

**MUNICIPAL EMPLOYEES'  
RETIREMENT SYSTEM**

ACTUARIAL VALUATION AS OF  
JUNE 30, 2008

# G. S. CURRAN & COMPANY, LTD.

Actuarial Services

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Consulting Actuary

December 5, 2008

Board of Trustees  
Municipal Employees' Retirement System  
7937 Office Park Blvd.  
Baton Rouge, LA 70809

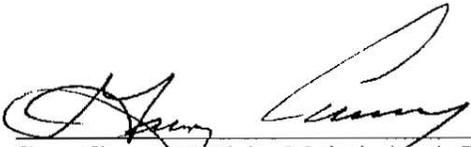
Ladies and Gentlemen:

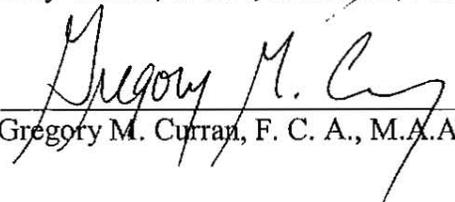
We are pleased to present our report on the actuarial valuation of the Municipal Employees' Retirement System for the fiscal year ending June 30, 2008. Our report is based on the actuarial assumptions specified and relies on the data supplied by the system's administrative director and auditors. This report was prepared at the request of the Board of Trustees of the Municipal Employees' Retirement System. The primary purposes of the report are to determine the actuarially required contribution for the retirement system for the fiscal year ending June 30, 2009, to recommend the net direct employer contribution rate for fiscal 2010, and to provide information for the system's financial statements. This report was prepared exclusively for the Municipal Employees' Retirement System for a specific limited purpose. It is not for the use or benefit of any third party for any purpose.

This report has been prepared in accordance with generally accepted actuarial principles and practices, and to the best of our knowledge and belief fairly reflects the actuarial present values and costs stated herein. The undersigned actuaries are members of the American Academy of Actuaries and have met the qualification standards for the American Academy of Actuaries to render the actuarial opinions incorporated in this report, and are available to provide further information or answer any questions with respect to this valuation.

Sincerely,

G. S. CURRAN & COMPANY, LTD.

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

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

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

Valuation Date:	June 30, 2008	June 30, 2007
Census Summary:		
Active Members	5,030	4,965
Retirees and Beneficiaries	2,794	2,721
Terminated Due a Deferred Benefit	184	209
Terminated Due a Refund	2,561	2,553
Payroll:	\$ 148,644,512	\$ 141,232,448
Benefits in Payment:	\$ 37,650,335	\$ 34,978,923
Frozen Unfunded Actuarial Accrued Liability:	\$ 73,993,478	\$ 73,216,582
Market Value of Assets:	\$ 666,534,551	\$ 667,345,480
Actuarial Asset Value:	\$ 671,721,084	\$ 624,442,059
Actuarial Accrued Liability (as defined by GASB-25)	\$ 745,714,562	\$ 697,658,641
Ratio of Actuarial Value of Assets to Actuarial Accrued Liability:	90.08%	89.51%

\*\*\*\*\*

	FISCAL 2009	FISCAL 2008
Employer Normal Cost (July 1):	\$ 13,494,664	\$ 13,901,391
Amortization Cost (July 1):	\$ 4,904,027	\$ 4,704,102
Interest Adjusted Gross Employer Actuarially Required Contribution Including Estimated Administrative Costs:	\$ 19,825,970	\$ 20,051,911
Projected Ad Valorem and Revenue Sharing Funds	\$ 4,276,524	\$ 3,807,874
Net Direct Employer Actuarially Required Contribution:	\$ 15,549,446	\$ 16,244,037
Actuarially Required Net Direct Employer Contribution Rate	10.25%	11.17%
Actual Net Direct Employer Contribution Rate:	13.50%	13.50%

\*\*\*\*\*

**Minimum Recommended Net Direct Employer Contribution Rate for Fiscal 2010: 10.25%**

Employee Contribution Rate: 9.25% of Payroll

Actuarial Cost Method: Frozen Attained Age Normal Actuarial Cost Method

Valuation Interest Rate: 8% (Net of Investment Expense)

Exclusions from Census: None

Basis of Actuarial Asset Value: The actuarial value of assets is based on the market value of investment securities adjusted to average in asset earnings above or below the assumed rate of return over a four-year period. In addition, expense fund assets were allocated to each plan in proportion to covered payroll.

Changes in Valuation Methods, Assumptions, and Amortization Periods: NONE

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

**SUMMARY OF VALUATION RESULTS  
MUNICIPAL EMPLOYEES' RETIREMENT SYSTEM - PLAN B**

Valuation Date:	June 30, 2008	June 30, 2007
Census Summary: Active Members	2,191	2,153
Retirees and Beneficiaries	793	794
Terminated Due a Deferred Benefit	68	74
Terminated Due a Refund	998	928
Payroll:	\$ 59,233,705	\$ 54,572,935
Benefits in Payment:	\$ 6,625,934	\$ 6,328,157
Frozen Unfunded Actuarial Accrued Liability:	\$ 5,183,177	\$ 5,446,715
Market Value of Assets:	\$ 134,832,148	\$ 132,326,073
Actuarial Asset Value:	\$ 136,207,119	\$ 124,483,332
Actuarial Accrued Liability (as defined by GASB-25)	\$ 141,390,296	\$ 129,930,047
Ratio of Actuarial Value of Assets to Actuarial Accrued Liability:	96.33%	95.81%

\*\*\*\*\*

	FISCAL 2009	FISCAL 2008
Employer Normal Cost (July 1):	\$ 3,354,236	\$ 3,257,565
Amortization Cost (July 1):	\$ 634,528	\$ 647,477
Interest Adjusted Gross Employer Actuarially Required Contribution Including Estimated Administrative Costs:	\$ 4,426,377	\$ 4,335,104
Projected Ad Valorem and Revenue Sharing Funds	\$ 1,704,162	\$ 1,471,382
Net Direct Employer Actuarially Required Contributions:	\$ 2,722,215	\$ 2,863,722
Actuarially Required Net Direct Employer Contribution Rate	4.50%	5.06%
Actual Net Direct Employer Contribution Rate:	6.75%	6.75%

\*\*\*\*\*

**Minimum Recommended Net Direct Employer Contribution Rate for Fiscal 2010: 4.50%**

Employee Contribution Rate: 5.00% of Payroll

Actuarial Cost Method: Frozen Attained Age Normal Actuarial Cost Method

Valuation Interest Rate: 8% (Net of Investment Expense)

Exclusions from Census: None

Basis of Actuarial Asset Value: The actuarial value of assets is based on the market value of investment securities adjusted to average in asset earnings above or below the assumed rate of return over a four-year period. In addition, expense fund assets were allocated to each plan in proportion to covered payroll.

Changes in Valuation Methods, Assumptions, and Amortization Periods: NONE

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

## COMMENTS ON DATA

For the valuation, the administrative director of the system furnished a census on compact disk derived from the system's master data processing file indicating each active covered employee's sex, date of birth, service credit, annual salary, and accumulated contributions. Information on retirees detailing dates of birth of retirees and beneficiaries, as well as option categories and benefit amounts, was provided in like manner. In addition, data was supplied on former employees who are vested or who have contributions remaining on deposit. As illustrated in Exhibit X, there are 5,030 active members in Plan A of whom 2,193 have vested retirement benefits including 238 participants in the Deferred Retirement Option Plan (DROP); 2,794 former Plan A members or their beneficiaries are receiving retirement benefits. An additional 2,745 Plan A members have contributions remaining on deposit with the system; of this number, 184 have vested rights for future retirement benefits. Census data on Plan B members may be found in Exhibit XXI. There are 2,191 active members in Plan B of whom 790 have vested retirement benefits including 57 participants in the Deferred Retirement Option Plan (DROP); 793 former Plan B members or their beneficiaries are receiving retirement benefits. An additional 1,066 Plan B members have contributions remaining on deposit with the system; of this number, 68 have vested rights for future retirement benefits. All individuals submitted were included in the valuation.

Census data submitted to our office is tested for errors. Several types of census data errors are possible; to ensure that the valuation results are as accurate as possible, a significant effort is made to identify and correct these errors. In order to minimize coverage errors (i.e., missing or duplicated individual records) the records are checked for duplicates, and a comparison of the current year's records to those submitted in prior years is made. Changes in status, new records, and previous records which have no corresponding current record are identified. This portion of the review indicates the annual flow of members from one status to another and is used to check some of the actuarial assumptions, such as retirement rates, rates of withdrawal, and mortality. In addition, the census is checked for reasonableness in several areas, such as age, service, salary, and current benefits. The records identified by this review as questionable are checked against data from prior valuations; those not recently verified are included in a detailed list of items sent to the system's administrative staff for verification and/or correction. Once the identified data has been researched and verified or corrected, it is returned to us for use in the valuation. Occasionally some requested information is either unavailable or impractical to obtain. In such cases, values may be assigned to missing data. The assigned values are based on information from similar records or based on information implied from other data in the record.

In addition to the statistical information provided on the system's participants, the system's administrative director 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, L.L.P. As indicated in the system's audit report, the net market value of Plan A's assets was \$666,534,551 as of June 30, 2008. Net investment income for fiscal 2008 measured on a market value basis for Plan A amounted to \$7,430,397. Contributions to the Plan for the fiscal year totaled \$38,745,368; benefits and expenses paid by Plan A amounted to \$46,986,694. The net market value of Plan B's assets was \$134,832,148 as of June 30, 2008. Net investment income for fiscal 2008 measured on a market value basis for Plan B amounted to \$1,698,099. Contributions to the Plan for the fiscal year totaled \$8,939,175; benefits and expenses paid by Plan

B amounted to \$8,131,199. In addition to the two benefit trust funds the system maintains an expense fund for payment of certain investment and administrative expenses. The balance in this fund at the beginning of the year was \$445,943 and at the end of the year the balance was \$267,742.

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

## **COMMENTS ON ACTUARIAL METHODS AND ASSUMPTIONS**

This valuation is based on the Frozen Attained Age Normal actuarial cost method with the unfunded actuarial accrued liability frozen as of June 30, 1989. Under the provisions of Louisiana R.S. 11:103 the unfunded accrued liability for Plan A, which was determined to be \$48,466,297 as of June 30, 1989, was amortized over forty years with payments increasing at 4.25% per year. The unfunded accrued liability for Plan B, which was determined to be \$9,853,175 as of June 30, 1989, was amortized over forty years with payments decreasing at 2% per year. In accordance with R. S. 11:105, in any year in which the net direct employer contribution is scheduled to decrease, the board of trustees may freeze the net direct employer contribution rate and use the excess funds collected, if any, to reduce the frozen unfunded actuarial accrued liability. In Plan B, the board elected to freeze the employer contribution rate in fiscal 2001. As a result of this freeze in rates, the unfunded accrued liability will be fully amortized by June 30, 2023. In Plan A, payroll growth in excess of 4.25% per year will reduce future amortization payments as a percent of payroll. In Plan B, any payroll growth or payroll decline less than 2% per year will reduce future amortization payments as a percent of payroll. Under the Frozen Attained Age Normal Cost Method, actuarial gains and losses are spread over future normal costs. Thus, favorable plan experience will lower future normal costs; unfavorable experience will cause future normal costs to increase. In addition, changes in benefits and assumptions are also spread over future normal costs.

The actuarial assumptions utilized for the report are outlined on pages sixty-three through sixty-six. The valuation for fiscal 2008 utilized the same assumptions as the prior year. In the aggregate the assumptions represent our "best estimate" of future long-term experience for the fund. All calculations, recommendations, and conclusions are based on the assumptions specified. To the extent that prospective experience differs from that assumed, adjustments will be required to contribution levels. Such differences will be revealed in future actuarial valuations.

## **CHANGES IN PLAN PROVISIONS**

The following changes in plan provisions were enacted during the 2008 Regular Session of the Louisiana Legislature:

**Act 113** authorizes the board of trustees to provide a permanent monthly cost-of-living adjustment (COLA) for retirees or their beneficiaries who would otherwise be eligible for a COLA. The COLA will be payable in a monthly amount not to exceed three percent of the normal monthly benefit payable to the retiree or beneficiary on the date the increase is granted, but will not be less than

twenty dollars per month. The authority granted by this act is non-recurring and the board of trustees may not grant more than one COLA pursuant to the provisions of the act.

**Act 397** stipulates that, except as provided in R.S. 11:143 and notwithstanding any other provision of law to the contrary, employer contributions will not be returned, refunded, transferred, or rolled over to any employee or employer or to any retirement system, plan, or fund.

**Act 445** provides that, notwithstanding the provisions of R.S. 11:103, 104 and 105, the board of trustees is authorized to require a net direct contribution rate of up to three percent more than the rate determined under R.S. 11:103. In addition, the act provides that in any fiscal year during which the net direct employer contribution rates would otherwise be decreased, the board of trustees is authorized to set the employer contribution rate at any point between the previous year's employer contribution rate and the decreased rate that would otherwise occur. Any excess funds resulting from the additional contributions will be applied as provided in R.S. 11:105(C).

### **ASSET EXPERIENCE**

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

	<u>Market Value</u>	<u>Actuarial Value</u>	
PLAN A	1999	8.2%	
	2000	9.1%	
	2001	-4.2%	
	2002	-1.8%	
	2003	4.4%	-1.0% *
	2004	9.6%	3.5%
	2005	7.2%	9.6% **
	2006	8.6%	10.7% ***
	2007	18.1% †	10.8% †
	2008	1.1%	9.0%

	<u>Market Value</u>	<u>Actuarial Value</u>	
PLAN B	1999	7.9%	
	2000	8.4%	
	2001	-4.2%	
	2002	-2.8%	
	2003	3.8%	-1.8% *
	2004	9.7%	3.1%
	2005	7.2%	6.4% **
	2006	8.5%	13.7% ***
	2007	17.4% †	10.6% †
	2008	1.3%	8.8%

- \* Includes the effect of a change from amortized cost for fixed income securities to three year smoothing of realized and unrealized capital gains.
- \*\* Includes the effect of a change from three year smoothing of realized and unrealized capital gains to two year smoothing of realized and unrealized capital gains.
- \*\*\* Includes effect of change in asset valuation method. Effective with the 2006 valuation the method was changed from smoothing capital gains and losses over 2 years in Plan A and 3 years in Plan B to smoothing investment earnings above or below the assumed rate of return over 4 years in both Plan A and Plan B.
- † Includes the impact of inclusion of the prior period adjustment as income in fiscal 2007.

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 2008, the fund earned \$10,252,467 of dividends and interest and other recurring income for Plan A and \$2,064,212 for Plan B. Net income was decreased by realized and unrealized capital losses of \$334,864 for Plan A and increased by realized and unrealized capital gains of \$124,905 for Plan B and offset by net investment expenses of \$2,487,206 for Plan A and \$491,018 for Plan B. The geometric mean of the market value rates of return measured over the last ten years was 5.9% for Plan A and 5.6% for Plan B.

The actuarial rate of return is presented for comparison to the assumed long-term rate of return of 8% used for the valuation. This rate is calculated based on the actuarial value of assets and all interest, dividends, other investment income, and capital gains or losses as given in Exhibit VI for Plan A and Exhibit XVII for Plan B, adjusted for any change in asset determination methodology. Investment income used to calculate this yield is based upon a smoothing of gains or losses over a four-year period. The difference between rates of return on an actuarial and market value basis results from the smoothing of gains or losses on investments relative to the valuation interest rate over a four-year period. In addition to the smoothing of investment returns above or below the assumed rate of return of 8.0%, the actuarial and market rates of return differ due to the allocation of expense fund assets and income to both Plan A and Plan B. Yields in excess of the 8% assumption will reduce future costs; yields below 8% will increase future costs. Plan A experienced net actuarial investment earnings of \$5,987,429 more than the actuarial assumed earnings rate of 8%. Plan B experienced net actuarial investment earnings of \$960,911 more than the actuarial assumed earnings rate of 8%. These actuarial gains decreased the normal cost accrual rate by 0.5681% and 0.2198% respectively for Plan A and Plan B.

At the end of each fiscal year, a review of the data is made to identify current members of Plan A and Plan B who have consecutive service credit in both plans and have not been addressed in previous transfers of assets and liabilities between the Plan A and Plan B trust funds pursuant to the provisions of R.S. 11: 1862(F). In the course of reviewing data for the June 30, 2008 valuation we found five members of Plan A and one member of Plan B with such service and therefore do recommend a transfer of \$84,220 be made from the Plan B trust to the Plan A trust for fiscal 2008.

## **PLAN A – DEMOGRAPHICS AND LIABILITY EXPERIENCE**

A reconciliation of the census for Plan A is given in Exhibit X. The average active member is 48 years old with 10.31 years of service and an annual salary of \$29,552. The Plan's active membership increased during the fiscal year by 65 members. The plan has experienced a decline in the active plan population of 503 members between 2003 and 2008. Should the five year trend in plan population continue, a change in the structure of the amortization of the frozen unfunded actuarial accrued liability will be required to prevent continual increases in contributions as a percentage of payroll. A review of the active census by age indicates that over the last ten years the population in the under-forty age group has decreased while the proportion of active members over-forty increased. Over the same ten-year period the plan showed a decrease in the percentage of members with service less than ten years; the percentage of members with service over ten years has increased. These trends are indicative of a maturing population which will have a tendency to show increased costs.

The average retiree is 70 years old with a monthly benefit of \$1,296. The number of retirees and beneficiaries receiving benefits from the system increased by 73 during the fiscal year. Over the last five years the number of retirees has increased by 422; during this same period, annual benefits in payment increased by \$10,219,208.

Plan liability experience for fiscal 2008 was favorable. Other than salary increases, there was no one significant factor affecting liability experience. Salary increases were above projected levels. Regular retirements and DROP entries were below projected levels; disabilities were slightly below projections and retiree deaths were slightly above projections. Withdrawals were above projections. The net effect of all of these elements was a decrease in cost. Plan liability gains decreased the normal cost accrual rate by 0.1925%.

## **PLAN B – DEMOGRAPHICS AND LIABILITY EXPERIENCE**

A reconciliation of the census for Plan B is given in Exhibit XXI. The average active member is 48 years old with 9.03 years of service and an annual salary of \$27,035. The Plan's active membership increased during the fiscal year by 38 members. Over the last five years the active population increased by 127 members. A review of the active census by age indicates that over the last ten years the population in the under 40 age group has decreased while the proportion of active members in the age group extending from 51 to 60 has increased. Over the same ten-year period the system showed a decrease in the percentage of members with service of five to nine years and the corresponding increase in the percentage of members with service over twenty-five years.

The average retiree is 73 years old with a monthly benefit of \$789. The number of retirees and beneficiaries receiving benefits from the system decreased by 1. Over the last five years this group increased by 73; during this same period, annual benefits in payment increased by \$1,408,972.

Plan liability experience for fiscal 2008 was unfavorable. Other than salary increases, there was no one significant factor affecting liability experience. Salary increases were above projected levels. Retirements and disabilities were below projected levels. Withdrawals, DROP entries, and retiree deaths were above projected levels. Plan liability losses increased the normal cost accrual rate by 0.0334%.

## FUNDING ANALYSIS AND RECOMMENDATIONS

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

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

For Plan A, the derivation of the actuarially required contribution for the current fiscal year is given in Exhibit I. The normal cost for fiscal 2009 as of July 1, 2008, is \$13,494,664. The amortization payment on the plan's frozen unfunded actuarial accrued liability as of July 1, 2008, is \$4,904,027. The total actuarially required contribution is determined by adjusting these two values for interest (since payments are made throughout the fiscal year) and adding estimated administrative expenses. As given on line 14 of Exhibit I, the total actuarially required contribution for fiscal 2009 is \$19,825,970. When this amount is reduced by projected tax contributions and revenue sharing funds the resulting employers' net direct actuarially required contribution for fiscal 2009 is \$15,549,446. This is 10.25% of the projected Plan A payroll for fiscal 2009.

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

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

Normal Cost Accrual Rate – Fiscal 2008	10.5045%
Factors Increasing the Normal Cost Accrual Rate:	
COLA Loss	0.7916%

Factors Decreasing the Normal Cost Accrual Rate:	
Asset Experience	-0.5681%
New Members	-0.3625%
Liability Experience	-0.1925%
Contribution Gain	-0.4234%
 Normal Cost Accrual Rate – Fiscal 2009	 9.7496%

For Plan B, the derivation of the actuarially required contribution for the current fiscal year is given in Exhibit XII. The normal cost for fiscal 2009 as of July 1, 2008, is \$3,354,236. The amortization payment on the plan's frozen unfunded actuarial accrued liability as of July 1, 2008, is \$634,528. The total actuarially required contribution is determined by adjusting these two values for interest (since payments are made throughout the fiscal year) and adding estimated administrative expenses. As given on line 14 of Exhibit XII, the total actuarially required contribution for fiscal 2009 is \$4,426,377. When this amount is reduced by projected tax contributions and revenue sharing funds the resulting employers' net direct actuarially required contribution for fiscal 2009 is \$2,722,215. This is 4.50% of the projected Plan B payroll for fiscal 2009.

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

Normal Cost Accrual Rate – Fiscal 2008	6.4877%
Factors Increasing the Normal Cost Accrual Rate:	
COLA Loss	0.3533%
Liability Experience	0.0334%
Factors Decreasing the Normal Cost Accrual Rate:	
Asset Experience	-0.2198%
New Members	-0.2222%
Contribution Gain	-0.2959%
 Normal Cost Accrual Rate – Fiscal 2009	 6.1365%

In addition to the above factors, payroll growth affects plan costs to the extent that payments on the system's unfunded liability are on a schedule that varies from actual trends in payroll growth or decline. If payroll changes at rates not consistent with the amortization schedule, the result will be costs that change as a percentage of payroll. For fiscal 2009, the net effect of the change in payroll on amortization costs was a reduction of 0.10% of payroll for Plan B; there was no change for Plan A. Required net direct employer contributions are also affected by the available ad valorem taxes and revenue sharing funds which the system receives each year. When these funds change as a percentage of payroll, net direct employer contributions are adjusted accordingly. We estimate that these funds collected in fiscal 2009 will increase by 0.20% of payroll in Plan A and 0.22% of payroll in Plan B. Although the actuarially required net direct employer contribution rate for Plan A for fiscal 2009 is 10.25%, the actual employer contribution rate for fiscal 2009 is 13.50% of payroll. Since any employer contributions collected in excess of the minimum required contributions in fiscal 2009 will be dedicated to reducing the frozen unfunded accrued liability no adjustment for surplus contributions is necessary for determining the minimum required rate for fiscal 2010. Thus the minimum recommended rate for fiscal 2010 for Plan A is 10.25%. Although the actuarially

required net direct employer contribution rate in Plan B is 4.50%, the actual employer contribution rate for fiscal 2009 is 6.75% of payroll. As is the case in Plan A, any employer contributions collected in excess of the minimum required contributions in fiscal 2009 will be dedicated to reducing the frozen unfunded accrued liability; hence, no adjustment for surplus contributions is necessary for determining the minimum required rate for fiscal 2010. Thus the minimum recommended rate for fiscal 2010 for Plan B is 4.50%.

Notwithstanding the allowable decrease in the employer contribution rate for fiscal 2010 for Plan A, under provisions of R. S. 11:105, the board of trustees may elect to maintain the net direct employer contribution rate at the current level of 13.50% and allocate any additional funds collected to reduce the system's frozen unfunded actuarial accrued liability. Because of the current state of the capital markets we do not believe a meaningful estimate can be made of the surplus funds if any that will be collected should the board elect to freeze the current employer contribution rate. It is quite possible that even maintaining the current contribution rate will be insufficient to insure that the contributions collected in fiscal 2010 will exceed the actuarially required contributions which will be determined in the fiscal 2009 valuation. In view of the current investment environment the board should strongly consider setting employer contribution rates at the highest level permitted by the statutes. Given the current asset performance substantial future increases in required contributions appear likely. Likewise in Plan B, under provisions of R. S. 11:105, the board of trustees may elect to maintain the net direct employer contribution rate at the current level of 6.75% and allocate any additional funds collected to reduce the system's frozen unfunded actuarial accrued liability.

Recent capital market conditions have resulted in asset experience losses for the Fund that will likely significantly increase its cost structure. These market conditions may be temporary or may indicate that future return expectations should be reduced. In order to illustrate the impact of a reduction in return expectations, we have performed an alternative valuation at an assumed valuation interest rate of 7.5% with all other assumptions unchanged. Lowering the valuation interest rate by 0.50% would significantly increase required funding. The employer normal cost accrual rate would be increased by of 5.24% in Plan A and 2.73% in Plan B, although there would be a small offset resulting from lower amortization payments on the frozen unfunded accrued liability. The total employer actuarially required contribution would be increased by \$7,279,105 to \$22,828,551 for Plan A, and increased by \$1,435,868 to \$4,158,083 for Plan B. The actuarially required net direct employer contribution rate for fiscal 2009 would increase from 10.25% to 15.05% for Plan A, and increased from 4.50% to 6.88% for Plan B. We estimate that the contribution shortfall in fiscal 2009 would result in an increase of 0.20% for Plan A and an increase of 0.02% for Plan B to the normal cost accrual rate in fiscal 2010. Based on these numbers, lowering the valuation interest rate from 8% to 7.50%, with all other assumptions unchanged, in fiscal 2009 would result in a recommended minimum net direct employer contribution rate of 15.25% for Plan A and 7.00% for Plan B for fiscal 2010. Whether or not the system's valuation interest rate will ultimately need to be adjusted will depend on the actual performance and future long-term expectation for the capital markets in general.

Please note that the above results are only intended to serve as an illustration of the impact of a change in the valuation interest rate. Any actual change in the valuation interest rate should only be effected with a review of all other plan assumptions. The impact of such other changes in assumptions are not reflected in the above the results.

## COST OF LIVING INCREASES

During fiscal 2008 the actual cost of living (as measured by the US Department of Labor CPI-U) increased by 5.02%. Cost of living provisions for the system are detailed in R.S. 11:1761 and R.S. 11:246. The former statute allows the board to use interest earnings in excess of the normal requirements to grant annual cost of living increases of 2% of each retiree's original benefit. R.S. 11:246 provides cost of living increases of 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 30<sup>th</sup> of the initial year of such increase. The provisions of this subpart do not repeal provisions relative to cost of living adjustments contained within the individual laws governing systems; however, they are to be controlling in cases of conflict. All of the above provisions require that the system earn sufficient excess interest earnings to fund the increases. In addition, the ratio of the plan's assets to benefit obligations must meet the criteria established in R.S. 11:242. This section sets forth a minimum "target ratio" of the actuarial value of assets to the Pension Benefit Obligation. We have determined that for fiscal 2008, both plans meet the target ratio. In addition we have determined that Plan A has earned \$5,987,429 and Plan B has earned \$960,911 in excess interest for fiscal 2008.

Below is a summary of available cost of living increases and their respective costs.

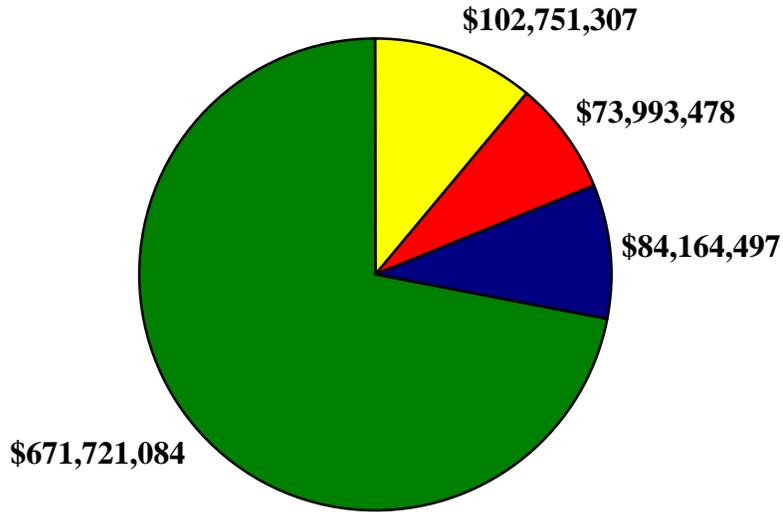
<u>COLA Description</u>	<u>Plan</u>	<u>Increase in Benefits</u>	<u>Present Value Of Increase</u>	<u>Contribution Cost</u>
2% to all allowable pensioners	A	\$ 638,470	\$ 5,560,765	0.53%
2% to pensioners over age 65	A	\$ 394,666	\$ 3,010,613	0.29%
2% to all allowable pensioners	B	\$ 112,534	\$ 928,897	0.21%
2% to pensioners over age 65	B	\$ 83,627	\$ 636,276	0.15%

Since there is insufficient excess interest to fund both of the above cost of living adjustments, the board may grant either one of the permissible cost of living adjustments or a portion of each such that the total present value of additional benefits is no more than \$5,987,429 in Plan A and \$960,911 in Plan B.

There is insufficient information available on the system's database to provide meaningful estimates of the costs associated with awarding the cost of living increase detailed in R.S. 11:241.

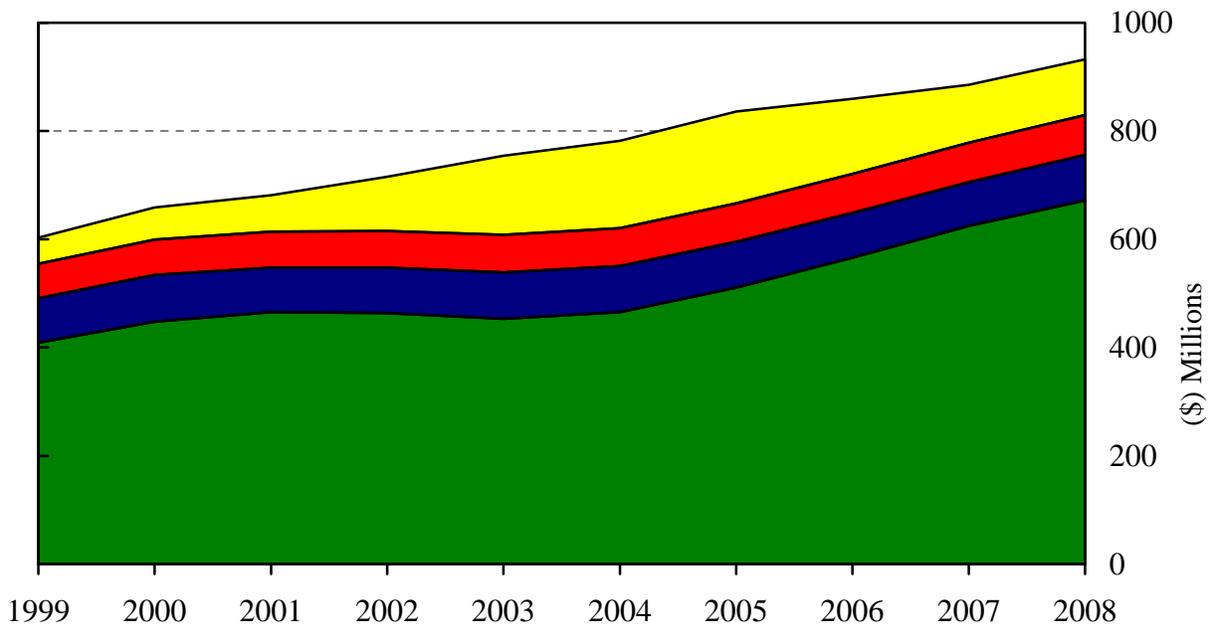
Act 113 of the 2008 Regular Session of the Louisiana Legislature provides for the payment of a cost of living increase of 3% of the current benefit with a minimum monthly increase of \$20 to all recipients who have been retired for a period of not less than one year. The increase in the present value of future benefits attributable to this increase is estimated to be \$9,695,834 for Plan A and \$1,892,866 for Plan B.

## Plan A - Components of Present Value of Future Benefits June 30, 2008



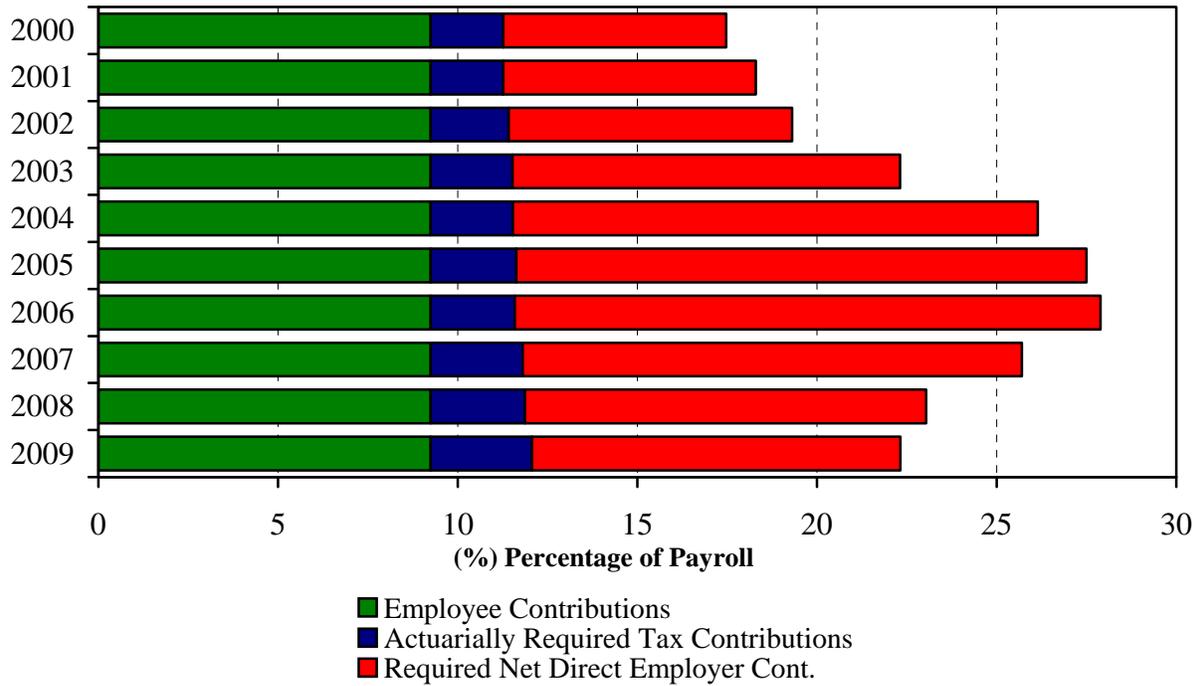
- Present Value of Future Employer Normal Cost
- Unfunded Accrued Liability
- Present Value of Future Employee Contributions
- Actuarial Value of Assets

## Plan A - Components of Present Value of Future Benefits

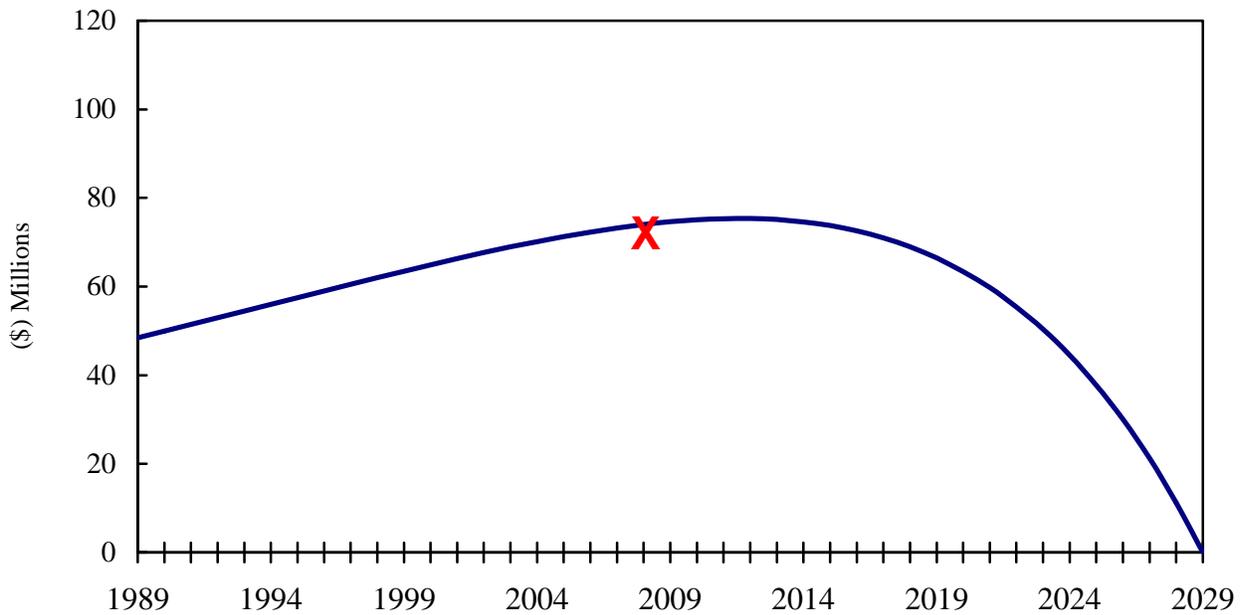


- Present Value of Future Employer Normal Cost
- Unfunded Accrued Liability
- Present Value of Future Employee Contributions
- Actuarial Value of Assets

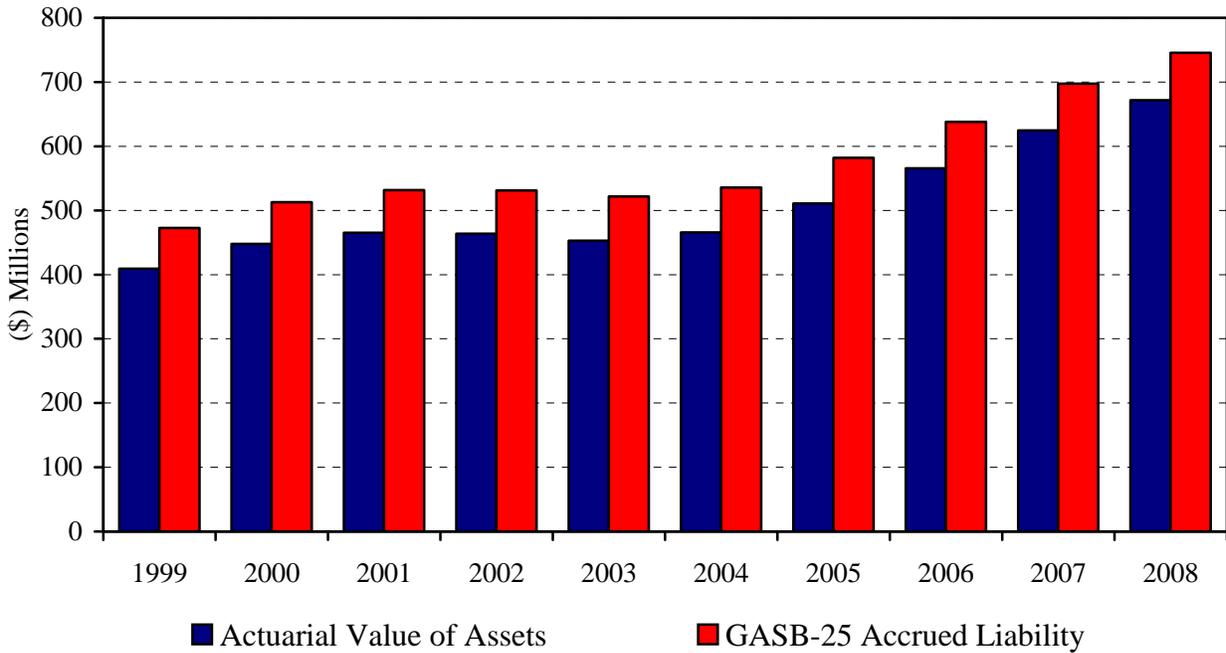
## Plan A - Components of Actuarial Funding



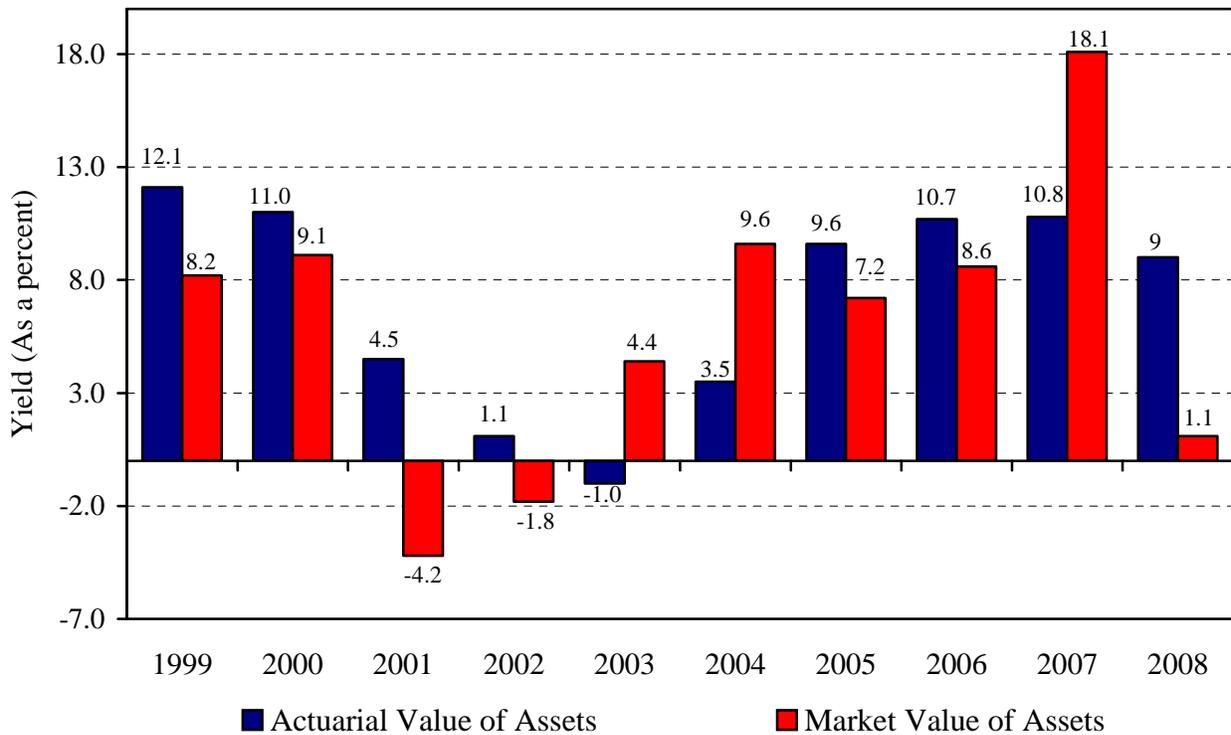
## Plan A – Frozen Unfunded Accrued Liability



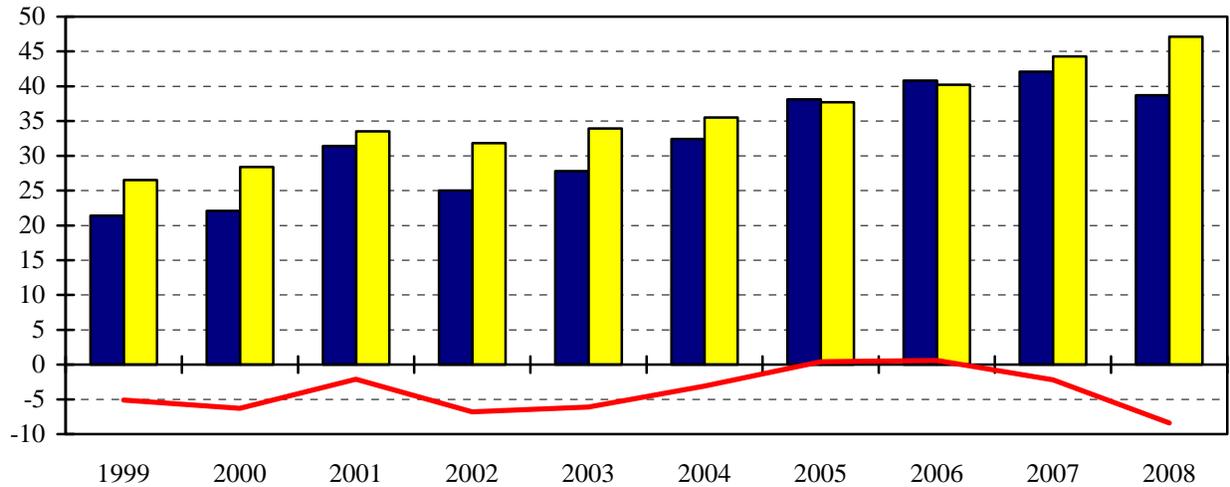
## Plan A Actuarial Value of Assets vs. GASB-25 Accrued Liability



## Plan A – Historical Asset Yield

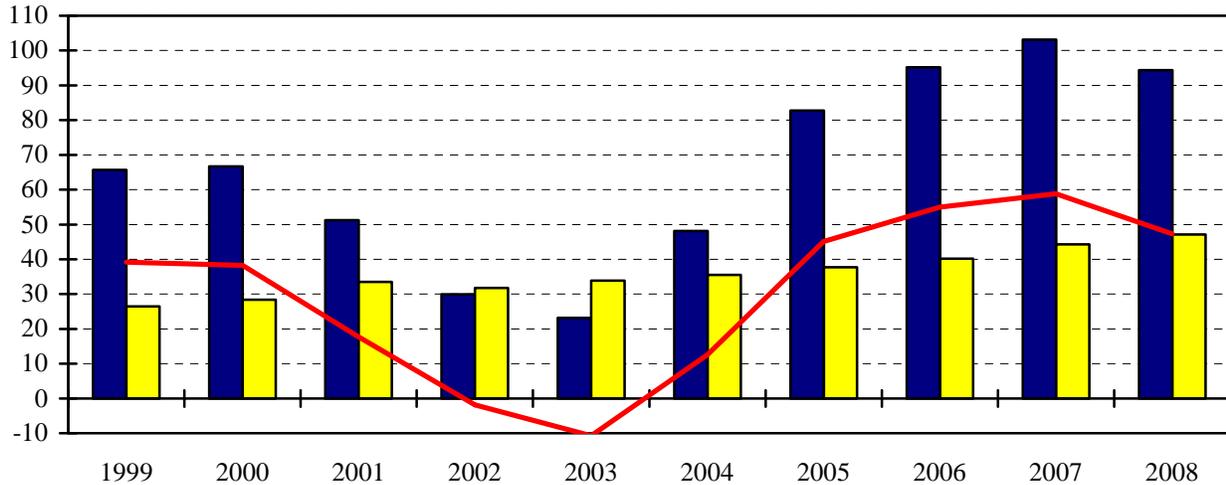


## Plan A - Net Non-Investment Income



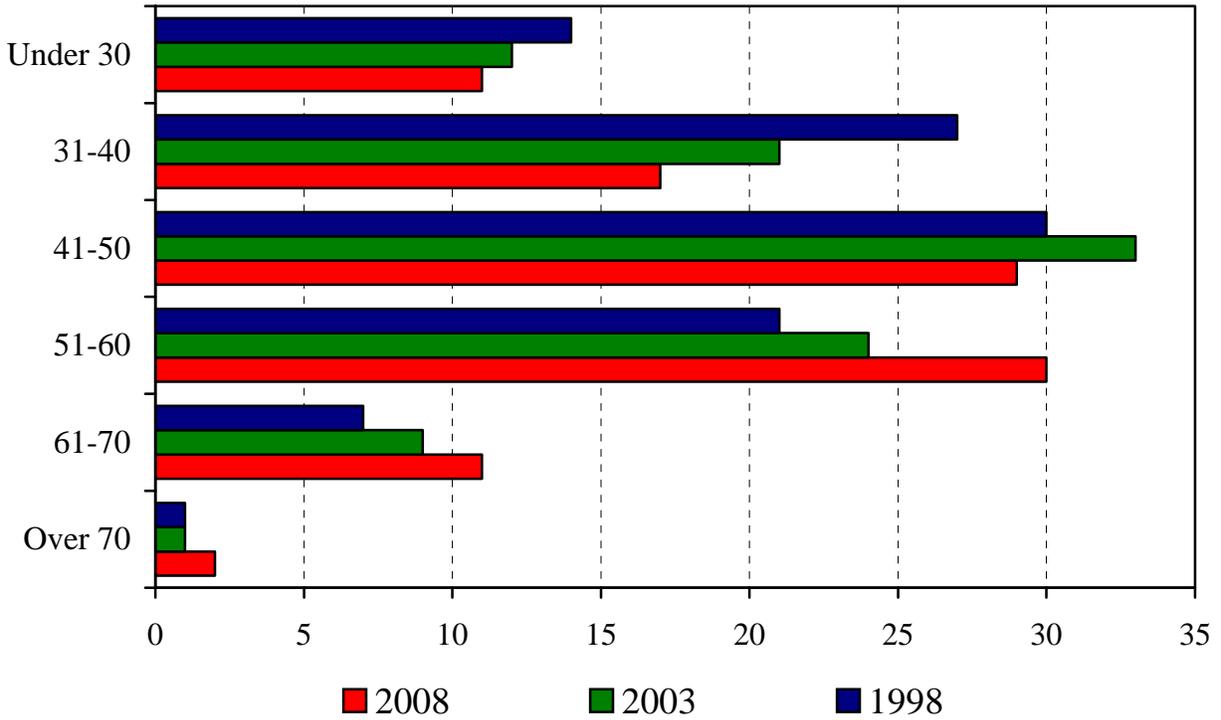
		1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Non-Investment Income (\$Mil)	<span style="color: blue;">■</span>	21.4	22.1	31.4	25.0	27.8	32.4	38.1	40.8	42.1	38.7
Benefits and Expenses (\$Mil)	<span style="color: yellow;">■</span>	26.5	28.4	33.5	31.8	33.9	35.5	37.7	40.2	44.3	47.1
Net Non-Investment Income (\$Mil)	<span style="color: red;">—</span>	-5.1	-6.3	-2.1	-6.8	-6.1	-3.1	0.4	0.6	-2.2	-8.4

## Plan A - Total Income vs. Expenses (Based on Actuarial Value of Assets)

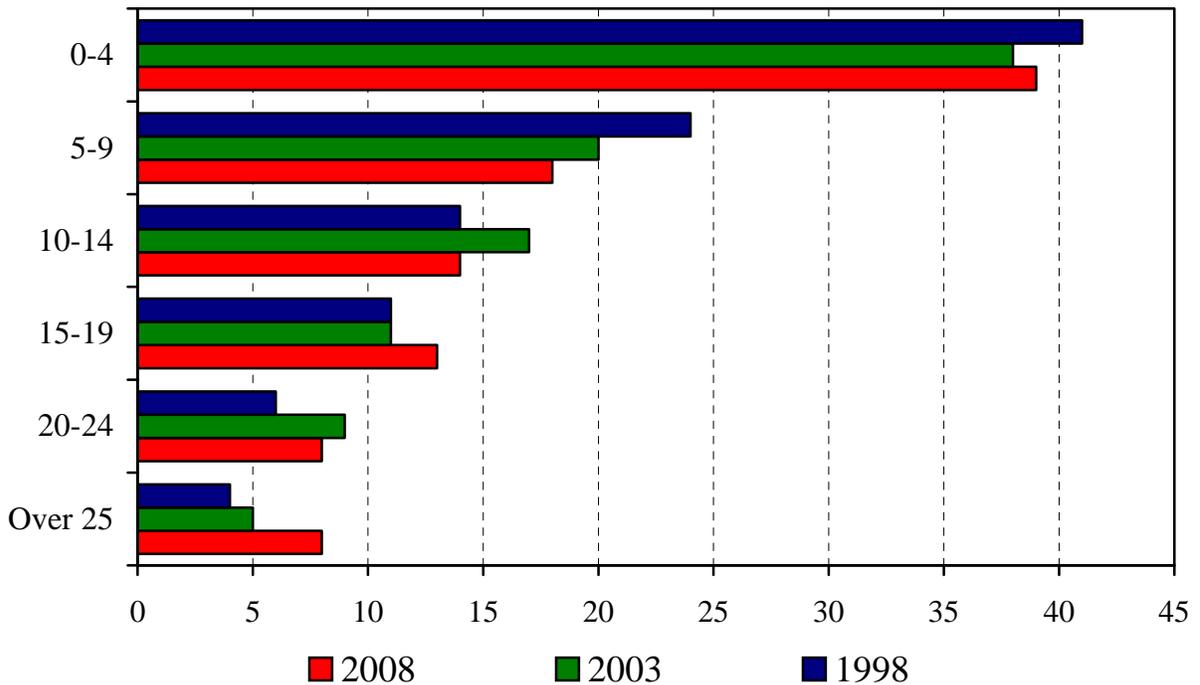


		1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Total Income (\$Mil)	<span style="color: blue;">■</span>	65.7	66.7	51.2	29.9	23.2	48.1	82.8	95.2	103.1	94.4
Benefits and Expenses (\$Mil)	<span style="color: yellow;">■</span>	26.5	28.4	33.5	31.8	33.9	35.5	37.7	40.2	44.3	47.1
Net Change in AVA (\$Mil)	<span style="color: red;">—</span>	39.2	38.3	17.7	-1.9	-10.7	12.6	45.1	55.0	58.8	47.3

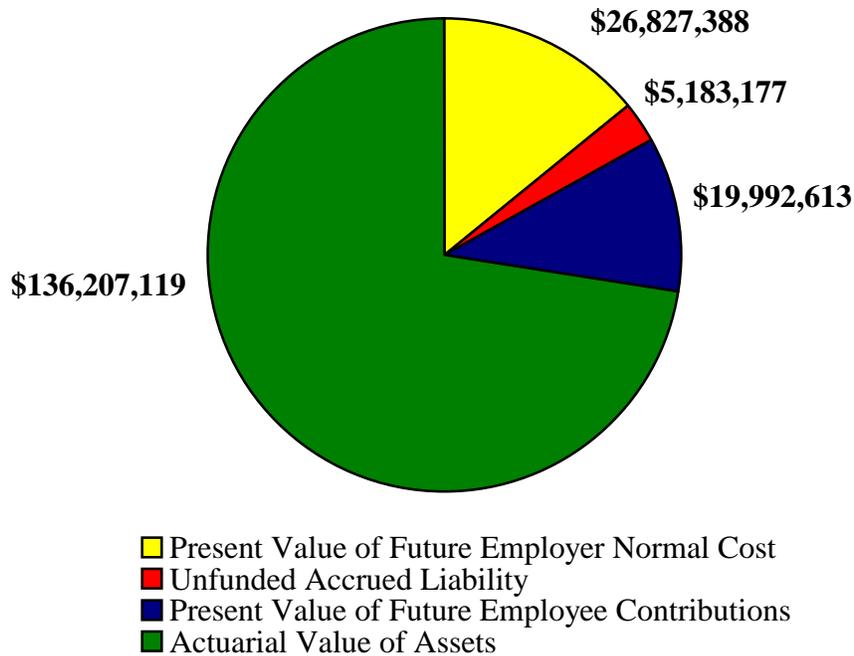
## Plan A - Active – Census By Age (as a percent)



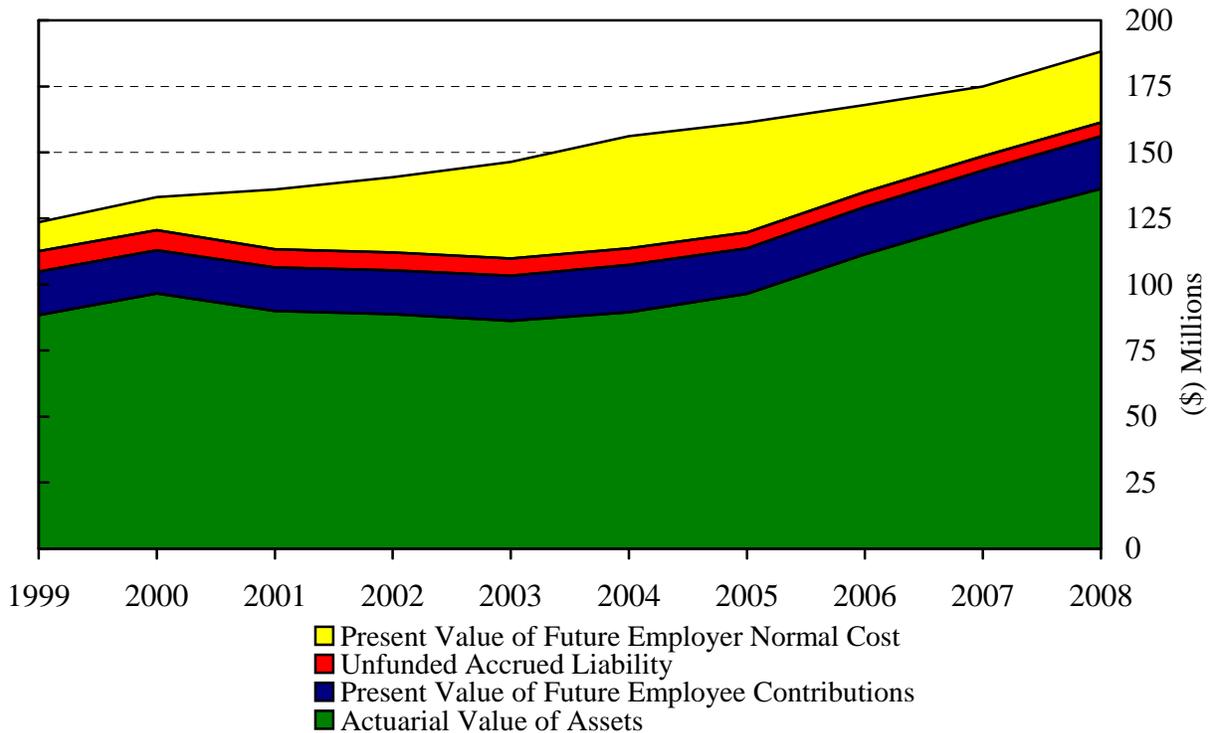
## Plan A - Active – Census By Service (as a percent)



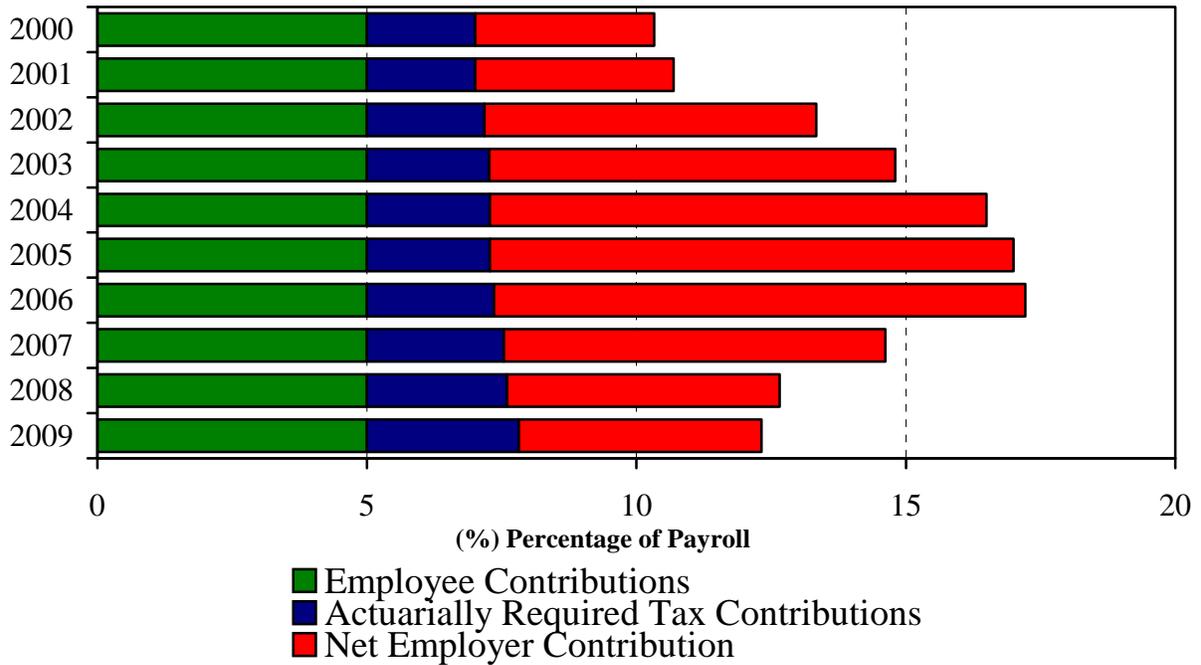
## Plan B - Components of Present Value of Future Benefits June 30, 2008



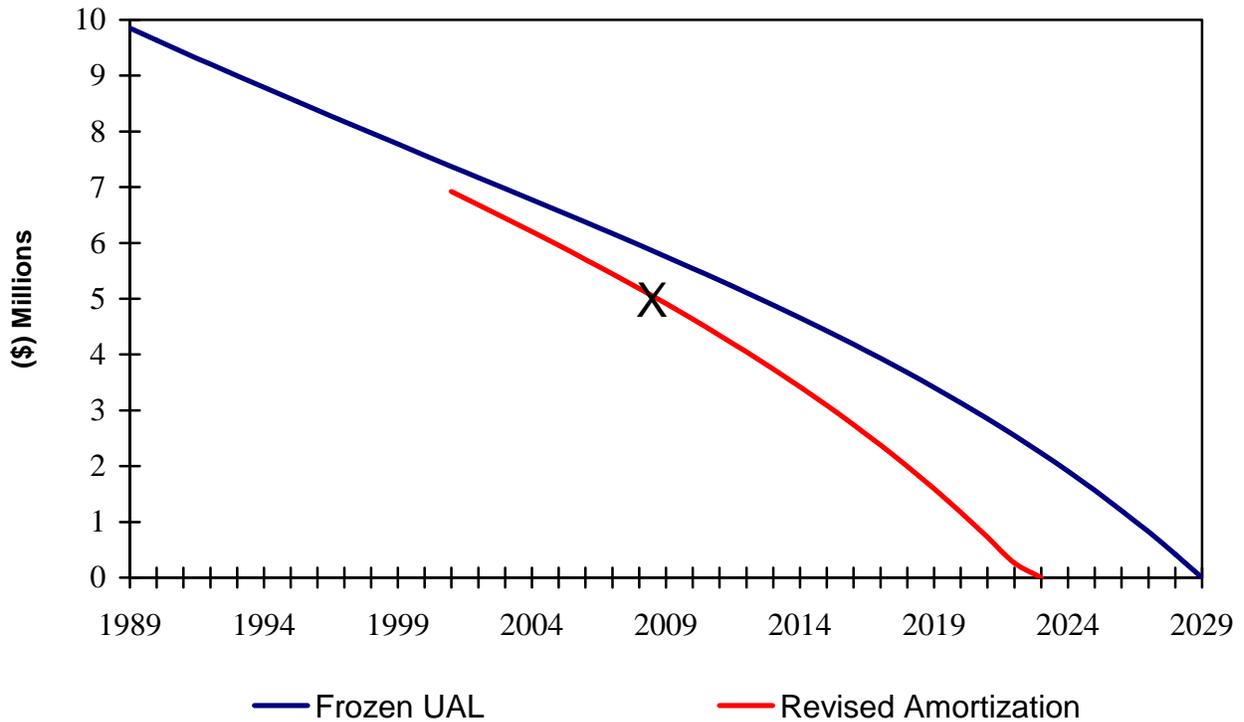
## Plan B - Components of Present Value of Future Benefits



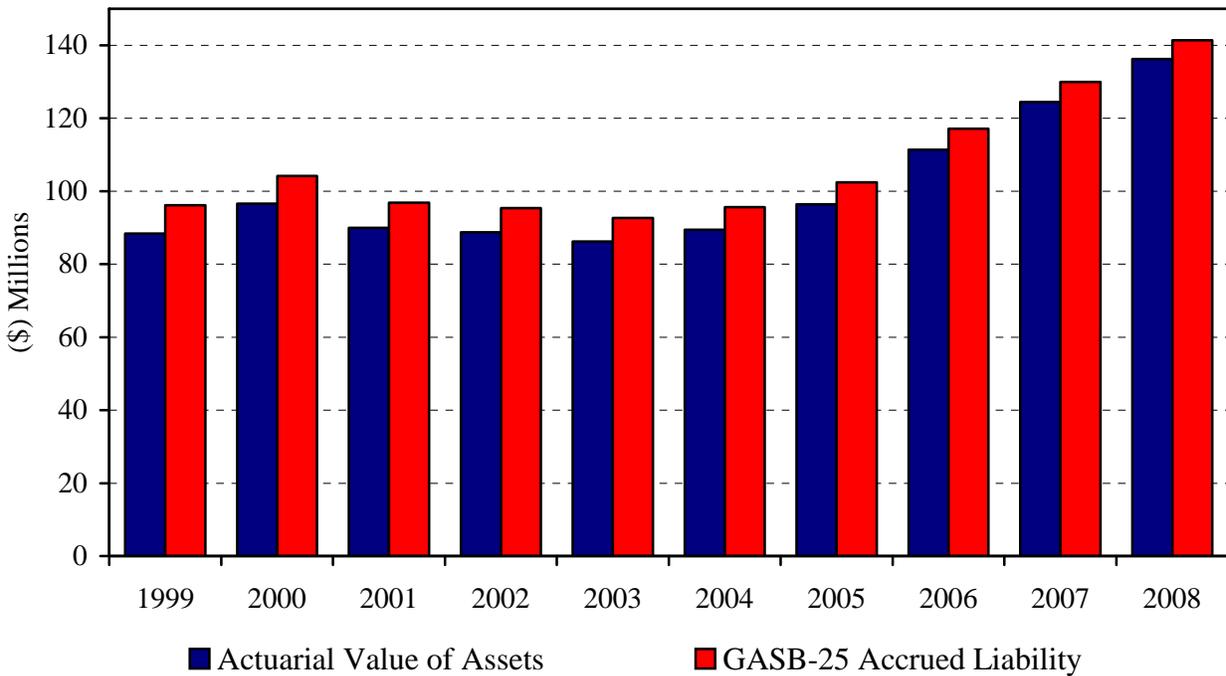
## Plan B - Components of Actuarial Funding



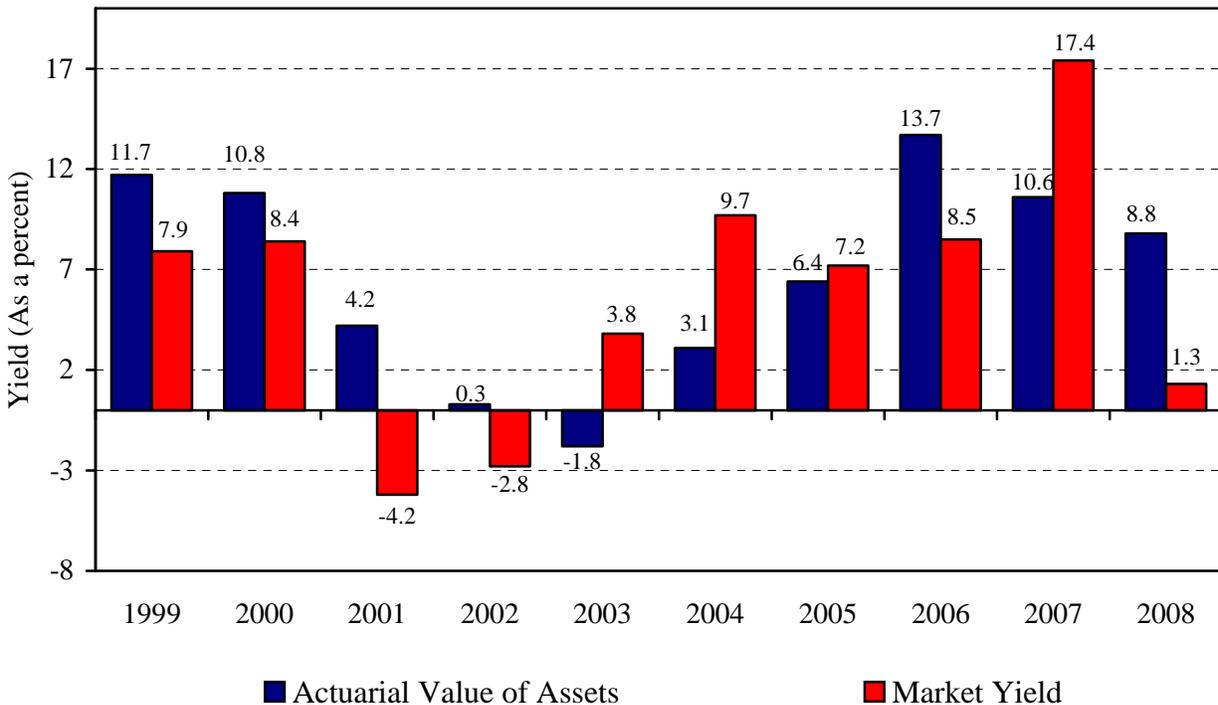
## Plan B – Frozen Unfunded Accrued Liability



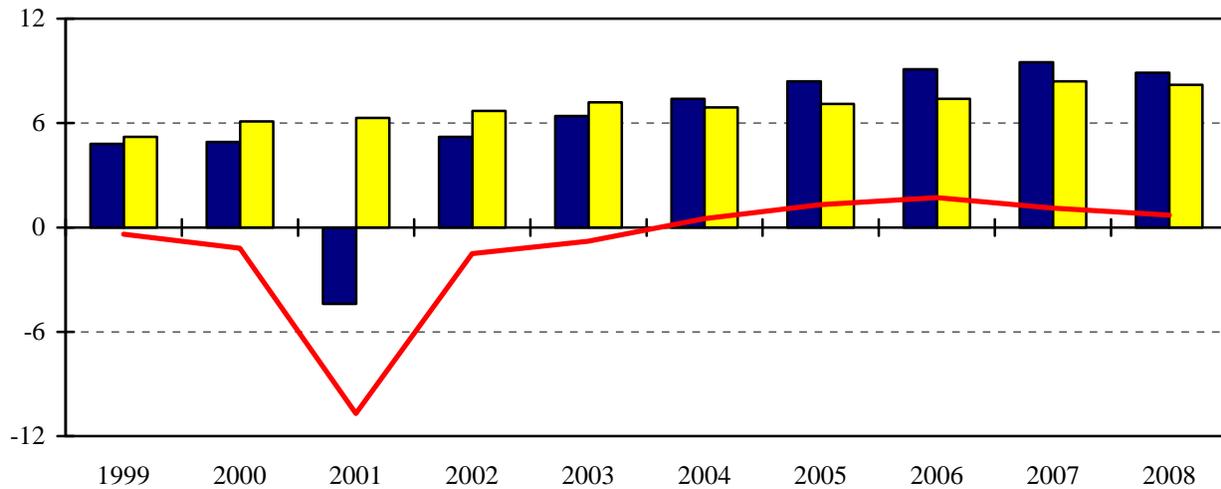
## Plan B Actuarial Value of Assets vs. GASB-25 Accrued Liability



## Plan B – Historical Asset Yield

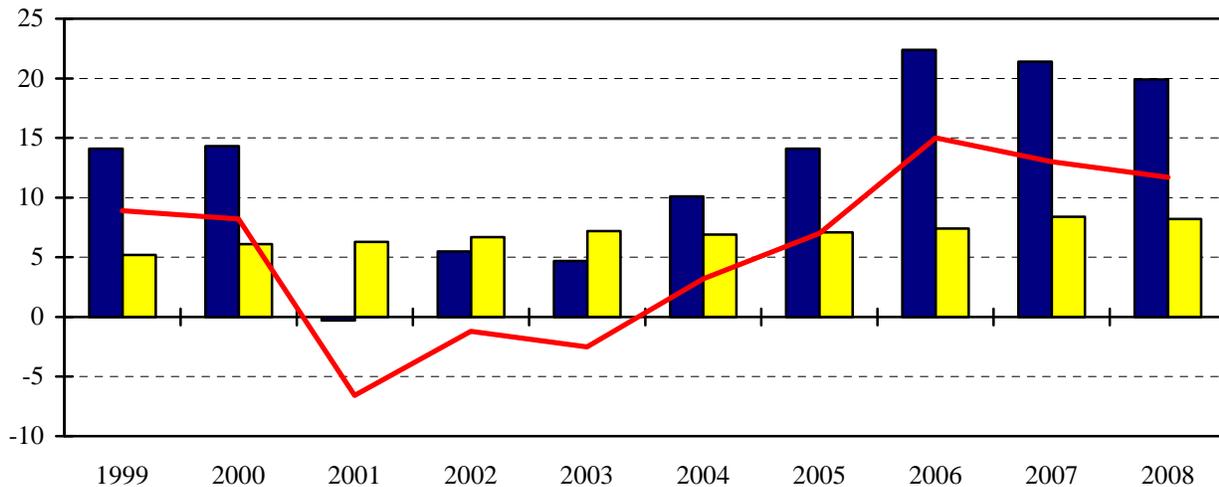


## Plan B - Net Non-Investment Income



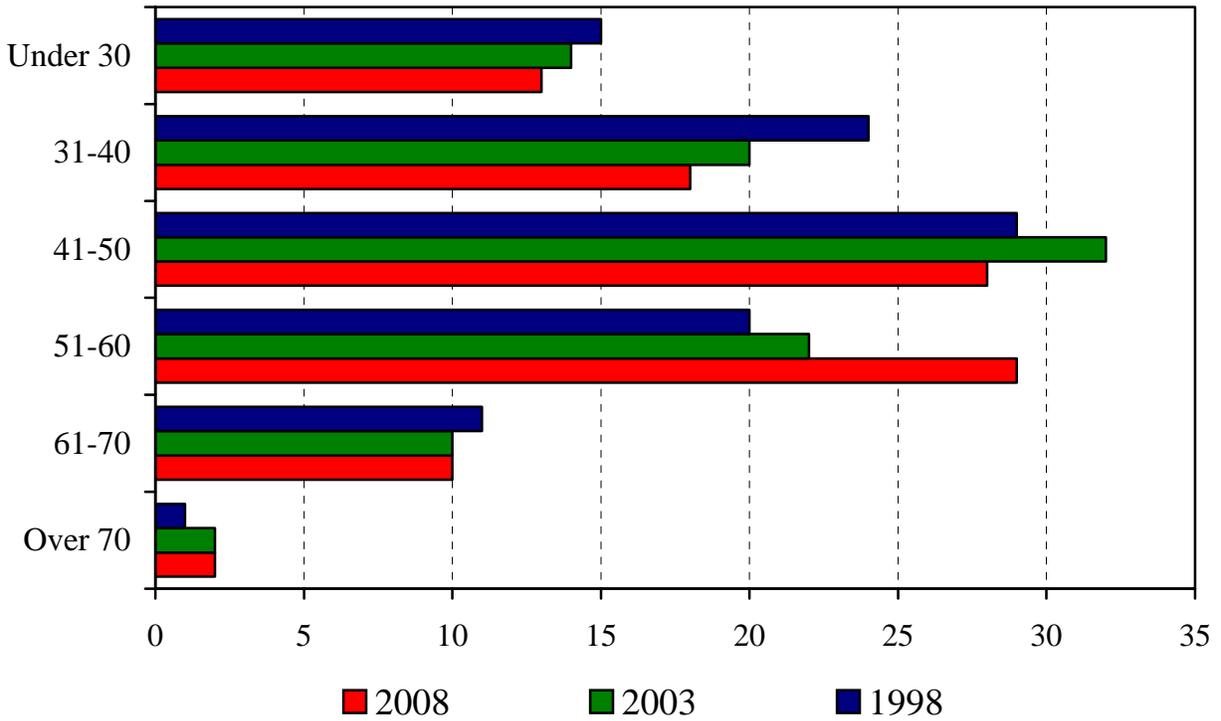
		1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Non-Investment Income (\$Mil)	<span style="color: blue;">■</span>	4.8	4.9	-4.4	5.2	6.4	7.4	8.4	9.1	9.5	8.9
Benefits and Expenses (\$Mil)	<span style="color: yellow;">■</span>	5.2	6.1	6.3	6.7	7.2	6.9	7.1	7.4	8.4	8.2
Net Non-Investment Income (\$Mil)	<span style="color: red;">—</span>	-0.4	-1.2	-10.7	-1.5	-0.8	0.5	1.3	1.7	1.1	0.7

## Plan B - Total Income vs. Expenses (Based on Actuarial Value of Assets)

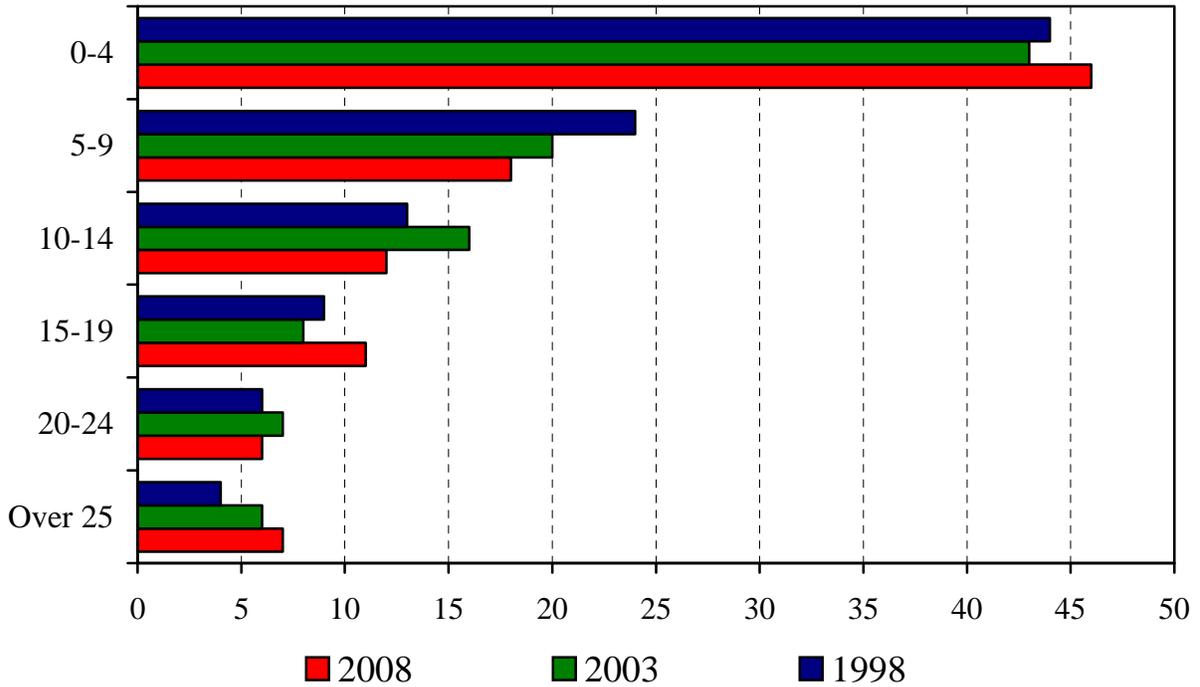


		1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Total Income (\$Mil)	<span style="color: blue;">■</span>	14.1	14.3	-0.3	5.5	4.7	10.1	14.1	22.4	21.4	19.9
Benefits and Expenses (\$Mil)	<span style="color: yellow;">■</span>	5.2	6.1	6.3	6.7	7.2	6.9	7.1	7.4	8.4	8.2
Net Change in AVA (\$Mil)	<span style="color: red;">—</span>	8.9	8.2	-6.6	-1.2	-2.5	3.2	7.0	15.0	13.0	11.7

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



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



## **EXHIBITS**

**EXHIBIT I**  
**PLAN A: ANALYSIS OF ACTUARIALLY REQUIRED CONTRIBUTIONS**

1. Present Value of Future Benefits.....	\$ 932,630,366
2. Frozen Unfunded Actuarial Accrued Liability .....	\$ 73,993,478
3. Actuarial Value of Assets .....	\$ 671,721,084
4. Present Value of Future Employee Contributions.....	\$ 84,164,497
5. Present Value of Future Employer Normal Costs (1-2-3-4).....	\$ 102,751,307
6. Present Value of Future Salaries .....	\$1,053,897,746
7. Employer Normal Cost Accrual Rate (5 ÷ 6) .....	9.749647%
8. Projected Fiscal 2009 Salary for Current Membership .....	\$ 138,411,817
9. Employer Normal Cost as of July 1, 2008 (7 x 8).....	\$ 13,494,664
10. Amortization Payment on Frozen Unfunded Accrued Liability of \$73,993,478 with Payments increasing at 4.25% per year.....	\$ 4,904,027
11. Total Employer Normal Cost & Amortization Payment (9 + 10).....	\$ 18,398,691
12. Employer Normal Cost and Amortization Payment Interest Adjusted for Midyear Payment.....	\$ 19,120,481
13. Estimated Administrative Cost for Fiscal 2009.....	\$ 705,489
14. Gross Employer Actuarially Required Contribution for Fiscal 2009 (12 + 13).....	\$ 19,825,970
15. Projected Tax Contributions for Fiscal 2009.....	\$ 4,157,935
16. Projected Revenue Sharing Funds for Fiscal 2009.....	\$ 118,589
17. Net Direct Employer Actuarially Required Contribution for Fiscal 2009 (14 - 15 - 16).....	\$ 15,549,446
18. Projected Payroll (July 1, 2008 through June 30, 2009) .....	\$ 151,675,123
19. Employers Minimum Net Direct Actuarially Required Contribution as a % of Projected Payroll for Fiscal 2009 (17 ÷ 18).....	10.25%
20. Minimum Recommended Net Direct Employer Contribution Rate for Fiscal 2010 (19 Rounded to nearest .25%) .....	10.25%

**EXHIBIT II**  
**PLAN A: PRESENT VALUE OF FUTURE BENEFITS**

Present Value of Future Benefits for Active Members:

Retirement Benefits .....	\$ 535,058,280
Survivor Benefits .....	15,801,751
Disability Benefits .....	9,339,770
Vested Deferred Termination Benefits .....	11,644,493
Contribution Refunds.....	16,099,957

TOTAL Present Value of Future Benefits for Active Members ..... \$ 587,944,251

Present Value of Future Benefits for Terminated Members:

Terminated Vested Members Due Benefits at Retirement..	\$ 11,417,263
Terminated Members with Reciprocals	
Due Benefits at Retirement .....	846,232
Terminated Members Due a Refund .....	2,093,234

TOTAL Present Value of Future Benefits for Terminated Members..... \$ 14,356,729

Present Value of Future Benefits for Retirees:

Regular Retirees .....	\$ 269,377,704
Disability Retirees .....	17,935,254
Survivors & Widows .....	39,094,170
Reserve for Accrued Retiree DROP Account Balances.....	3,922,258

TOTAL Present Value of Future Benefits for Retirees & Survivors ..... \$ 330,329,386

TOTAL Present Value of Future Benefits ..... \$ 932,630,366

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

Current Assets:

Cash .....	\$ 9,515,210
Contributions Receivable from Employers .....	1,435,055
Investment Receivable .....	181,737
Contributions Receivable from Members.....	922,823
Accrued Alternative Investments .....	4,186,388
Accrued Interest and Dividends on Investments .....	1,366,438
Due from Plan B .....	84,220
Other Receivables.....	29,948

TOTAL CURRENT ASSETS ..... \$ 17,721,819

Property Plant & Equipment ..... \$ 533,316

Investments:

Co-Mingled Funds.....	\$ 210,613,059
Mutual Fund – Equities .....	114,664,032
Common Stock .....	72,135,985
Limited Partnerships.....	72,088,466
Cash Equivalents .....	53,423,813
Mutual Fund – Fixed Income .....	51,788,879
Land Mitigation Banks .....	37,368,616
Limited Liability Companies.....	26,266,173
Corporate Bonds .....	18,282,396
Notes Receivable .....	10,488,898
Government Agency Securities .....	1,242,318

TOTAL INVESTMENTS..... \$ 668,362,635

TOTAL ASSETS ..... \$ 686,617,770

Current Liabilities:

Minority Interest in Land Mitigation Bank .....	17,433,245
Notes Payable .....	1,497,289
Due to Related Parties .....	445,832
Investment Payable.....	328,345
Refunds Payable .....	287,032
Accounts Payable .....	91,476

TOTAL CURRENT LIABILITIES..... \$ 20,083,219

MARKET VALUE OF ASSETS ..... \$ 666,534,551

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

Excess (Shortfall) of invested income  
for current and previous 3 years:

Fiscal year 2008 .....	\$ (45,633,930)
Fiscal year 2007 .....	56,997,359
Fiscal year 2006 .....	2,926,741
Fiscal year 2005 .....	<u>(3,945,256)</u>
 Total for four years .....	 \$ 10,344,914

Deferral of excess (shortfall) of invested income:

Fiscal year 2008 (75%) .....	\$ (34,225,447)
Fiscal year 2007 (50%) .....	28,498,679
Fiscal year 2006 (25%) .....	731,685
Fiscal year 2005 (0%) .....	<u>0</u>
 Total deferred for year .....	 \$ (4,995,083)

Market value of plan net assets, end of year ..... \$ 666,534,551

Allocated Share of the Expense Fund ..... \$ 191,450

Preliminary actuarial value of plan assets, end of year ..... \$ 671,721,084

Actuarial value of assets corridor

90% of market value, end of year .....	\$ 599,188,096
110% of market value, end of year .....	\$ 733,188,006

Final actuarial value of plan net assets, end of year..... \$ 671,721,084

**EXHIBIT IV**  
**PLAN A: PRESENT VALUE OF FUTURE CONTRIBUTIONS**

Employee Contributions to the Annuity Savings Fund.....	\$ 84,164,497
Employer Normal Contributions to the Pension Accumulation Fund .....	102,751,307
Employer Amortization Payments to the Pension Accumulation Fund.....	73,993,478
 TOTAL PRESENT VALUE OF FUTURE CONTRIBUTIONS .....	 \$260,909,282

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

Prior Year Frozen Unfunded Accrued Liability.....	\$ 73,216,582
Interest on Frozen Unfunded Accrued Liability .....	\$ 5,857,327
Employer Normal Cost for Prior Year .....	13,901,391
Interest on the Normal Cost .....	1,112,111
Administrative Expenses .....	679,462
Interest on Expenses.....	26,656
 TOTAL Increases to Frozen Unfunded Accrued Liability .....	 \$ 21,576,947
 Gross Regular Employer Contributions .....	 \$ 24,322,495
Interest on Employer Contributions .....	954,183
Contribution Shortfall (Excess).....	(4,307,637)
Interest on Contribution Shortfall (Excess).....	(168,990)
 TOTAL Decreases to Frozen Unfunded Accrued Liability .....	 \$ 20,800,051
 CURRENT YEAR FROZEN UNFUNDED ACCRUED LIABILITY .....	 \$ 73,993,478

**EXHIBIT VI**  
**PLAN A: ANALYSIS OF INCREASE IN ASSETS**

Actuarial Value of Assets (June 30, 2007).....	\$	624,442,059
Income:		
Member Contributions .....	\$	13,115,136
Employer Contributions.....		20,316,409
Ad Valorem Taxes .....		3,886,912
Revenue Sharing Funds .....		119,174
Irregular Contributions.....		1,188,663
Transfer of Funds from Plan B .....		119,074
Total Contribution Income .....	\$	38,745,368
Net Appreciation in Fair Value of Investments .....	\$	(334,864)
Interest and Dividend Income .....		5,845,852
Income from Alternative Investments.....		4,161,871
Securities Lending.....		244,744
Investment Income Allocated from Expense Fund.....		8,089
Allocated Share of Investment Expense.....		(2,530,109)
Net Investment Income .....	\$	7,395,583
TOTAL Income.....	\$	46,140,951
Expenses:		
Retirement Benefits.....	\$	36,375,584
Refund to Municipality .....		3,623,911
Funds Transferred to Another System .....		803,880
Refunds of Contributions .....		2,904,972
DROP Disbursements .....		2,680,202
Allocated Share of Administrative Expenses.....		679,462
TOTAL Expenses.....	\$	47,068,011
Net Market Income for Fiscal 2008 (Income - Expenses) .....	\$	(927,060)
Adjustment for Change in Allocated Expense Fund Balance .....	\$	(14,072)
Adjustment for Actuarial Smoothing .....	\$	48,220,157
Actuarial Value of Assets (June 30, 2008).....	\$	671,721,084

**EXHIBIT VII**  
**PLAN A: FUND BALANCE**

Present Assets of the System Creditable to:

Annuity Savings Fund.....	\$ 99,402,040
Annuity Reserve Fund.....	326,407,128
Pension Accumulation Fund .....	219,714,799
Deferred Retirement Option Plan Account .....	21,010,584
NET MARKET VALUE OF ASSETS .....	\$ 666,534,551
ADJUSTMENT FOR ACTUARIAL SMOOTHING.....	4,995,083
ALLOCATED SHARE OF THE EXPENSE FUND .....	191,450
ACTUARIAL VALUE OF ASSETS.....	\$ 671,721,084

**EXHIBIT VIII**  
**PLAN A: PENSION BENEFIT OBLIGATION**

Present Value of Credited Projected Benefits Payable to Current Employees ...	\$ 407,844,555
Present Value of Benefits Payable to Terminated Employees .....	14,356,729
Present Value of Benefits Payable to Current Retirees and Beneficiaries .....	330,329,386
TOTAL PENSION BENEFIT OBLIGATION .....	752,530,670
TOTAL ACTUARIAL VALUE OF ASSETS .....	671,721,084
Ratio of Net Actuarial Value of Assets to Pension Benefit Obligation .....	89.26%

**EXHIBIT IX**  
**PLAN A: COST OF LIVING ADJUSTMENTS - TARGET RATIO**

1. Actuarial Value of Assets Divided by PBO as of Fiscal 1986:.....	65.05%
2. Amortization of Unfunded Balance over 30 years:.....	25.63%

Adjustments in Funded Ratio Due to Changes in Assumption(s):

Changes for Fiscal 1988.....	4.97%
Changes for Fiscal 1989.....	(1.98%)
Changes for Fiscal 1995.....	(1.38%)
Changes for Fiscal 1997.....	(3.44%)
Changes for Fiscal 1998.....	(3.63%)
Changes for Fiscal 2000.....	(1.35%)
Changes for Fiscal 2003.....	0.89%
Changes for Fiscal 2005.....	0.02%
Changes for Fiscal 2006.....	2.66%

3. TOTAL Adjustments .....	(3.24%)
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Amortization of Adjustments in Funded Ratio over 30 years:

Changes for Fiscal 1988.....	(3.31%)
Changes for Fiscal 1989.....	1.25%
Changes for Fiscal 1995.....	0.60%
Changes for Fiscal 1997.....	1.26%
Changes for Fiscal 1998.....	1.21%
Changes for Fiscal 2000.....	0.36%
Changes for Fiscal 2003.....	(0.15%)
Changes for Fiscal 2005.....	(0.00%)
Changes for Fiscal 2006.....	(0.18%)

4. TOTAL Amortization of Adjustments .....	1.04%
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5. Target Ratio for Current Fiscal Year (Lesser of 1+2+3+4 or 100%).....	88.48%
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6. Actuarial Value of Assets Divided by PBO as of June 30, 2008.....	89.26%
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**EXHIBIT X**  
**PLAN A: CENSUS DATA**

	<b>Active</b>	<b>Terminated with Funds on Deposit</b>	<b>DROP</b>	<b>Retired</b>	<b>Total</b>
Number of members as of June 30, 2007	4,720	2,762	245	2,721	10,448
Additions to Census					
Initial membership	716	89			805
Death of another member	(10)	(1)		11	
Omitted in error last year		1			1
Transferred from Plan B			1		1
Change in Status during Year					
Actives terminating service	(188)	188			
Actives who retired	(81)			81	
Actives entering DROP	(74)		74		
Term. members rehired	11	(11)			
Term. members who retire		(19)		19	
Retirees who are rehired					
Refunded who are rehired	13	37			50
DROP participants retiring			(40)	40	
DROP returned to work	41		(41)		
Suspended Benefit Reinstated				7	7
Eliminated from Census					
Refund of contributions	(344)	(298)			(642)
Deaths	(12)	(3)	(1)	(85)	(101)
Included in error last year					
Adjustment for multiple records					
Number of members as of June 30, 2008	4,792	2,745	238	2,794	10,569

PLAN A ACTIVES CENSUS BY AGE:

Age	Number Male	Number Female	Total Number	Average Salary	Total Salary
16 - 20	31	6	37	16,620	614,952
21 - 25	176	56	232	19,055	4,420,691
26 - 30	201	102	303	22,659	6,865,607
31 - 35	249	155	404	25,861	10,447,775
36 - 40	297	167	464	28,714	13,323,189
41 - 45	436	218	654	29,201	19,097,642
46 - 50	516	303	819	31,562	25,849,289
51 - 55	582	261	843	32,453	27,358,074
56 - 60	416	219	635	33,107	21,023,040
61 - 65	282	106	388	31,998	12,415,091
66 - 70	122	46	168	29,533	4,961,610
71 - 75	36	17	53	27,965	1,482,161
76 - 80	20	5	25	27,269	681,726
81 - 85	4	1	5	20,733	103,665
TOTAL	3,368	1,662	5,030	29,552	148,644,512

THE ACTIVE CENSUS INCLUDES 2,193 ACTIVES WITH VESTED BENEFITS, INCLUDING 238 DROP PARTICIPANTS AND 158 ACTIVE FORMER DROP PARTICIPANTS.

PLAN A - TERMINATED MEMBERS DUE A DEFERRED RETIREMENT BENEFIT:

Age	Number Male	Number Female	Total Number	Average Benefit	Total Benefit
31 - 35	3	1	4	9,933	39,733
36 - 40	4	2	6	14,926	89,553
41 - 45	12	18	30	12,611	378,339
46 - 50	24	14	38	11,262	427,951
51 - 55	32	15	47	14,866	698,704
56 - 60	29	13	42	13,860	582,108
61 - 65	6	5	11	4,926	54,190
66 - 70	5	1	6	8,860	53,157
TOTAL	115	69	184	12,629	2,323,735

PLAN A - TERMINATED MEMBERS DUE A REFUND OF CONTRIBUTIONS:

Contributions Ranging		Number	Total Contributions
From	To		
0	99	1,844	103,956
100	499	333	79,074
500	999	100	69,107
1000	1999	91	132,462
2000	4999	86	283,116
5000	9999	47	335,438
10000	19999	47	648,405
20000	99999	13	359,496
TOTAL		2,561	2,011,054

PLAN A - REGULAR RETIREES:

Age	Number Male	Number Female	Total Number	Average Benefit	Total Benefit
36 - 40	0	1	1	11,503	11,503
41 - 45	1	2	3	15,884	47,652
46 - 50	42	23	65	19,714	1,281,396
51 - 55	95	33	128	22,832	2,922,466
56 - 60	106	49	155	22,111	3,427,205
61 - 65	213	77	290	17,241	4,999,764
66 - 70	307	97	404	15,261	6,165,485
71 - 75	266	82	348	14,661	5,101,982
76 - 80	204	60	264	12,487	3,296,444
81 - 85	133	52	185	11,484	2,124,524
86 - 90	63	30	93	10,707	995,772
91 - 99	22	9	31	7,151	221,695
TOTAL	1,452	515	1,967	15,555	30,595,888

PLAN A - DISABILITY RETIREES:

Age	Number Male	Number Female	Total Number	Average Benefit	Total Benefit
31 - 35	0	1	1	11,086	11,086
36 - 40	4	0	4	9,086	36,342
41 - 45	7	1	8	13,391	107,129
46 - 50	16	3	19	11,434	217,248
51 - 55	33	10	43	11,008	473,360
56 - 60	34	10	44	11,509	506,395
61 - 65	28	7	35	8,769	306,914
66 - 70	14	4	18	8,565	154,170
71 - 75	9	2	11	8,320	91,520
76 - 80	6	3	9	5,251	47,263
81 - 85	3	0	3	4,998	14,993
TOTAL	154	41	195	10,084	1,966,420

PLAN A - SURVIVORS:

Age	Number Male	Number Female	Total Number	Average Benefit	Total Benefit
0 - 25	2	5	7	4,033	28,231
31 - 35	2	1	3	4,654	13,963
36 - 40	0	3	3	6,892	20,676
41 - 45	7	12	19	4,981	94,637
46 - 50	2	15	17	8,144	138,452
51 - 55	4	33	37	7,627	282,205
56 - 60	1	34	35	7,768	271,875
61 - 65	4	53	57	9,802	558,718
66 - 70	8	86	94	9,646	906,703
71 - 75	2	86	88	7,954	699,977
76 - 80	2	113	115	9,133	1,050,351
81 - 85	5	71	76	7,681	583,773
86 - 90	2	49	51	6,417	327,283
91 - 99	0	30	30	3,706	111,183
TOTAL	41	591	632	8,051	5,088,027

PLAN A - ACTIVE MEMBERS:

Attained Ages	Completed Years of Service											Total			
	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30&Over				
0 - 20	31	5	1												37
21 - 25	132	51	22	14	12	1									232
26 - 30	105	47	41	27	13	69	1								303
31 - 35	90	71	48	17	22	99	56	1							404
36 - 40	70	43	39	28	15	88	99	80	2						464
41 - 45	86	61	43	28	19	115	102	124	65	11					654
46 - 50	65	66	37	38	37	129	115	121	108	98	5				819
51 - 55	72	49	51	32	22	141	132	125	89	88	42				843
56 - 60	56	40	19	34	16	105	88	100	83	58	36				635
61 - 65	21	22	18	13	17	89	66	59	42	24	17				388
66 - 70	5	9	7	11	3	30	25	34	16	14	14				168
71 & Over	1	3	4	1	2	19	17	14	13	3	6				83
Totals	734	467	330	243	178	885	701	658	418	296	120				5030

PLAN A - AVERAGE ANNUAL SALARY OF ACTIVE MEMBERS:

Attained Ages	Completed Years of Service											Average Salary			
	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30&Over				
0 - 20	16,031	18,908	23,467												16,620
21 - 25	16,895	20,321	23,213	25,606	21,640	25,360									19,055
26 - 30	19,261	22,796	21,111	24,751	26,709	26,901	34,511								22,659
31 - 35	20,905	25,953	22,267	25,734	24,924	29,932	29,802	36,924							25,861
36 - 40	19,364	27,045	24,599	26,681	26,551	28,589	33,420	35,192	30,165						28,714
41 - 45	18,915	23,030	25,354	27,036	28,165	27,304	30,511	36,318	38,808	36,886					29,201
46 - 50	19,568	24,878	21,693	27,696	25,516	30,951	30,431	33,302	40,971	40,818	37,904				31,562
51 - 55	22,669	22,947	24,138	34,414	26,838	28,764	30,854	34,525	41,199	41,796	44,999				32,453
56 - 60	22,477	27,752	27,763	27,799	34,523	28,882	29,744	37,818	38,471	40,754	45,571				33,107
61 - 65	20,572	33,927	30,725	26,452	25,506	33,467	29,613	30,454	34,264	39,947	45,800				31,998
66 - 70	19,330	29,795	31,076	31,178	27,049	29,049	27,146	25,441	34,381	34,047	36,664				29,533
71 & Over	24,914	17,416	14,488	24,833	24,707	28,614	23,327	28,200	29,880	47,262	32,156				27,320
Average	19,522	24,745	23,963	27,896	26,627	29,351	30,447	34,254	38,864	40,624	43,374				29,552

PLAN A - TERMINATED MEMBERS DUE A DEFERRED RETIREMENT BENEFIT:

Attained Ages	Years Until Retirement Eligibility											Total
	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30&Over	
0 - 30												0
31 - 35											4	4
36 - 40									6			6
41 - 45							30					30
46 - 50							1					38
51 - 55						47						47
56 - 60	10	7	8	6	9	2						42
61 - 65	9					2						11
66 - 70	6											6
71 & Over												0
Totals	25	7	8	6	9	51	37	31	6	4	0	184

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

Attained Ages	Years Until Retirement Eligibility											Average Benefit
	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30&Over	
0 - 30												0
31 - 35										9,933		9,933
36 - 40									14,925			14,925
41 - 45								12,611				12,611
46 - 50							11,387	6,624				11,262
51 - 55						14,866						14,866
56 - 60	11,933	11,124	19,368	10,943	15,484	12,472						13,860
61 - 65	4,706					5,919						4,926
66 - 70	8,860											8,860
71 & Over												0
Average	8,594	11,124	19,368	10,943	15,484	14,421	11,387	12,418	14,925	9,933	0	12,629

PLAN A - SERVICE RETIREES:

Attained Ages	Completed Years Since Retirement											Total			
	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30&Over				
0 - 50	25	14	10	8	2	10									69
51 - 55	24	26	21	18	14	25									128
56 - 60	21	22	20	15	15	58	2	1	1						155
61 - 65	35	71	31	44	29	63	15	2							290
66 - 70	21	32	29	28	37	170	55	26	4	2					404
71 - 75	3	9	11	14	20	101	115	48	25	2					348
76 - 80	1	7	2	5	3	37	75	93	32	8	1				264
81 - 85		2	3	4	2	12	17	63	64	18					185
86 - 90		2		1		5	2	16	36	26	5				93
91 & Over						2	1	4	6	10	8				31
Totals	130	185	127	137	122	483	282	253	168	66	14				1967

PLAN A - AVERAGE ANNUAL BENEFITS PAYABLE TO SERVICE RETIREES:

Attained Ages	Completed Years Since Retirement											Average Benefit			
	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30&Over				
0 - 50	21,112	21,082	20,535	16,051	23,505	13,682									19,428
51 - 55	25,597	22,386	23,331	21,465	25,104	19,934									22,832
56 - 60	19,280	22,772	21,199	23,945	28,535	21,440	27,252	7,243	4,904						22,111
61 - 65	15,825	14,787	17,491	16,547	15,531	20,746	22,416	16,041							17,241
66 - 70	11,209	15,261	14,257	10,432	14,719	14,014	21,519	21,702	11,025	8,671					15,261
71 - 75	11,094	11,582	14,477	13,383	12,670	11,043	14,358	20,470	23,746	10,831					14,661
76 - 80	11,793	7,100	7,560	7,695	22,087	10,297	11,771	12,096	17,573	18,458	16,364				12,487
81 - 85		6,527	21,852	11,428	10,384	8,298	11,259	11,546	11,330	13,108					11,484
86 - 90		7,089		3,147		14,595	8,788	12,411	9,388	11,596	9,971				10,707
91 & Over						14,160	1,520	13,001	7,673	5,950	4,289				7,151
Average	18,318	16,743	18,227	15,831	17,721	15,042	15,315	14,581	13,774	11,873	7,181				15,555

PLAN A - DISABILITY 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 - 30												0
31 - 35			1									1
36 - 40		2										4
41 - 45	2	1	1			1	2	1				8
46 - 50	1	3	2		1	6	5	1				19
51 - 55	3	3	3	5	2	13	11	3				43
56 - 60	3	3	4	2	1	11	10	8	2			44
61 - 65		1	2	2	1	15	6	4		4		35
66 - 70	1				1	2	5	7		1	1	18
71 - 75	1				1	1	4	1	1	2		11
76 - 80					1	1	2	4		1	1	9
81 - 85			1		1						1	3
86 & Over												0
Totals	11	13	14	9	8	50	46	30	3	8	3	195

PLAN A - AVERAGE ANNUAL BENEFITS PAYABLE TO DISABILITY 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 - 30												0
31 - 35			11,086									11,086
36 - 40		7,840				8,373	12,290					9,085
41 - 45	21,471	12,688	13,142			14,447	7,930	8,051				13,391
46 - 50	16,379	17,674	12,698		19,761	8,623	8,948	6,215				11,434
51 - 55	15,721	12,315	17,569	11,959	7,726	9,999	9,064	10,535				11,008
56 - 60	9,592	7,859	19,713	6,803	17,782	10,954	13,613	9,122	7,098			11,509
61 - 65		4,128	4,570	6,641	9,942	8,994	11,257	10,889		6,103		8,769
66 - 70	5,321				5,109	7,384	9,001	9,874		9,042	5,804	8,565
71 - 75	8,014				9,486	4,808	6,148	16,244	9,300	9,539		8,320
76 - 80					4,163		4,749	4,519		10,136	5,368	5,251
81 - 85			4,517					4,135			6,340	4,998
86 & Over												0
Average	13,509	11,234	13,917	9,631	10,212	9,591	9,899	8,999	7,832	7,833	5,844	10,084

PLAN A - SURVIVING BENEFICIARIES OF FORMER MEMBERS:

Completed Years Since Retirement

Attained Ages	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30&Over	Total
0 - 20	1					5	1					7
21 - 25												0
26 - 30												0
31 - 35					1	1	1					3
36 - 40						3						3
41 - 45			1	1	2	2	4	1	2	6		19
46 - 50	2	1	3	2	2	6	2	4	1			17
51 - 55		1	1	2	3	9	11	7	4			37
56 - 60	3	1	1	1	3	7	11	5	4			35
61 - 65	2	1	2	4	3	12	17	11	5			57
66 - 70	2	1	4	2	3	19	21	21	16	4	1	94
71 - 75	2	1	2	2	1	12	20	25	15	6	4	88
76 - 80						6	17	36	37	13	6	115
81 - 85						4	3	13	21	23	12	76
86 - 90				1				5	10	21	14	51
91 & Over		1							2	7	20	30
Totals	12	6	10	14	14	86	108	128	117	80	57	632

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

Completed Years Since Retirement

Attained Ages	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30&Over	Average Benefit
0 - 20	5,620					3,707	4,078					4,033
21 - 25												0
26 - 30												0
31 - 35						1,846	7,164					4,654
36 - 40					4,953	6,892						6,892
41 - 45			8,296	4,010	4,234	14,334	5,643	9,613	3,325	1,060		4,981
46 - 50	7,339	4,021	9,016	18,891	10,724	13,438	4,614	5,013				8,144
51 - 55		1,051	7,963	7,122	7,963	7,122	5,023	7,789				7,627
56 - 60	5,242	1,905	20,838	20,838	5,954	8,297	4,549	3,840				7,768
61 - 65	7,096	15,976	8,347	21,470	10,921	9,925	6,631	4,207				9,802
66 - 70	10,620	12,638	8,368	17,889	13,258	11,936	9,977	9,559	6,112	4,545	10,774	9,646
71 - 75	6,951	13,077	8,247	2,882	13,212	8,247	8,524	8,799	8,953	8,799	3,483	7,954
76 - 80						8,153	8,540	9,900	10,615	7,053	2,566	9,133
81 - 85						9,527	6,763	10,464	7,816	8,317	2,827	7,681
86 - 90				12,085				9,890	6,122	7,138	3,902	6,417
91 & Over					4,361				8,132	5,225	2,699	3,706
Average	7,113	8,111	8,551	14,800	8,633	9,439	8,694	8,708	8,083	6,835	3,204	8,051

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

	Fiscal 2008	Fiscal 2007	Fiscal 2006	Fiscal 2005
Number of Active Members	5,030	4,965	5,109	5,289
Number of Retirees and Survivors	2,794	2,721	2,588	2,512
Number Terminated Due Deferred Benefits	184	209	179	186
Number Terminated Due Refund	2,561	2,553	2,148	2,263
Active Lives Payroll	\$ 148,644,512	\$ 141,232,448	\$ 140,773,796	\$ 140,020,164
Retiree Benefits in Payment	\$ 37,650,335	\$ 34,978,923	\$ 32,315,373	\$ 30,555,460
Market Value of Assets	\$ 666,534,551	\$ 667,345,480	\$ 567,015,013	\$ 521,411,279
Ratio of Actuarial Value of Assets to Actuarial Accrued Liability	90.08%	89.51%	88.67%	87.75%
Actuarial Accrued Liability (As defined by GASB- 25)	\$ 745,714,562	\$ 697,658,641	\$ 637,909,978	\$ 581,801,281
Actuarial Value of Assets	\$ 671,721,084	\$ 624,442,059	\$ 565,604,518	\$ 510,523,409
Unfunded Actuarial Accrued Liability	\$ 73,993,478	\$ 73,216,582	\$ 72,305,460	\$ 71,277,872
Present Value of Future Employer Normal Cost	\$ 102,751,307	\$ 106,821,650	\$ 138,753,419	\$ 169,264,548
Present Value of Future Employee Contributions	\$ 84,164,497	\$ 81,084,751	\$ 82,859,110	\$ 84,762,421
Present Value of Future Benefits	\$ 932,630,366	\$ 885,565,042	\$ 859,522,507	\$ 835,828,250

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	Fiscal 2009	Fiscal 2008	Fiscal 2007	Fiscal 2006
Employee Contribution Rate	9.25%	9.25%	9.25%	9.25%
Proj. Tax Contribution as % of Projected Payroll	2.82%	2.62%	2.56%	2.34%
Actuarially Req'd Net Direct Employer Cont. Rate	10.25%	11.17%	13.89%	16.30%
Actual Employer Direct Contribution Rate	13.50%	13.50%	16.25%	16.00%

Fiscal 2004	Fiscal 2003	Fiscal 2002	Fiscal 2001	Fiscal 2000	Fiscal 1999
5,325	5,533	5,481	5,455	5,558	5,706
2,448	2,372	2,316	2,255	2,213	2,130
193	192	193	189	187	150
2,266	2,185	2,158	2,122	2,108	2,010
\$ 135,925,550	\$ 135,876,426	\$ 130,191,230	\$ 125,304,827	\$ 124,683,590	\$ 120,568,583
\$ 29,043,640	\$ 27,431,127	\$ 26,145,224	\$ 24,838,273	\$ 23,418,404	\$ 21,553,214
\$ 485,539,046	\$ 444,996,698	\$ 432,669,352	\$ 447,796,046	\$ 469,525,372	\$ 436,446,684
86.90%	86.79%	87.26%	87.53%	87.33%	86.57%
\$ 535,579,287	\$ 521,766,411	\$ 531,127,529	\$ 531,562,970	\$ 512,465,288	\$ 472,653,880
\$ 465,429,341	\$ 452,830,104	\$ 463,477,324	\$ 465,259,344	\$ 447,557,888	\$ 409,182,585
\$ 70,149,946	\$ 68,936,307	\$ 67,650,205	\$ 66,303,626	\$ 64,907,400	\$ 63,471,295
\$ 161,387,026	\$ 146,656,618	\$ 100,815,782	\$ 67,974,883	\$ 59,512,163	\$ 48,158,874
\$ 85,111,124	\$ 86,226,350	\$ 83,902,996	\$ 82,237,210	\$ 83,646,334	\$ 81,782,562
\$ 782,077,437	\$ 754,649,379	\$ 715,846,307	\$ 681,775,063	\$ 655,623,785	\$ 602,595,316

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Fiscal 2005	Fiscal 2004	Fiscal 2003	Fiscal 2002	Fiscal 2001	Fiscal 2000
9.25%	9.25%	9.25%	9.25%	9.25%	9.25%
2.38%	2.29%	2.28%	2.17%	2.02%	2.02%
15.87%	14.61%	10.78%	7.89%	7.03%	6.20%
15.00%	11.00%	8.00%	7.00%	6.25%	5.75%

**EXHIBIT XII**  
**PLAN B: ANALYSIS OF ACTUARIALLY REQUIRED CONTRIBUTIONS**

1. Present Value of Future Benefits.....	\$ 188,210,297
2. Frozen Unfunded Actuarial Accrued Liability .....	\$ 5,183,177
3. Actuarial Value of Assets .....	\$ 136,207,119
4. Present Value of Future Employee Contributions.....	\$ 19,992,613
5. Present Value of Future Employer Normal Costs (1 – 2 – 3 – 4).....	\$ 26,827,388
6. Present Value of Future Salaries .....	\$ 437,177,174
7. Employer Normal Cost Accrual Rate (5 ÷ 6).....	6.136502%
8. Projected Fiscal 2009 Salary for Current Membership .....	\$ 54,660,392
9. Employer Normal Cost as of July 1, 2008 (7 x 8).....	\$ 3,354,236
10. Amortization Payment on Frozen Unfunded Accrued Liability of \$5,183,177 with Payments decreasing at 2% per year .....	\$ 634,528
11. TOTAL Employer Normal Cost & Amortization Payment (9 + 10) .....	\$ 3,988,764
12. Employer Normal Cost and Amortization Payment Interest Adjusted for Midyear Payment.....	\$ 4,145,245
13. Estimated Administrative Cost for Fiscal 2009.....	\$ 281,132
14. TOTAL Employer Actuarially Required Contribution for Fiscal 2009 (12 + 13).....	\$ 4,426,377
15. Projected Tax Contributions for Fiscal 2009 .....	\$ 1,656,905
16. Projected Revenue Sharing Funds for Fiscal 2009.....	\$ 47,257
17. Net Direct Employer Actuarially Required Contribution for Fiscal 2009 (14-15-16) .....	\$ 2,722,215
18. Projected Payroll (July 1, 2008 through June 30, 2009) .....	\$ 60,475,279
19. Employers' Minimum Net Direct Actuarially Required Contribution as a % of Projected Payroll for Fiscal 2009 (17 ÷ 18).....	4.50%
20. Minimum Recommended Net Direct Employer Contribution Rate for Fiscal 2009 (19 Rounded to nearest .25%) .....	4.50%

**EXHIBIT XIII**  
**PLAN B: PRESENT VALUE OF FUTURE BENEFITS**

Present Value of Future Benefits for Active Members:

Retirement Benefits .....	\$ 112,155,579
Survivor Benefits .....	4,955,616
Disability Benefits .....	2,560,050
Vested Deferred Termination Benefits .....	5,836,552
Contribution Refunds.....	4,678,474
 TOTAL Present Value of Future Benefits for Active Members .....	 \$ 130,186,271

Present Value of Future Benefits for Terminated Members:

Terminated Vested Members Due Benefits at Retirement....	\$ 2,553,357
Terminated Members with Reciprocals	
Due Benefits at Retirement .....	256,608
Terminated Members Due a Refund .....	530,939
 TOTAL Present Value of Future Benefits for Terminated Members.....	 \$ 3,340,904

Present Value of Future Benefits for Retirees:

Regular Retirees .....	\$ 41,532,533
Disability Retirees .....	3,853,807
Survivors & Widows .....	8,756,251
Reserve for Accrued Retiree DROP Account Balances.....	540,531
 TOTAL Present Value of Future Benefits for Retirees & Survivors.....	 \$ 54,683,122
 TOTAL Present Value of Future Benefits .....	 \$ 188,210,297

**EXHIBIT XIV – Schedule A**  
**PLAN B: MARKET VALUE OF ASSETS**

Current Assets:

Cash .....	\$ 2,260,177
Contributions Receivable from Members.....	210,168
Contributions Receivable from Employers .....	294,997
Accrued Interest on Investments .....	263,218
Dividends Receivable .....	13,034
Investments Receivable .....	36,742
Accrued Alternative Investments .....	822,166
Other .....	19,041

TOTAL CURRENT ASSETS ..... \$ 3,919,543

Property, Plant & Equipment ..... \$ 165,281

Investments:

Co-Mingled Funds.....	\$ 42,589,890
Mutual Fund – Equities .....	23,181,937
Limited Partnerships.....	14,579,794
Common Stock .....	14,583,927
Cash Equivalents .....	10,553,236
Mutual Fund – Fixed Income .....	10,470,297
Land Mitigation Banks .....	7,554,914
Limited Liability Companies.....	5,312,298
Corporate Bonds .....	3,696,201
Notes Receivable .....	2,121,365
Government Agency Securities .....	251,163

TOTAL INVESTMENTS..... \$ 134,895,022

TOTAL ASSETS..... \$ 138,979,846

Current Liabilities:

Minority Interest in Land Mitigation Bank.....	\$ 3,524,526
Notes Payable .....	302,711
Due to Related Parties.....	90,135
Due to Plan A.....	84,220
Investments Payable .....	66,382
Refunds Payable .....	64,058
Accounts Payable.....	15,666

TOTAL CURRENT LIABILITIES..... \$ 4,147,698

MARKET VALUE OF ASSETS..... \$ 134,832,148

**EXHIBIT XIV – SCHEDULE B  
PLAN B - ACTUARIAL VALUE OF ASSETS**

Excess (Shortfall) of invested income  
for current and previous 3 years:

Fiscal year 2008 .....	\$ (8,919,684)
Fiscal year 2007 .....	10,509,451
Fiscal year 2006 .....	545,437
Fiscal year 2005 .....	<u>(751,106)</u>
 Total for four years .....	 \$ 1,384,098

Deferral of excess (shortfall) of invested income:

Fiscal year 2008 (75%) .....	\$ (6,689,763)
Fiscal year 2007 (50%) .....	5,254,725
Fiscal year 2006 (25%) .....	136,359
Fiscal year 2005 (0%) .....	<u>0</u>
 Total deferred for year .....	 \$ (1,298,679)

Market value of plan net assets, end of year ..... \$ 134,832,148

Allocated Share of the Expense Fund ..... \$ 76,292

Preliminary actuarial value of plan assets, end of year ..... \$ 136,207,119

Actuarial value of assets corridor

90% of market value, end of year .....	\$ 121,348,933
110% of market value, end of year .....	\$ 148,315,363

Final actuarial value of plan net assets, end of year ..... \$ 136,207,119

**EXHIBIT XV**  
**PLAN B: PRESENT VALUE OF FUTURE CONTRIBUTIONS**

Employee Contributions to the Annuity Savings Fund.....	\$ 19,992,613
Employer Normal Contributions to the Pension Accumulation Fund .....	26,827,388
Employer Amortization Payments to the Pension Accumulation Fund.....	5,183,177
 TOTAL PRESENT VALUE OF FUTURE CONTRIBUTIONS .....	 \$ 52,003,178

**EXHIBIT XVI**  
**PLAN B: CHANGE IN FROZEN UNFUNDED ACTUARIAL ACCRUED LIABILITY**

Prior Year Frozen Unfunded Accrued Liability.....	\$ 5,446,715
 Interest on Frozen Unfunded Accrued Liability .....	 \$ 435,737
Employer Normal Cost for Prior Year .....	3,257,565
Interest on the Normal Cost .....	260,605
Administrative Expenses .....	269,356
Interest on Expenses.....	10,567
 TOTAL Increases to Frozen Unfunded Accrued Liability .....	 \$ 4,233,830
 Gross Employer Contributions.....	 \$ 5,558,142
Interest on Employer Contributions .....	218,049
Contribution Shortfall (Excess).....	(1,230,547)
Interest on Contribution Shortfall (Excess).....	(48,276)
 TOTAL Decreases to Frozen Unfunded Accrued Liability .....	 \$ 4,497,368
 CURRENT YEAR FROZEN UNFUNDED ACCRUED LIABILITY .....	 \$ 5,183,177

**EXHIBIT XVII**  
**PLAN B: ANALYSIS OF INCREASE IN ASSETS**

Actuarial Value of Assets (June 30, 2007).....		\$ 124,483,332
Income:		
Member Contributions .....	\$ 2,880,163	
Employer Contributions.....	4,010,184	
Ad Valorem Taxes .....	1,501,922	
Revenue Sharing Funds .....	46,036	
Irregular Contributions.....	500,870	
Total Contribution Income.....		\$ 8,939,175
Net Appreciation in Fair Value of Investments .....	\$ 124,905	
Interest and Dividend Income .....	1,171,820	
Income from Alternative Investments.....	835,240	
Miscellaneous.....	8,041	
Securities Lending.....	49,111	
Investment Income Allocated from Expense Fund.....	3,224	
Allocated Share of Investment Expense.....	(508,115)	
Net Investment Income .....		\$ 1,684,226
TOTAL Income.....		\$ 10,623,401
Expenses:		
Retirement Benefits.....	\$ 6,497,764	
Refunds of Contributions .....	651,392	
Funds Transferred to Another System .....	249,852	
DROP Disbursements .....	391,958	
Transfer of Funds to Plan A .....	119,074	
Allocated Share of Administrative Expenses.....	269,356	
TOTAL Expenses.....		\$ 8,179,396
Net Market Income for Fiscal 2008 (Income - Expenses) .....		\$ 2,444,005
Adjustment for Change in Allocated Expense Fund Balance .....		\$ 14,072
Adjustment for Actuarial Smoothing .....		\$ 9,265,710
Actuarial Value of Assets (June 30, 2008).....		\$ 136,207,119

**EXHIBIT XVIII**  
**PLAN B: FUND BALANCE**

Present Assets of the System Creditable to:

Annuity Savings Fund.....	\$ 19,673,617
Annuity Reserve Fund.....	54,142,591
Pension Accumulation Fund .....	57,559,730
Deferred Retirement Option Plan Account .....	3,456,210
NET MARKET VALUE OF ASSETS.....	\$ 134,832,148
ADJUSTMENT FOR ACTUARIAL SMOOTHING .....	1,298,679
ALLOCATION OF EXPENSE FUND .....	76,292
ACTUARIAL VALUE OF ASSETS .....	\$ 136,207,119

**EXHIBIT XIX**  
**PLAN B: PENSION BENEFIT OBLIGATION**

Present Value of Credited Projected Benefits Payable to Current Employees .....	\$ 83,670,707
Present Value of Benefits Payable to Terminated Employees .....	3,340,904
Present Value of Benefits Payable to Current Retirees and Beneficiaries .....	54,683,122
TOTAL PENSION BENEFIT OBLIGATION .....	\$ 141,694,733
NET ACTUARIAL VALUE OF ASSETS .....	\$ 136,207,119
Ratio of Net Actuarial Value of Assets to Pension Benefit Obligation .....	96.13%

**EXHIBIT XX**  
**PLAN B: COST OF LIVING ADJUSTMENTS - TARGET RATIO**

1. Actuarial Value of Assets Divided by PBO as of Fiscal 1986:.....	63.44%
2. Amortization of Unfunded Balance over 30 years:.....	26.81%

Adjustments in Funded Ratio Due to Changes in Assumption(s):

Changes for Fiscal 1988.....	2.40%
Changes for Fiscal 1989.....	(2.94%)
Changes for Fiscal 1995.....	(1.22%)
Changes for Fiscal 1997.....	(3.84%)
Changes for Fiscal 1998.....	(3.71%)
Changes for Fiscal 2000.....	(2.29%)
Changes for Fiscal 2001.....	1.21%
Changes for Fiscal 2003.....	0.53%
Changes for Fiscal 2005.....	(1.12%)
Changes for Fiscal 2006.....	5.18%

3. TOTAL Adjustments .....	(5.80%)
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Amortization of Adjustments in Funded Ratio over 30 years:

Changes for Fiscal 1988.....	(1.60%)
Changes for Fiscal 1989.....	1.86%
Changes for Fiscal 1995.....	0.53%
Changes for Fiscal 1997.....	1.41%
Changes for Fiscal 1998.....	1.24%
Changes for Fiscal 2000.....	0.61%
Changes for Fiscal 2001.....	(0.28%)
Changes for Fiscal 2003.....	(0.09%)
Changes for Fiscal 2005.....	0.11%
Changes for Fiscal 2006.....	(0.35%)

4. TOTAL Amortization of Adjustments .....	3.44%
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5. Target Ratio for Current Fiscal Year (Lesser of 1+2+3+4 or 100%).....	87.89%
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6. Actuarial Value of Assets Divided by PBO as of June 30, 2008.....	96.13%
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**EXHIBIT XXI**  
**PLAN B - CENSUS DATA**

	Active	Terminated with Funds on Deposit	DROP	Retired	Total
Number of members as of June 30, 2007	2,105	1,002	48	794	3,949
Additions to Census					
Initial membership	343	55			398
Death of another member	(1)			1	
Omitted in error last year					
Change in Status during Year					
Actives terminating service	(94)	94			
Actives who retired	(22)			22	
Actives entering DROP	(27)		27		
Term. members rehired	7	(7)			
Term. members who retire		(11)		11	
Retirees who are rehired					
Refunded who are rehired	7	1			8
DROP participants retiring			(7)	7	
DROP returned to work	11		(11)		
Suspended Benefit Reinstated				1	1
Eliminated from Census					
Refund of contributions	(184)	(67)			(251)
Deaths	(5)	(1)		(42)	(48)
Included in error last year				(1)	(1)
Adjustment for multiple records					
Moved to Plan A	(6)				(6)
Number of members as of June 30, 2008	2,134	1,066	57	793	4,050

PLAN B - ACTIVES CENSUS BY AGE:

Age	Number Male	Number Female	Total Number	Average Salary	Total Salary
16 - 20	17	0	17	16,239	276,058
21 - 25	82	21	103	18,113	1,865,615
26 - 30	104	56	160	22,777	3,644,331
31 - 35	119	42	161	23,836	3,837,523
36 - 40	143	84	227	25,284	5,739,525
41 - 45	176	82	258	26,916	6,944,253
46 - 50	237	110	347	28,667	9,947,601
51 - 55	239	118	357	28,761	10,267,790
56 - 60	207	82	289	30,795	8,899,885
61 - 65	114	40	154	30,519	4,699,915
66 - 70	65	13	78	26,438	2,062,144
71 - 75	16	8	24	29,276	702,629
76 - 80	12	0	12	23,073	276,877
81 - 85	4	0	4	17,390	69,559
TOTAL	1,535	656	2,191	27,035	59,233,705

THE ACTIVE CENSUS INCLUDES 790 ACTIVES WITH VESTED BENEFITS, INCLUDING 57 DROP PARTICIPANTS AND 51 ACTIVE FORMER DROP PARTICIPANTS.

PLAN B - TERMINATED MEMBERS DUE A DEFERRED RETIREMENT BENEFIT:

Age	Number Male	Number Female	Total Number	Average Benefit	Total Benefit
36 - 40	1	0	1	7,419	7,419
41 - 45	5	1	6	9,813	58,880
46 - 50	9	5	14	8,301	116,210
51 - 55	12	9	21	8,760	183,961
56 - 60	17	4	21	6,781	142,400
61 - 65	3	0	3	1,164	3,492
71 - 75	1	0	1	1,567	1,567
76 - 80	0	1	1	4,280	4,280
TOTAL	48	20	68	7,621	518,209

PLAN B - TERMINATED MEMBERS DUE A REFUND OF CONTRIBUTIONS:

Contributions Ranging From	To	Number	Total Contributions
0	99	712	20,479
100	499	157	34,718
500	999	38	25,769
1000	1999	23	33,936
2000	4999	36	116,442
5000	9999	21	134,498
10000	19999	11	147,925
	TOTAL	998	513,767

**PLAN B - REGULAR RETIREES:**

Age	Number Male	Number Female	Total Number	Average Benefit	Total Benefit
46 - 50	1	0	1	8,911	8,911
51 - 55	4	0	4	17,713	70,852
56 - 60	13	5	18	19,415	349,471
61 - 65	55	19	74	11,359	840,533
66 - 70	77	28	105	9,724	1,021,058
71 - 75	103	36	139	9,449	1,313,436
76 - 80	65	23	88	8,256	726,514
81 - 85	45	15	60	8,201	492,035
86 - 90	22	15	37	5,931	219,461
91 - 99	8	4	12	4,103	49,238
<b>TOTAL</b>	<b>393</b>	<b>145</b>	<b>538</b>	<b>9,464</b>	<b>5,091,509</b>

**PLAN B - DISABILITY RETIREES:**

Age	Number Male	Number Female	Total Number	Average Benefit	Total Benefit
36 - 40	1	0	1	6,771	6,771
41 - 45	2	0	2	9,335	18,670
46 - 50	6	2	8	7,352	58,815
51 - 55	9	2	11	8,683	95,515
56 - 60	10	3	13	8,543	111,055
61 - 65	7	1	8	6,546	52,364
66 - 70	1	1	2	8,632	17,263
71 - 75	3	1	4	7,125	28,501
81 - 85	0	1	1	3,989	3,989
<b>TOTAL</b>	<b>39</b>	<b>11</b>	<b>50</b>	<b>7,859</b>	<b>392,943</b>

**PLAN B - SURVIVORS:**

Age	Number Male	Number Female	Total Number	Average Benefit	Total Benefit
31 - 35	0	1	1	4,221	4,221
41 - 45	1	3	4	4,498	17,990
46 - 50	1	1	2	6,695	13,389
51 - 55	2	10	12	5,470	65,639
56 - 60	0	13	13	6,530	84,888
61 - 65	0	19	19	5,872	111,562
66 - 70	2	28	30	5,898	176,941
71 - 75	0	31	31	6,409	198,679
76 - 80	1	33	34	5,996	203,866
81 - 85	1	31	32	5,631	180,207
86 - 90	0	24	24	3,361	80,659
91 - 99	0	3	3	1,147	3,441
<b>TOTAL</b>	<b>8</b>	<b>197</b>	<b>205</b>	<b>5,568</b>	<b>1,141,482</b>

PLAN B - ACTIVE MEMBERS:

Attained Ages	Completed Years of Service											Total			
	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30&Over				
0 - 20	15	2													17
21 - 25	54	29	9	7	1	3									103
26 - 30	47	33	21	10	13	34	2								160
31 - 35	43	25	21	14	4	31	22	1							161
36 - 40	29	30	27	19	8	57	33	23	1						227
41 - 45	40	40	15	23	11	59	34	21	12	3					258
46 - 50	38	44	23	19	10	58	43	47	25	37	3				347
51 - 55	39	35	21	16	11	59	43	56	29	31	17				357
56 - 60	21	29	14	17	16	49	39	48	23	12	21				289
61 - 65	8	11	10	7	3	30	23	27	15	7	13				154
66 - 70	8	1	6	2	5	10	16	11	12	5	2				78
71 & Over		2		1	4		8	10	5	6	4				40
Totals	342	281	167	135	82	394	263	244	122	101	60				2191

PLAN B - AVERAGE ANNUAL SALARY OF ACTIVE MEMBERS:

Attained Ages	Completed Years of Service											Average Salary			
	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30&Over				
0 - 20	15,688	20,370													16,239
21 - 25	16,425	17,957	20,848	21,775	22,689	31,731									18,113
26 - 30	18,287	25,545	23,326	23,340	24,831	24,505	31,325								22,777
31 - 35	18,797	24,540	21,204	25,510	23,225	27,932	28,699	23,157							23,836
36 - 40	19,664	23,224	23,589	22,870	23,568	27,348	28,709	29,093	37,222						25,284
41 - 45	18,417	26,122	25,789	22,896	26,590	27,638	26,508	36,207	41,727	34,587					26,916
46 - 50	17,387	27,550	24,797	24,501	28,494	26,708	27,582	35,688	34,309	37,455	32,673				28,667
51 - 55	18,076	24,362	24,891	24,545	27,931	28,551	27,687	31,494	33,437	37,045	42,985				28,761
56 - 60	23,746	26,374	24,092	28,160	28,138	29,533	31,190	33,954	35,223	36,077	39,705				30,795
61 - 65	23,178	28,773	28,308	32,869	30,992	26,683	27,332	31,918	34,577	29,582	44,247				30,519
66 - 70	15,893	22,561	25,548	27,165	30,195	28,279	25,090	29,250	22,531	38,810	41,725				26,438
71 & Over		30,868		52,500		18,451	9,471	30,870	31,228	37,644	23,639				26,227
Average	18,345	24,876	24,390	25,022	26,900	27,466	27,534	32,851	33,775	36,613	40,264				27,035

PLAN B - TERMINATED MEMBERS DUE A DEFERRED RETIREMENT BENEFIT:

Attained Ages	Years Until Retirement Eligibility										Total	
	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29		30&Over
0 - 35												0
36 - 40						1						1
41 - 45								6				6
46 - 50							14					14
51 - 55						19	2					21
56 - 60	4	3	2	5	6	1						21
61 - 65	3											3
66 - 70												0
71 - 75	1											1
76 - 80	1											1
81 & Over												0
Totals	9	3	2	5	6	21	16	6	0	0	0	68

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

Attained Ages	Years Until Retirement Eligibility										Average Benefit	
	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29		30&Over
0 - 35												0
36 - 40						7,419						7,419
41 - 45								9,813				9,813
46 - 50							8,301					8,301
51 - 55						8,549	10,768					8,760
56 - 60	5,782	6,261	22,246	3,557	4,266	12,617						6,781
61 - 65	1,164											1,164
66 - 70												0
71 - 75	1,567											1,567
76 - 80	4,280											4,280
81 & Over												0
Average	3,608	6,261	22,246	3,557	4,266	8,689	8,609	9,813	0	0	0	7,621

PLAN B - 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			1									1
51 - 55		1	1		2							4
56 - 60	3	3	4	3	1	4						18
61 - 65	17	20	17	4	5	11						74
66 - 70	7	5	12	12	9	47	13					105
71 - 75	6	5	2	7	7	65	41	6				139
76 - 80	1	3	2	1	2	21	36	19	5			88
81 - 85		1	1			5	1	23	28	2		60
86 - 90		1			1	1	4	6	15	9		37
91 & Over					1	1	4	6	1	8	3	12
Totals	34	38	38	27	27	154	95	54	49	19	3	538

PLAN B - 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			8,911									8,911
51 - 55		25,000	17,594		14,129							17,713
56 - 60	17,913	20,827	23,058	18,025	20,316	16,657						19,415
61 - 65	10,389	13,664	9,365	2,997	11,381	14,777						11,359
66 - 70	5,751	7,806	9,704	11,334	11,141	8,674	13,951					9,724
71 - 75	10,726	9,795	16,620	8,427	11,726	9,561	8,263	10,920				9,449
76 - 80	6,812	6,302		4,008	11,115	7,194	8,891	7,337	12,802			8,256
81 - 85			1,175			5,267	12,090	9,081	7,852	11,861		8,201
86 - 90		4,331			3,647	7,633	4,762	8,546	5,179	6,205		5,931
91 & Over									5,574	4,407	2,802	4,103
Average	10,052	12,421	11,285	9,817	11,619	9,373	9,172	8,612	7,492	6,044	2,802	9,464

PLAN B - DISABILITY RETIREES:

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

PLAN B - AVERAGE ANNUAL BENEFITS PAYABLE TO DISABILITY RETIREES:

Attained Ages	Completed Years Since Retirement										Average Benefit	
	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29		30&Over
0 - 35												0
36 - 40		6,771										6,771
41 - 45		11,558		7,112								9,335
46 - 50	9,405	8,674			9,489	8,501	4,703	4,318				7,352
51 - 55	7,646	11,745		7,567		6,171	8,636					8,683
56 - 60	11,063			12,639	8,393	7,763	7,763	5,128				8,543
61 - 65		5,057				7,471	4,001	7,395			6,105	6,546
66 - 70						8,632						8,632
71 - 75								8,310	3,572			7,125
76 - 80												0
81 - 85									3,989			3,989
86 & Over												0
Average	9,941	9,880	0	9,106	8,941	7,465	5,780	6,512	3,780	0	6,105	7,859

PLAN B - SURVIVING BENEFICIARIES OF FORMER MEMBERS:

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							1						1
36 - 40													0
41 - 45			1				1		1				4
46 - 50							1		1				2
51 - 55							4		1				12
56 - 60	1						3		3		2		19
61 - 65			3				4		2				13
66 - 70			2				11		4				30
71 - 75			1				7		9				31
76 - 80			1				2		13				34
81 - 85			1				1		4				32
86 - 90							1		13				24
91 & Over							1		1				3
Totals	1	5	7	7	6	30	38	37	32	24	18		205

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

Attained Ages	Completed Years Since Retirement											Average Benefit	
	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30&Over		
0 - 30													0
31 - 35							4,221						4,221
36 - 40							2,211						4,497
41 - 45			2,717				8,289		888				6,695
46 - 50							7,225		5,100				5,470
51 - 55							4,452		2,800				6,530
56 - 60	8,078	16,813					5,361		6,802				5,872
61 - 65		4,451	4,747				6,664		4,364				5,898
66 - 70		5,384	5,905				7,445		3,178				6,409
71 - 75							6,515		8,295				6,409
76 - 80			500				6,055		6,160				5,996
81 - 85			12,651				7,950		4,432				5,631
86 - 90							11,757		6,781				5,631
91 & Over							2,101		9,351				3,361
Average	8,078	6,597	5,145	6,303	5,999	5,842	6,660	6,476	5,588	4,374	1,809		5,568

**EXHIBIT XXII**  
**PLAN B: YEAR-TO-YEAR COMPARISON**

	Fiscal 2008	Fiscal 2007	Fiscal 2006	Fiscal 2005
Number of Active Members	2,191	2,153	2,060	2,038
Number of Retirees and Survivors	793	794	763	745
Number Terminated Due Deferred Benefits	68	74	77	79
Number Terminated Due Refund	998	928	777	806
Active Lives Payroll	\$ 59,233,705	\$ 54,572,935	\$ 51,055,201	\$ 48,690,316
Retiree Benefits in Payment	\$ 6,625,934	\$ 6,328,157	\$ 5,872,330	\$ 5,649,984
Market Value of Assets	\$ 134,832,148	\$ 132,326,073	\$ 111,581,452	\$ 101,109,899
Ratio of Actuarial Value of Assets to Actuarial Accrued Liability	96.33%	95.81%	95.13%	94.18%
Actuarial Accrued Liability (As defined by GASB- 25)	\$ 141,390,296	\$ 129,930,047	\$ 117,108,583	\$ 102,373,290
Actuarial Value of Assets	\$ 136,207,119	\$ 124,483,332	\$ 111,404,638	\$ 96,417,685
Unfunded Actuarial Accrued Liability	\$ 5,183,177	\$ 5,446,715	\$ 5,703,945	\$ 5,955,605
Present Value of Future Employer Normal Cost	\$ 26,827,388	\$ 26,365,299	\$ 32,959,966	\$ 41,742,178
Present Value of Future Employee Contributions	\$ 19,992,613	\$ 18,627,179	\$ 17,883,419	\$ 17,253,376
Present Value of Future Benefits	\$ 188,210,297	\$ 174,922,525	\$ 167,951,968	\$ 161,368,844

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	Fiscal 2009	Fiscal 2008	Fiscal 2007	Fiscal 2006
Employee Contribution Rate	5.00%	5.00%	5.00%	5.00%
Proj. Tax Contribution as % of Projected Payroll	2.82%	2.60%	2.54%	2.36%
Actuarially Req'd Net Direct Employer Cont. Rate	4.50%	5.06%	7.08%	9.86%
Actual Employer Direct Contribution Rate	6.75%	6.75%	9.75%	9.75%

Fiscal 2004	Fiscal 2003	Fiscal 2002	Fiscal 2001	Fiscal 2000	Fiscal 1999
2,052	2,064	2,066	2,069	2,068	2,152
734	720	705	700	689	664
74	63	60	53	52	58
820	790	761	713	715	702
\$ 47,676,817	\$ 45,260,679	\$ 43,560,002	\$ 42,572,472	\$ 41,586,147	\$ 41,646,939
\$ 5,476,263	\$ 5,216,962	\$ 5,039,462	\$ 4,855,154	\$ 4,579,320	\$ 4,235,936
\$ 92,904,743	\$ 83,836,074	\$ 81,767,131	\$ 87,702,933	\$ 100,649,110	\$ 94,054,385
93.51%	93.04%	92.99%	92.86%	92.73%	91.92%
\$ 95,618,087	\$ 92,615,633	\$ 95,381,233	\$ 96,857,576	\$ 104,176,006	\$ 96,158,035
\$ 89,415,704	\$ 86,170,714	\$ 88,697,416	\$ 89,937,940	\$ 96,602,212	\$ 88,384,208
\$ 6,202,383	\$ 6,444,919	\$ 6,683,817	\$ 6,919,636	\$ 7,573,794	\$ 7,773,827
\$ 42,458,765	\$ 36,670,550	\$ 28,532,252	\$ 22,615,159	\$ 12,529,147	\$ 10,902,426
\$ 18,040,618	\$ 17,184,709	\$ 16,666,322	\$ 16,496,208	\$ 16,317,771	\$ 16,469,405
\$ 156,117,470	\$ 146,470,892	\$ 140,579,807	\$ 135,968,943	\$ 133,022,924	\$ 123,529,866

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Fiscal 2005	Fiscal 2004	Fiscal 2003	Fiscal 2002	Fiscal 2001	Fiscal 2000
5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
2.37%	2.28%	2.27%	2.18%	2.01%	2.01%
9.72%	9.22%	7.53%	6.16%	3.68%	3.32%
9.50%	7.75%	6.25%	4.50%	4.50%	4.50%

## **SUMMARY OF PRINCIPAL PLAN PROVISIONS**

All members of the Municipal Employees' Retirement System are participants in either Plan A or B according to the provisions of the agreement entered into by their employer. All employees of a participating employer must participate in the same plan. The principal provisions of each plan are given below. The following summary of plan provisions as of June 30, 2008, is for general informational purposes only and does not constitute a guarantee of benefits.

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

### **PLAN A PROVISIONS:**

**CONTRIBUTION RATES** - Employee contributions in Plan A are 9.25% of the member's earnings. In addition, each sheriff and ex officio tax collector deducts one-fourth of one percent of the aggregate amount of the tax shown to be collected by the tax roll of each respective parish, excepting Orleans Parish, and remits the money to the system on an annual basis. Taxes are apportioned between Plan A and Plan B in proportion to salaries of plan participants. Taxes received from East Baton Rouge Parish are apportioned between the Municipal Employees' Retirement System and the Employees' Retirement System of the City of Baton Rouge. The system also receives revenue sharing funds each year as appropriated by the legislature. The remaining employer contributions are determined according to actuarial requirements and are set annually.

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

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

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

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

#### **PLAN B PROVISIONS:**

**CONTRIBUTION RATES** - Employee contributions in Plan B are 5.00% of the member's earnings. In addition, each sheriff and ex officio tax collector deducts one-fourth of one percent of the aggregate amount of the tax shown to be collected by the tax roll of each respective parish, excepting Orleans Parish, and remits the money to the system on an annual basis. Taxes are apportioned between Plan A and Plan B in proportion to salaries of plan participants. Taxes received from East Baton Rouge Parish are apportioned between the Municipal Employees' Retirement System and the Employees' Retirement System of the City of Baton Rouge. The system also receives revenue sharing funds each year as appropriated by the legislature. The remaining employer contributions are determined according to actuarial requirements and are set annually.

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

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

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

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

**PROVISIONS APPLICABLE TO BOTH PLAN A AND B:**

**FINAL AVERAGE COMPENSATION** – For a member whose first employment making him eligible for membership in the system began on or before June 30, 2006, final average compensation is based on the average monthly earnings during the highest thirty-six consecutive months or joined months if service was interrupted. The earnings to be considered for each twelve month period within the thirty-six month period shall not exceed 125% of the preceding twelve month period.

For a member whose first employment making him eligible for membership in the system began after June 30, 2006, final average compensation is based on the average monthly earnings during the highest sixty consecutive months or joined months if service was interrupted. The earnings to be considered for each twelve month period within the thirty-six month period shall not exceed 125% of the preceding twelve month period.

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

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

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

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

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

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

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

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

## ACTUARIAL ASSUMPTIONS

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

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

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

**ACTUARIAL ASSET VALUES:** Invested assets are valued at market value adjusted to defer three-fourths of all earnings above or below the valuation interest rate in the valuation year, two-fourths of all earnings above or below the valuation interest rate in the prior year, and one-fourth of all earnings above or below the valuation interest rate from two years prior. Under this methodology the value of the assets will not be less than 90% nor more than 110% of the actual market value. In addition, expense fund assets were allocated to each plan in proportion to covered payroll.

**VALUATION INTEREST RATE:** 8% (Net of Investment Expense)

**ANNUAL SALARY INCREASE RATE:** 6% (3.25% Inflation / 2.75% Merit)

**ANNUITANT MORTALITY:** 1994 Uninsured Pensioners' Table set forward 2 years (male mortality is based on 2 year set forward of the male table and female mortality is based on 2 year set forward of the female table)

**RETIREE COST OF LIVING INCREASES:** The present value of future retirement benefits is based on benefits currently being paid by

the system and includes previously granted cost of living increases. The present values do not include provisions for potential future increases not yet authorized by the Board of Trustees.

**RATES OF RETIREMENT:** The table of these rates is included later in the report. These rates apply only to those individuals eligible to retire. Members are assumed to retire no earlier than normal retirement age. In the first year of eligibility the tabular rates are multiplied by 1.5.

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

**DROP ENTRY RATES:** The table of these rates is included later in the report. These rates apply only to those individuals eligible to participate in DROP. In the first year of eligibility the tabular rates are multiplied by 1.5.

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

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

Ages	Retirement Rates
Below 89	0.21
90	1.00

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

<u>Service</u>	<u>Plan A</u>	<u>Plan B</u>
0	0.24	0.26
1	0.19	0.20
2	0.16	0.15
3	0.12	0.15
4	0.10	0.10
5	0.08	0.10
6	0.08	0.09
7	0.08	0.09
8	0.06	0.06
9	0.06	0.05
10	0.06	0.05

11	0.05	0.05
12	0.05	0.05
13	0.05	0.05
14	0.03	0.05
15	0.03	0.05
16	0.03	0.03
17	0.01	0.03
18	0.01	0.03
19	0.01	0.03
20	0.01	0.02
over 20	0.01	0.02

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

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

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

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

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

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

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

## ACTUARIAL TABLES AND RATES

Age	Male Mortality Rates	Female Mortality Rates	Plan A Retirement Rates	Plan B Retirement Rates	Plan A DROP Entry Rates	Plan B DROP Entry Rates	Base Disability	Remarriage Rates
18	0.00054	0.00031	0.00000	0.00000	0.00000	0.00000	0.00150	0.05665
19	0.00057	0.00031	0.00000	0.00000	0.00000	0.00000	0.00150	0.05665
20	0.00060	0.00031	0.00000	0.00000	0.00000	0.00000	0.00150	0.05665
21	0.00063	0.00031	0.00000	0.00000	0.00000	0.00000	0.00150	0.05213
22	0.00067	0.00031	0.00000	0.00000	0.00000	0.00000	0.00150	0.04834
23	0.00071	0.00031	0.00000	0.00000	0.00000	0.00000	0.00150	0.04522
24	0.00075	0.00032	0.00000	0.00000	0.00000	0.00000	0.00150	0.04270
25	0.00078	0.00032	0.00000	0.00000	0.00000	0.00000	0.00150	0.04070
26	0.00081	0.00034	0.00000	0.00000	0.00000	0.00000	0.00150	0.03915
27	0.00084	0.00036	0.00000	0.00000	0.00000	0.00000	0.00150	0.03799
28	0.00086	0.00038	0.00000	0.00000	0.00000	0.00000	0.00150	0.03714
29	0.00088	0.00040	0.00000	0.00000	0.00000	0.00000	0.00150	0.03654
30	0.00090	0.00043	0.00000	0.00000	0.00000	0.00000	0.00150	0.03611
31	0.00091	0.00045	0.00000	0.00000	0.00000	0.00000	0.00150	0.03578
32	0.00091	0.00048	0.00000	0.00000	0.00000	0.00000	0.00150	0.03549
33	0.00091	0.00051	0.00000	0.00000	0.00000	0.00000	0.00150	0.03515
34	0.00093	0.00055	0.00000	0.00000	0.00000	0.00000	0.00150	0.03471
35	0.00096	0.00059	0.00000	0.00000	0.00000	0.00000	0.00170	0.03409
36	0.00101	0.00064	0.00000	0.00000	0.00000	0.00000	0.00190	0.03286
37	0.00107	0.00070	0.00000	0.00000	0.00000	0.00000	0.00210	0.03139
38	0.00115	0.00076	0.00000	0.00000	0.00000	0.00000	0.00240	0.02973
39	0.00124	0.00083	0.00000	0.00000	0.00000	0.00000	0.00270	0.02787
40	0.00135	0.00089	0.00000	0.00000	0.00000	0.00000	0.00310	0.02585
41	0.00145	0.00094	0.06000	0.00000	0.27000	0.00000	0.00350	0.02352
42	0.00157	0.00099	0.06000	0.00000	0.27000	0.00000	0.00390	0.02111
43	0.00170	0.00105	0.06000	0.00000	0.27000	0.00000	0.00440	0.01868
44	0.00185	0.00111	0.06000	0.00000	0.27000	0.00000	0.00500	0.01629
45	0.00204	0.00120	0.06000	0.00000	0.27000	0.00000	0.00570	0.01400
46	0.00226	0.00130	0.06000	0.06000	0.27000	0.19000	0.00650	0.01208
47	0.00250	0.00141	0.06000	0.06000	0.27000	0.19000	0.00730	0.01034
48	0.00277	0.00154	0.06000	0.06000	0.27000	0.19000	0.00830	0.00879
49	0.00309	0.00169	0.06000	0.06000	0.27000	0.19000	0.00940	0.00744
50	0.00345	0.00186	0.06000	0.06000	0.27000	0.19000	0.01070	0.00629
51	0.00385	0.00205	0.06000	0.06000	0.27000	0.19000	0.01220	0.00551
52	0.00428	0.00224	0.06000	0.06000	0.27000	0.19000	0.01380	0.00493
53	0.00476	0.00247	0.06000	0.06000	0.27000	0.19000	0.01570	0.00451
54	0.00532	0.00276	0.06000	0.06000	0.27000	0.19000	0.01780	0.00423
55	0.00600	0.00314	0.06000	0.36000	0.27000	0.30000	0.02020	0.00406
56	0.00677	0.00361	0.06000	0.22000	0.27000	0.30000	0.02300	0.00000
57	0.00762	0.00415	0.06000	0.22000	0.27000	0.30000	0.02610	0.00000
58	0.00858	0.00477	0.06000	0.22000	0.27000	0.30000	0.02960	0.00000
59	0.00966	0.00548	0.06000	0.22000	0.27000	0.12500	0.03370	0.00000
60	0.01091	0.00627	0.14000	0.12000	0.27000	0.12500	0.04880	0.00000
61	0.01233	0.00718	0.14000	0.12000	0.12000	0.12500	0.05300	0.00000
62	0.01391	0.00819	0.14000	0.12000	0.12000	0.12500	0.05780	0.00000
63	0.01563	0.00929	0.14000	0.12000	0.12000	0.12500	0.05550	0.00000
64	0.01746	0.01042	0.14000	0.12000	0.12000	0.12500	0.03510	0.00000
65	0.01939	0.01157	0.14000	0.12000	0.12000	0.12500	0.00630	0.00000

## GLOSSARY

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

**NOTES:**