 85		2					2	1	7	17	93	122
86 - 90		2					1		3	8	78	92
91 & Over										1	38	39
Totals	9	15	16	22	8	94	99	153	115	98	435	1064

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	17,994	7,591	7,836	12,828	5,179	7,024	5,151	5,407	2,924	2,400		7,580
21 - 25			2,696	16,076	19,613	6,587	11,380	3,620				7,542
26 - 30		17,552						1,803				9,678
31 - 35						23,187			15,364		3,029	20,579
36 - 40		25,178	13,318	16,950	13,998	26,829	8,947					17,433
41 - 45		15,165	31,054	38,794	32,950	19,263	11,975	6,925	21,683	3,379		14,781
46 - 50		10,640	26,523	55,873	24,932	24,932	16,529	10,902	9,885	13,908	13,306	17,954
51 - 55				28,291	28,291	28,291	21,831	12,063	14,052	8,845	5,727	19,958
56 - 60	14,840		24,593	34,952	29,193	25,453	20,206	14,372	11,524	12,102	6,772	16,985
61 - 65	11,595			6,770	20,307	20,307	18,458	19,226	13,734	12,965	8,120	15,625
66 - 70	8,986			41,285	11,152	26,205	12,657	19,253	14,499	21,923	8,097	14,845
71 - 75	6,000		5,141			19,681	13,362	15,651	20,233	17,192	8,950	13,282
76 - 80		4,800			60,562		8,843	14,898	14,791	18,709	10,119	12,172
81 - 85		4,800					4,896	19,067	23,755	18,748	8,781	10,984
86 - 90		4,800					4,896		30,025	24,545	10,597	12,255
91 & Over										15,444	10,405	10,534
Average	12,597	9,019	13,234	22,870	22,228	18,548	14,722	14,717	16,149	17,120	9,438	13,379

EXHIBIT X YEAR-TO-YEAR COMPARISON

	Fiscal 2013	Fiscal 2012	Fiscal 2011	Fiscal 2010
Number of Active Contributing Members	5,602	5,779	5,933	6,197
Number of Retirees & Survivors	4,340	4,230	4,165	4,028
DROP Participants	314	284	231	194
Number Terminated Due Deferred Benefits	145	130	128	112
Number of Terminated Due Refund	1,252	1,176	1,251	1,198
Active Lives Payroll (excludes DROP participants)	\$ 264,711,491	\$ 272,606,934	\$ 273,348,634	\$ 280,977,278
Retiree Benefits in Payment	\$ 110,735,234	\$ 104,998,503	\$ 99,863,547	\$ 93,382,980
Market Value of Assets	\$1,600,532,779	\$1,406,662,003	\$1,440,795,586	\$1,175,083,706
Ratio of Actuarial Value of Assets to Actuarial Accrued Liability	64.15%	59.75%	58.05%	59.87%
Actuarial Accrued Liability	\$2,399,375,820	\$2,313,751,839	\$2,215,674,343	\$2,083,809,321
Actuarial Value of Assets	\$1,539,218,085	\$1,382,503,860	\$1,286,287,651	\$1,247,546,395
UAL (Funding Excess)	\$ 860,157,735	\$ 931,247,979	\$ 929,386,692	\$ 836,262,926

	Fiscal 2014	Fiscal 2013	Fiscal 2013	Fiscal 2011
Employee Contribution Rate (For employees with earnings above the poverty level)	10.00%	10.00%	10.00%	7.50%
Required Tax Contributions as a Percentage of Projected Payroll	6.19%	5.75%	5.65%	5.36%
Actuarially Required Employer Contribution as a Percentage of Projected Payroll (For employees with earnings above the poverty level in Hazardous and Pre-2013 Plan)	31.53%	31.03%	30.52%	27.84%
Actual Employer Contribution Rate (For employees with earnings above the poverty level in Hazardous and Pre-2013 Plan)	31.00%	31.00%	26.50%	25.00%

Fiscal 2009	Fiscal 2008	Fiscal 2007	Fiscal 2006	Fiscal 2005	Fiscal 2004
6,071	5,908	5,840	5,769	6,000	6,013
3,984	3,896	3,834	3,739	3,652	3,648
185	213	217	227	239	265
112	114	108	99	88	80
1,197	1,095	993	926	602	687
\$ 270,236,561	\$ 252,562,020	\$ 229,145,048	\$ 223,213,661	\$ 215,638,892	\$ 208,756,800
\$ 90,285,300	\$ 85,848,060	\$ 81,976,596	\$ 77,538,204	\$ 73,587,564	\$ 69,061,812
\$1,084,169,309	\$1,476,652,461	\$1,627,120,612	\$1,420,792,356	\$1,328,792,481	\$1,226,382,950
65.23%	86.95%	89.05%	83.10%	79.47%	72.89%
\$1,988,394,358	\$1,841,234,995	\$1,719,536,371	\$1,651,055,550	\$1,552,332,283	\$1,561,739,325
\$1,297,128,398	\$1,600,941,810	\$1,531,297,284	\$1,371,981,645	\$1,233,572,172	\$1,138,387,070
\$ 691,265,960	\$ 240,293,185	\$ 188,239,087	\$ 279,073,905	\$ 318,760,111	\$ 423,352,255

Fiscal 2010	Fiscal 2009	Fiscal 2008	Fiscal 2007	Fiscal 2006	Fiscal 2005
7.50%	7.50%	7.50%	7.50%	7.50%	7.50%
5.52%	5.85%	5.59%	5.66%	5.44%	5.60%
24.13%	10.98%	10.45%	13.70%	15.59%	20.73%
11.00%	9.50%	13.75%	15.50%	16.25%	21.50%

SUMMARY OF PRINCIPAL PLAN PROVISIONS

The Municipal Police Employees' Retirement System was established as of July 1, 1973, for the purpose of providing retirement allowances and other benefits as described under R.S. 11:2211 - 11:2235. The following summary of plan provisions is for general informational purposes only and does not constitute a guarantee of benefits. The provisions contained within this section are as of June 30, 2013.

MEMBERSHIP - All full-time police officers empowered to make arrests, all full-time police officers decommissioned due to illness or injury, empowered by a municipality of the state of Louisiana, and engaged in law enforcement, all individuals in a position as defined in the municipal fire and police civil service system who are employed on a full-time basis by a police department of any municipality of this state, and are under the direction of a chief of police, and are paid from the budget of the applicable police department are required to become members of this retirement system, if they earn at least \$375 per month excluding state supplemental pay. All elected chiefs of police, whose salary is at least \$100 per month, all academy recruits who are participating in or awaiting participation in a formal training program, required prior to commission as a municipal police officer, with complete law enforcement office authority, all full-time secretaries to an appointed chief or elected chief of police, and all full-time employees of the system are required to become members of this retirement system. Persons must be under the age of fifty on their date of employment to be eligible for system membership. Certain restrictions to membership apply to those who are receiving disability or regular retirement benefits from another system.

For employees whose first employment making them eligible for membership in the system occurred on or after January 1, 2013, membership will be in the Hazardous Duty Subplan if they are eligible to receive state supplemental pay by virtue of their employment or the Nonhazardous Duty Subplan if they are not eligible for state supplemental pay.

CONTRIBUTION RATES - The fund is financed by employee and employer contributions together with funds from dedicated insurance premium taxes as allocated by the Public Retirement Systems' Actuarial Committee in accordance with RS 22:1476A(3). For employees hired prior to January 1, 2013, the employee contribution rate is at least 7.5% but not greater than 10% based on the total contribution expressed as a percentage of payroll after applying all required tax contributions. The employee rate, when such contributions total 25% or less, is set at 7.5%. The employee rate then increases 0.25% for each 0.75% increase in the total rate, and an additional 0.25% when the rate exceeds 28.75%, subject to a maximum rate of 10%. Regardless of the total contribution rate, members whose earnable compensation is less than or equal to the poverty guidelines issued by the U.S. Department of Health and Human Services have an employee contribution rate of 7.5%. Net direct employer contributions are nine percent (9.0%) of earnable compensation unless the funds allocated from dedicated taxes are insufficient to provide the actuarially required contributions or the actuarially required contributions are less than 9.0%. Members are not required to contribute to the system once they have enough service to have accrued 100% of final average compensation, but the employer is required to continue to contribute the employer's contribution until the member retires or enters DROP.

For employees hired on or after January 1, 2013 who are members of the Hazardous Duty Subplan, the employee contribution rate is the same as that for employees hired before January 1, 2013. For employees hired on or after January 1, 2013 who are members of the Nonhazardous Duty Subplan, the employee contribution rate is 8%.

CONTRIBUTION REFUNDS - Upon withdrawal from service, members not entitled to a retirement allowance may receive a refund of accumulated contributions. Refunds are payable thirty days after the effective date of withdrawal from service, if the member's employer has submitted all contributions.

AVERAGE FINAL COMPENSATION –

For employees hired prior to January 1, 2013: The average annual earned compensation of an employee for the highest period of thirty-six successive or joined months of service as an employee.

For employees hired on or after January 1, 2013: The average annual earned compensation of an employee for the highest period of sixty successive or joined months of service as an employee.

The twelve month salaries used to compute the average final compensation are subject to a limit in the rate of increase of 15% per year with certain exceptions.

NORMAL RETIREMENT BENEFITS –

For employees hired prior to January 1, 2013: Members with twelve years of creditable service may retire at age fifty-five; members with twenty years of service may retire at age fifty; members with twenty-five years of service may retire regardless of age. The retirement allowance is equal to three and one-third percent of the member's average final compensation multiplied by his years of creditable service, not to exceed one hundred percent of his average final compensation.

For employees hired on or after January 1, 2013 who participate in the Hazardous Duty Subplan: Members with twelve years of creditable service may retire at age fifty-five; members with twenty-five years of service may retire at any age. The retirement allowance is equal to three percent of the member's average final compensation multiplied by his years of creditable service, not to exceed one hundred percent of his average final compensation. Members in this subplan who retire with thirty or more years of creditable service receive benefits according to a three and one-third percent retirement allowance.

For employees hired on or after January 1, 2013 who participate in the Nonhazardous Duty Subplan: Members with twenty-five years of creditable service may retire at age fifty-five; members with thirty years of service may retire at any age. The retirement allowance is equal to two and one-half percent of the member's average final compensation multiplied by his years of creditable service, not to exceed one hundred percent of his average final compensation.

EARLY RETIREMENT –

For employees hired prior to January 1, 2013: Members with twenty or more years of creditable service who leave employment before age fifty may elect to receive early retirement benefits equal to an actuarially reduced accrued normal retirement benefit.

For employees hired on or after January 1, 2013: Members with twenty or more years of creditable service may elect to receive early retirement benefits equal to an actuarially reduced accrued normal retirement benefit.

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

Option 1 - If the member dies before he has received in annuity payments the present value of his member's annuity as it was at the time of retirement the balance is paid to his beneficiary.

Option 2 - Upon retirement, the member receives a reduced benefit. Upon the member's death, the designated beneficiary will continue to receive the same reduced benefit.

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

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

A member may also elect to receive an actuarially reduced benefit which provides for an automatic 2 ½% annual compound increase in monthly retirement benefits based on the reduced benefit and commencing on the later of age fifty-five or retirement anniversary; this COLA is in addition to any ad hoc COLAs which are payable.

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

DISABILITY BENEFITS - Any member who has been officially certified as totally disabled solely as the result of injuries sustained in the performance of his official duties, or for any cause, provided the member has a least ten years of creditable service and provided that the disability was incurred while the member was an active contributing member, is entitled to disability benefits.

For employees hired prior to January 1, 2013: Disability retirees will receive a benefit equal to three percent of final average compensation multiplied by the number of years of service, subject to a minimum of 40% of final compensation and a maximum of 60% of final compensation. Any disability retiree who is in a coma or paraplegic, or who is blinded or loses the total use of a limb, solely as a result of injuries sustained in the line of duty will receive a benefit equal to 100% of final average compensation. Disability retirees who retired with a service-connected disability benefit have the option, at normal retirement age, to continue receiving a disability benefit or to convert to receiving their vested retirement benefit. All other disability retirees, at normal retirement age, will receive the greater of their disability retirement benefit or their vested benefit.

For employees hired on or after January 1, 2013 who participate in the Hazardous Duty Subplan: Disability retirees who are disabled in the line of duty or who have 10 years of service credit will receive a benefit equal to two and three-quarters percent of final average compensation multiplied by the number of years of service, subject to a minimum of 33% of final compensation and a maximum of 55% of final compensation. Any disability retiree who is in a coma or paraplegic, or who

is blinded or loses the total use of a limb, solely as a result of injuries sustained in the line of duty will receive a benefit equal to 100% of final average compensation. Disability retirees who retired with a service-connected disability benefit have the option, at normal retirement age, to continue receiving a disability benefit or to convert to receiving their vested retirement benefit. All other disability retirees, at normal retirement age, will receive the greater of their disability retirement benefit or their vested benefit.

For employees hired on or after January 1, 2013 who participate in the Nonhazardous Duty Subplan: Disability retirees who have at least 10 years of service credit will receive a benefit equal to two and one-quarter percent of final average compensation multiplied by the number of years of service, subject to a minimum of 25% of final compensation and a maximum of 50% of final compensation. Any disability retiree who is in a coma or paraplegic, or who is blinded or loses the total use of a limb, solely as a result of injuries sustained in the line of duty will receive a benefit equal to 100% of final average compensation. At normal retirement age, disability retirees will receive the greater of their disability retirement benefit or their vested benefit.

SURVIVOR BENEFITS – Benefits are payable to survivors of any active contributing member who dies before retirement, or disability retirees who die after retirement as follows.

For employees hired prior to January 1, 2013: If he leaves a surviving spouse, she will receive an annual benefit equal to 3 1/3% of the deceased member's average final compensation multiplied by his total years of creditable service; however, in no event is the annual benefit less than 40% nor more than 60% of the deceased member's average final compensation. If the surviving spouse remarries, the benefits shall cease unless the remarriage occurs after age fifty-five. If the member dies as a result of injuries sustained in the line of duty, the surviving spouse receives a benefit equal to 100% of final average compensation, which shall not cease due to remarriage, less any benefits payable to surviving children. Unmarried children of the deceased member who are under the age of eighteen years are entitled to the greater of \$200 per month or 10% of average final compensation (not to exceed 100% of average final compensation when combined with the surviving spouse's benefit) until reaching the age of eighteen, or until the age of twenty-three, assuming they remain unmarried, if enrolled full-time in an institution of higher learning, high school, or vocational-technical school, unless the surviving child is physically handicapped or mentally retarded in which case the benefit is payable regardless of age. If a deceased member dies leaving no surviving spouse, but at least one minor child, each child is entitled to receive forty percent of the deceased's average final compensation, not to exceed an aggregate of sixty percent of average final compensation, subject to the same age restrictions as in the case of a surviving spouse with minor children. If a member dies after he is eligible for retirement but before actual retirement, his surviving spouse will be paid the greater of the surviving spouse benefits detailed above, or an automatic option 2 benefit. Members who have terminated employment with at least twelve years of service credit are eligible for the benefits detailed in this paragraph.

For employees hired on or after January 1, 2013 who participate in the Hazardous Duty Subplan: The surviving spouse of a deceased active contributing member or disability retiree with at least ten years of creditable service not killed in the line of duty will receive an annual benefit equal to the benefit calculated using the regular retirement formula; however, in no event is the annual benefit less than 33% nor more than 55% of the deceased member's average final compensation. If the surviving spouse remarries, the benefits shall cease unless the remarriage occurs after age sixty. If the member dies as a result of injuries sustained in the line of duty, the surviving spouse receives a benefit equal to 100% of final average compensation, which shall not cease due to remarriage, less any

benefits payable to surviving children. Unmarried children of the deceased member who are under the age of eighteen years are entitled to the greater of \$200 per month or 10% of average final compensation (not to exceed 100% of average final compensation when combined with the surviving spouse's benefit) until reaching the age of eighteen, or until the age of twenty-three, assuming they remain unmarried, if enrolled full-time in an institution of higher learning, high school, or vocational-technical school, unless the surviving child is physically handicapped or mentally retarded in which case the benefit is payable regardless of age. If a deceased member dies leaving no surviving spouse, but at least one minor child, each child is entitled to receive twenty-five percent of the deceased's average final compensation, not to exceed an aggregate of fifty percent of average final compensation, subject to the same age restrictions as in the case of a surviving spouse with minor children. If a member dies after he is eligible for retirement but before actual retirement, his surviving spouse will be paid the greater of the surviving spouse benefits detailed above, or an automatic option 2 benefit. Members who have terminated employment with at least twelve years of service credit are eligible for the benefits detailed in this paragraph.

For employees hired on or after January 1, 2013 who participate in the Nonhazardous Duty Subplan: The surviving spouse of a deceased active contributing member or disability retiree with at least ten years of creditable service not killed in the line of duty will receive an annual benefit equal to the benefit calculated using the regular retirement formula; however, in no event is the annual benefit less than 25% nor more than 50% of the deceased member's average final compensation. If the surviving spouse remarries, the benefits shall cease unless the remarriage occurs after age sixty. If the member dies as a result of injuries sustained in the line of duty, the surviving spouse receives a benefit equal to 100% of final average compensation, which shall not cease due to remarriage, less any benefits payable to surviving children. Unmarried children of the deceased member who are under the age of eighteen years are entitled to the greater of \$200 per month or 10% of average final compensation (not to exceed 100% of average final compensation when combined with the surviving spouse's benefit) until reaching the age of eighteen, or until the age of twenty-three, assuming they remain unmarried, if enrolled full-time in an institution of higher learning, high school, or vocational-technical school, unless the surviving child is physically handicapped or mentally retarded in which case the benefit is payable regardless of age. If a deceased member dies leaving no surviving spouse, but at least one minor child, each child is entitled to receive twenty percent (twenty-five percent in the case of one minor child) of the deceased's average final compensation, not to exceed an aggregate of fifty percent of average final compensation, subject to the same age restrictions as in the case of a surviving spouse with minor children. If a member dies after he is eligible for retirement but before actual retirement, his surviving spouse will be paid the greater of the surviving spouse benefits detailed above, or an automatic option 2 benefit. Members who have terminated employment with at least twelve years of service credit are eligible for the benefits detailed in this paragraph.

DEFERRED RETIREMENT OPTION PLAN - In lieu of terminating employment and accepting a service retirement allowance, any member of the system who is eligible to receive a regular retirement allowance may elect to participate in the Deferred Retirement Option Plan for up to thirty-six months and defer the receipt of benefits. Upon commencement of participation in the plan, membership in the system terminates and neither the employee nor employer contributions are payable. Compensation and creditable service will remain as they existed on the effective date of commencement of participation in the plan. The monthly retirement benefits that would have been payable, had the member elected to cease employment and receive a service retirement allowance, are paid into the deferred retirement option plan account. Upon termination of employment at the end of the specified period of participation, a participant in the program may receive, at his option, a lump sum payment

from the account equal to the payments to the account, or a true annuity based upon his account, or he may elect any other method of payment if approved by the board of trustees. The monthly benefits that were being paid into the fund during the period of participation will begin to be paid to the retiree. If employment is not terminated at the end of the thirty-six months, payments into the account cease and the member resumes active contributing membership in the system. Such members may accumulate an additional benefit for service rendered after completion of the Deferred Retirement Option Plan. If the participant dies during the period of participation in the program, a lump sum payment equal to his account balance is paid to his named beneficiary or, if none, to his estate; in addition, normal survivor benefits are payable to survivors of retirees.

COST OF LIVING INCREASES – Pursuant to R.S. 11:2225, the board of trustees is authorized to use interest earnings in excess of the normal requirements to grant annual cost of living increases of 3% of each retiree's original or current benefit. R.S. 11:246 provides cost of living increases to retirees and beneficiaries over the age of 65 equal to 2% of the benefit in payment on October 1, 1977, or the date the benefit was originally received if retirement commenced after that date. In lieu of these cost of living adjustments, the board may grant an increase under R.S. 11:241 in the form 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.

All of the above provisions require that the system earn sufficient excess interest earnings to fund the increases and to meet certain other criteria detailed in the statutes related to funding status.

R. S. 11:2225(A)(7)(c) and (d) provide that the board of trustees is authorized to provide a one-time cost of living adjustment of 3% of each retiree's normal monthly benefit (not to be less than \$20 per month) from excess interest earnings without regard to the provisions of R.S. 11:242 (which describes the target ratio).

ACTUARIAL ASSUMPTIONS

In determining actuarial costs, certain assumptions must be made regarding future experience under the plan. These assumptions include the rate of investment return, mortality of plan members, rates of salary increase, rates of retirement, rates of termination, rates of disability, and various other factors that have an impact on the cost of the plan. To the extent that future experience varies from the assumptions selected for valuation, future costs will be either higher or lower than anticipated. The following chart illustrates the effect of emerging experience on the plan.

Factor	Increase in Factor Results in
Investment Earnings Rate	Decrease in Cost
Annual Rate of Salary Increase	Increase in Cost
Rates of Retirement	Increase in Cost
Rates of Termination	Decrease in Cost
Rates of Disability	Increase in Cost
Rates of Mortality	Decrease in Cost
 ACTUARIAL COST METHOD:	 Individual Entry Age Normal With Allocation of Cost Based on Earnings. Entry and Attained Ages Calculated on an Age Near Birthday Basis.
 VALUATION INTEREST RATE:	 7.5% (Net of investment expense)
 ACTUARIAL ASSET VALUES TRANSITION:	 For this valuation, the Actuarial Value of Assets was calculated by phasing in to the ultimate approach as given below from the prior method which smoothed unrealized capital gains of losses over a four year period at 25% per year. The deferral of capital gains for all years before fiscal 2011 was based on the prior method. The deferral of gains and losses for fiscal 2011 and later is based on the ultimate method.
 ACTUARIAL ASSET VALUES ULTIMATE METHOD:	 All assets are valued at market value adjusted to defer four-fifths of all earnings above or below the valuation interest rate in the valuation year, three-fifths of all earnings above or below the valuation interest rate in the prior year, two-fifths of all earnings above or below the valuation interest rate from two years prior, and one-fifth of all earnings above or below the valuation interest rate from three years prior. The resulting smoothed values are subject to a corridor of 85% to 115% of the market value of assets. If the smoothed value falls outside the corridor, the actuarial value is set equal to the average of the corridor limit and the smoothed value.

ACTIVE MEMBER MORTALITY:	RP 2000 Sex Distinct Employee Tables set back 1 year for males and set back 1 year for females.												
ANNUITANT AND BENEFICIARY MORTALITY:	RP 2000 Sex Distinct Healthy Annuitant Tables set back 1 year for males and set back 1 year for females.												
RETIREE COST OF LIVING INCREASES:	The present value of future retirement benefits is based on benefits currently being paid by the system and includes previously granted cost of living increases. The present values do not include provisions for potential future increases not yet authorized by the Board of Trustees.												
ANNUAL SALARY INCREASE RATE:	<p>The gross rates including inflation and merit increases are as follows:</p> <table> <tr> <th><u>Years of Service</u></th><th><u>Salary Growth Rate</u></th></tr> <tr> <td>1</td><td>10%</td></tr> <tr> <td>2</td><td>6%</td></tr> <tr> <td>3-19</td><td>4.3%</td></tr> <tr> <td>20-29</td><td>5.5%</td></tr> <tr> <td>Above 30</td><td>4%</td></tr> </table>	<u>Years of Service</u>	<u>Salary Growth Rate</u>	1	10%	2	6%	3-19	4.3%	20-29	5.5%	Above 30	4%
<u>Years of Service</u>	<u>Salary Growth Rate</u>												
1	10%												
2	6%												
3-19	4.3%												
20-29	5.5%												
Above 30	4%												
RETIREMENT RATES:	The table of these rates through age 65 is included later in the report. A rate of 15% applies at ages above 66. These rates apply only to those individuals eligible to retire.												
RETIREMENT LIMITATIONS:	Projected retirement benefits are not subject to IRS Section 415 limits.												
DROP ENTRY RATES:	<p>These rates apply only to those individuals eligible to participate.</p> <table> <tr> <th><u>Age</u></th><th><u>Rate</u></th></tr> <tr> <td>54 & Under</td><td>22%</td></tr> <tr> <td>55</td><td>40%</td></tr> <tr> <td>56 – 66</td><td>22%</td></tr> <tr> <td>67 & Over</td><td>40%</td></tr> </table>	<u>Age</u>	<u>Rate</u>	54 & Under	22%	55	40%	56 – 66	22%	67 & Over	40%		
<u>Age</u>	<u>Rate</u>												
54 & Under	22%												
55	40%												
56 – 66	22%												
67 & Over	40%												
DROP PARTICIPATION PERIOD:	All DROP participants are assumed to participate for 3 years and retire at the end of this participation period.												

RETIREMENT RATES FOR ACTIVE
FORMER DROP PARTICIPANTS:

Retirement rates for active former DROP
participants are as follows:

<u>Age</u>	<u>Rate</u>
49 & Under	25%
50-53	27%
54	30%
55	45%
56-59	25%
60-66	30%
67 & Above	99%

DISABILITY RATES:

The table of these rates is included later in this
report.

WITHDRAWAL RATES:

The rates of withdrawal are applied based upon
the attained age and are given later in the report.
Those rates are multiplied by the following
factors based on the member's completed years
of service.

<u>Service</u>	<u>Factor</u>
<1	1.25
1	1.20
2	1.15
3	1.10
>3	1.00

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

MARRIAGE STATISTICS:

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

SERVICE RELATED DEATH:

20% of Total Deaths

FAMILY STATISTICS:

Assumptions utilized in determining the costs of
various survivor benefits are listed below.

<u>Member's Age</u>	<u>% With Children</u>	<u>Number of Children</u>	<u>Average Age</u>
25	62%	1.66	6
35	82%	2.06	10
45	66%	1.75	13
55	19%	1.35	15
65	2%	1.35	15

DISABLED LIVES MORTALITY:	RP-2000 Disabled Lives Mortality Tables for Males and Females
VESTING ELECTING PERCENTAGE:	20% of those vested elect deferred benefits in lieu of contribution refunds.

ACTUARIAL TABLES AND RATES

Age	Male Employee Mortality	Female Employee Mortality	Male Retiree Mortality	Female Retiree Mortality	Retirement Rates	Disability Rates	Remarriage Rates	Withdrawal Rates
18	0.00030	0.00018	0.00030	0.00018	0.00000	0.00060	0.00000	0.085
19	0.00032	0.00019	0.00032	0.00019	0.00000	0.00060	0.09349	0.085
20	0.00033	0.00019	0.00033	0.00019	0.00000	0.00060	0.09350	0.085
21	0.00035	0.00019	0.00035	0.00019	0.00000	0.00060	0.09152	0.085
22	0.00036	0.00019	0.00036	0.00019	0.00000	0.00060	0.08954	0.085
23	0.00037	0.00019	0.00037	0.00019	0.00000	0.00060	0.08757	0.085
24	0.00037	0.00020	0.00037	0.00020	0.00000	0.00060	0.08569	0.080
25	0.00038	0.00020	0.00038	0.00020	0.00000	0.00060	0.08402	0.080
26	0.00038	0.00021	0.00038	0.00021	0.00000	0.00060	0.08225	0.080
27	0.00038	0.00021	0.00038	0.00021	0.00000	0.00060	0.08028	0.070
28	0.00038	0.00022	0.00038	0.00022	0.00000	0.00060	0.07802	0.070
29	0.00039	0.00024	0.00039	0.00024	0.00000	0.00060	0.07556	0.070
30	0.00041	0.00025	0.00041	0.00025	0.00000	0.00060	0.07281	0.070
31	0.00044	0.00026	0.00044	0.00026	0.00000	0.00060	0.06976	0.060
32	0.00050	0.00031	0.00050	0.00031	0.00000	0.00060	0.06652	0.060
33	0.00056	0.00035	0.00056	0.00035	0.00000	0.00060	0.06308	0.060
34	0.00063	0.00039	0.00063	0.00039	0.00000	0.00060	0.05945	0.060
35	0.00070	0.00044	0.00070	0.00044	0.00000	0.00068	0.05582	0.060
36	0.00077	0.00047	0.00077	0.00047	0.00000	0.00076	0.05230	0.050
37	0.00084	0.00051	0.00084	0.00051	0.00000	0.00084	0.04890	0.050
38	0.00090	0.00055	0.00090	0.00055	0.00000	0.00096	0.04570	0.050
39	0.00096	0.00060	0.00096	0.00060	0.00000	0.00108	0.04271	0.036
40	0.00102	0.00065	0.00102	0.00065	0.00000	0.00124	0.03993	0.036
41	0.00108	0.00071	0.00108	0.00071	0.08000	0.00140	0.03769	0.036
42	0.00114	0.00077	0.00114	0.00077	0.08000	0.00156	0.03480	0.036
43	0.00122	0.00085	0.00122	0.00085	0.08000	0.00176	0.03256	0.036
44	0.00130	0.00094	0.00130	0.00094	0.08000	0.00200	0.03037	0.036
45	0.00140	0.00103	0.00140	0.00103	0.08000	0.00228	0.02822	0.036
46	0.00151	0.00112	0.00151	0.00112	0.08000	0.00260	0.02632	0.036
47	0.00162	0.00122	0.00162	0.00122	0.08000	0.00292	0.02455	0.040
48	0.00173	0.00133	0.00173	0.00133	0.08000	0.00332	0.02303	0.040
49	0.00186	0.00143	0.00186	0.00143	0.08000	0.00376	0.02154	0.040
50	0.00200	0.00155	0.00200	0.00155	0.08000	0.00428	0.02019	0.050
51	0.00214	0.00168	0.00535	0.00234	0.08000	0.00488	0.01889	0.050
52	0.00229	0.00181	0.00553	0.00246	0.08000	0.00552	0.01808	0.050
53	0.00245	0.00197	0.00564	0.00265	0.08000	0.00628	0.01733	0.050
54	0.00262	0.00213	0.00572	0.00290	0.08000	0.00712	0.01671	0.050
55	0.00281	0.00232	0.00580	0.00319	0.15000	0.00808	0.01622	0.050
56	0.00303	0.00253	0.00590	0.00353	0.08000	0.00920	0.01596	0.050
57	0.00331	0.00276	0.00612	0.00393	0.08000	0.01044	0.01584	0.050
58	0.00363	0.00301	0.00644	0.00438	0.08000	0.01184	0.01589	0.050
59	0.00400	0.00329	0.00690	0.00492	0.08000	0.01348	0.01622	0.050
60	0.00441	0.00360	0.00749	0.00553	0.08000	0.01952	0.01682	0.050
61	0.00488	0.00393	0.00820	0.00620	0.08000	0.01952	0.01764	0.050
62	0.00538	0.00429	0.00900	0.00692	0.08000	0.01952	0.01906	0.050
63	0.00592	0.00466	0.00991	0.00769	0.08000	0.01952	0.02061	0.050
64	0.00647	0.00504	0.01095	0.00851	0.08000	0.01952	0.02239	0.000
65	0.00703	0.00543	0.01212	0.00939	0.08000	0.01952	0.02446	0.050

PRIOR YEAR ASSUMPTIONS

RETIREMENT RATES:

A change was made in the retirement rates to recognize that retirement eligibility standards provide for the possibility of retirements at ages lower than assumed in prior years. The rates used in the 2012 valuation are as follows:

<u>Age</u>	<u>Rate</u>
Prior to 47	0%
47 – 54	8%
55	15%
56 – 66	8%
67 & Over	15%

FAMILY STATISTICS:

Assumptions utilized in determining the costs of various survivor benefits are listed below.

<u>Member's Age</u>	<u>% With Children</u>	<u>Number of Children</u>	<u>Average Age</u>
25	80%	1.16	3
35	80%	1.71	7
45	80%	1.38	12
55	80%	0.83	16
65	80%	0.28	18

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.

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

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

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

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

Amortization Payment - That portion of the pension plan contribution designated to pay interest and reduce the outstanding principal balance of unfunded actuarial accrued liability. If the amortization

payment is less than the accrued interest on the unfunded actuarial accrued liability the outstanding principal balance will increase.

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

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

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

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

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

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

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

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

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

NOTES: