# MUNICIPAL EMPLOYEES' RETIREMENT SYSTEM

ACTUARIAL VALUATION AS OF JUNE 30, 2012

## G. S. CURRAN & COMPANY, LTD.

### **Actuarial Services**

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December 8, 2012

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, 2012. 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, 2013, to recommend the net direct employer contribution rate for fiscal 2014, 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.

Except as stated below, 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. This report contains a limitation with respect to the determination of asset values as a result of an exception detailed in the June 30, 2012 audit report. This limitation relates to the investments receivable given in the statement of plan net assets and is outlined in the audit report issued by Duplantier, Hrapmann, Hogan & Maher, L.L.P., Certified Public Accountants, as well as in this report in the section titled "Comments on Data". The qualification of the audit report limits our ability to determine with certainty the actuarially required contribution and funded ratio given in this report.

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, 2012		June 30, 2011
Census Summary:	Active Members Retirees and Beneficiaries Terminated Due a Deferred Benefit Terminated Due a Refund		5,021 3,040 181 2,632		5,029 3,001 174 2,594
Payroll:		\$	167,511,550		\$ 164,262,655
Benefits in Paymen	it:	\$	46,224,138		\$ 44,218,709
Frozen Unfunded A	Actuarial Accrued Liability:	\$	75,337,890		\$ 75,313,546
Market Value of A	ssets:	\$	639,209,518	†	\$ 679,285,361
Actuarial Asset Va	lue:	\$	721,475,280	†	\$ 723,942,801
Actuarial Accrued	Liability (as defined by GASB-25)	\$	796,813,170		\$ 799,256,347
Ratio of Actuarial	Value of Assets to Actuarial Accrued Liability:		90.55%		90.58%
******	************	***	*******	****	*********
		I	FISCAL 2013		FISCAL 2012
Employer Normal	Cost (July 1):	\$	29,655,906		\$ 26,605,047
Amortization Cost	(July 1):	\$	5,696,738		\$ 5,556,240
	ross Employer Actuarially Required ling Estimated Administrative Costs:	\$	37,573,585		\$ 34,122,855
Projected Ad Valor	rem and Revenue Sharing Funds	\$	5,388,595		\$ 5,228,362
Net Direct Employ	er Actuarially Required Contribution:	\$	32,184,990		\$ 28,894,493
Actuarially Require	ed Net Direct Employer Contribution Rate		18.67%	†	17.08%
Actual Net Direct I	Employer Contribution Rate:		17.00%		16.75%
*******	************	***	******	****	********

Minimum Recommended Net Direct Employer Contribution Rate Fiscal 2014: 19.00% † Fiscal 2013: 17.00%

Employee Contribution Rate: 9.25% of Payroll

Actuarial Cost Method: Frozen Attained Age Normal Actuarial Cost Method

Valuation Interest Rate: 7.75% (Net of Investment Expense)

Exclusions from Census: None

Basis of Actuarial Asset Value: The actuarial value of assets is based on the market value of assets adjusted to phase in

asset earnings above or below the assumed rate of return over a five-year period with limits set at 85% and 115% of the market value of assets. When the adjusted value falls outside of the limits, the actuarial value is set equal to the average of the limited

and adjusted value.

Changes in Valuation Methods, Assumptions, and/or Amortization Periods: Valuation interest rate changed from 8.0% to 7.75%. Salary increase rate changed from 6.0% to 5.75%. DROP assumption changed from immediate retirement at DROP completion for all participants in DROP to 50% retirement and 50% participation in Post-DROP service for one year.

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

<sup>†</sup> Based upon asset values which include an unaudited "best estimate" of the value of a receivable related to the FIA Leveraged Fund.

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

Valuation Date:			June 30, 2012		J	une 30, 2011
Census Summary:	Active Members Retirees and Beneficiaries Terminated Due a Deferred Benefit Terminated Due a Refund		2,155 879 61 1,100			2,175 865 62 1,062
Payroll:		\$	66,409,896		\$	65,427,477
Benefits in Paymer	it:	\$	8,285,257		\$	7,953,795
Frozen Unfunded A	Actuarial Accrued Liability:	\$	4,049,257		\$	4,346,525
Market Value of A	ssets:	\$	137,164,489	†	\$	144,028,034
Actuarial Asset Va	lue:	\$	154,451,871	†	\$	152,966,837
Actuarial Accrued	Liability (as defined by GASB-25)	\$	158,501,128		\$	157,313,362
Ratio of Actuarial	Value of Assets to Actuarial Accrued Liability	:	97.45%			97.24%
******	****************		**************************************	*****		************* FISCAL 2012
Employer Normal	Cost (July 1):	\$	6,867,836		\$	6,247,028
Amortization Cost	(July 1):	\$	573,126		\$	597,212
	ross Employer Actuarially Required ling Estimated Administrative Costs:	\$	8,071,443		\$	7,391,507
Projected Ad Valor	rem and Revenue Sharing Funds	\$	2,136,306		\$	2,082,510
Net Direct Employ	er Actuarially Required Contributions:	\$	5,935,137		\$	5,308,997
Actuarially Require	ed Net Direct Employer Contribution Rate		8.72%	†		7.89%
Actual Net Direct I	Employer Contribution Rate:		8.00%			8.00%
******	**************	****	********	*****	*****	******

Minimum Recommended Net Direct Employer Contribution Rate Fiscal 2014: 8.75% † Fiscal 2013: 8.00%

Employee Contribution Rate: 5.00% of Payroll

Actuarial Cost Method: Frozen Attained Age Normal Actuarial Cost Method

Valuation Interest Rate: 7.75% (Net of Investment Expense)

Exclusions from Census: None

Basis of Actuarial Asset Value: The actuarial value of assets is based on the market value of assets adjusted to phase in

asset earnings above or below the assumed rate of return over a five-year period with limits set at 85% and 115% of the market value of assets. When the adjusted value falls outside of the limits, the actuarial value is set equal to the average of the limited

and adjusted value.

Changes in Valuation Methods, Assumptions, and/or Amortization Periods: Valuation interest rate changed from 8.0% to 7.75%. Salary increase rate changed from 6.0% to 5.75%. DROP assumption changed from immediate retirement at DROP completion for all participants in DROP to 50% retirement and 50% participation in Post-DROP service for one year.

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

<sup>†</sup> Based upon asset values which include an unaudited "best estimate" of the value of a receivable related to the FIA Leveraged Fund.

### **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 5,021 active members in Plan A of whom 2,066 have vested retirement benefits including 259 participants in the Deferred Retirement Option Plan (DROP); 3,040 former Plan A members or their beneficiaries are receiving retirement benefits. An additional 2,813 Plan A members have contributions remaining on deposit with the system; of this number, 181 have vested rights for future retirement benefits. Census data on Plan B members may be found in Exhibit XXI. There are 2,155 active members in Plan B of whom 798 have vested retirement benefits including 90 participants in the Deferred Retirement Option Plan (DROP); 879 former Plan B members or their beneficiaries are receiving retirement benefits. An additional 1,161 Plan B members have contributions remaining on deposit with the system; of this number, 61 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. Except as stated below, valuation asset values as well as income and expenses for the fiscal year were based on information furnished by the system's auditor, the firm of Duplantier, Hrapmann, Hogan & Maher, Certified Public Accountants. Please note that an investment receivable in the amount of \$41,540,181 as of June 30, 2012 was not audited due to the lack of current financial information. This receivable is included in the consolidated statement of plan assets and represents 5.2% of Plan A and Plan B total assets. Since an audited value of the asset was not available, the statement of assets includes management's "best estimate" of the value of this receivable. The receivable is based upon an unfulfilled redemption request tendered to the FIA Leveraged Fund. This Fund has been placed in liquidation. As of the date this report was

issued, the Court-appointed valuation experts have not yet had the opportunity to provide the Firefighters' Retirement System with audited statements. To the extent that future valuations determine that the actual value of this asset differs with the "best estimate" provided, future contribution rates will be affected.

As indicated in the system's audit report, the net market value of Plan A's assets was \$639,209,518 as of June 30, 2012. Net investment income for fiscal 2012 measured on a market value basis for Plan A amounted to loss of \$32,458,941. Contributions to the Plan for the fiscal year totaled \$48,252,525; benefits and expenses paid by Plan A amounted to \$55,869,377. The net market value of Plan B's assets was \$137,164,489 as of June 30, 2012. Net investment income for fiscal 2012 measured on a market value basis for Plan B amounted to a loss of \$6,824,468. Contributions to the Plan for the fiscal year totaled \$10,754,015; benefits and expenses paid by Plan B amounted to \$10,793,081. 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 \$298,975 and at the end of the year the balance was \$252,860.

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

#### COMMENTS ON ACTUARIAL METHODS AND ASSUMPTIONS

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

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

The current year actuarial assumptions utilized for the report are outlined on pages sixty-four through sixty-eight. Three changes were made to the assumptions for this valuation. First, the valuation interest rate was reduced from 8% to 7.75%, effective June 30, 2012. One component of this reduction was a reduction in the assumed rate of inflation from 3.25% to 3.00%. Second, as a consequence of this change, the salary scale was reduced from 6% per year to 5.75% per year. Finally, the valuation model was changed to assume that one-half of DROP participants will retire at the end of their DROP participation period and one-half will retire after one year of post-DROP service credit. In the prior valuation, all DROP participants were assumed to retire at the end of the specified DROP period. With the exception of these three changes, the assumptions used are the same as those used for the prior year report. All assumptions are within our "best estimate range". All calculations, recommendations, and conclusions are based on the assumptions specified. To the extent that prospective experience differs from that assumed, adjustments will be required to contribution levels. Such differences will be revealed in future actuarial valuations. The net effect of all changes in assumptions was to increase the system's normal cost accrual rate by 0.9465% in Plan A and 0.4928% in Plan B.

#### **CHANGES IN PLAN PROVISIONS**

The following changes in plan provisions were enacted during the 2012 Regular Session of the Louisiana Legislature:

Act 224 permits the chairman of the House and Senate Retirement Committees to authorize legislative staff to attend an executive session for any board or committee meeting of any state or statewide retirement system.

Act 225 provided that at such time as the system's frozen unfunded accrued liability shall be fully amortized, the system shall be funded on the Aggregate Funding Method.

Act 478 provides for forfeiture of retirement benefits by a public employee or elected official hired or beginning service after January 1, 2013 who is convicted of a "public corruption crime" as defined in the act. The act allows the sentencing judge, in his discretion, to order forfeiture after appellate review is exhausted. The act limits forfeiture to benefits in excess of employee contributions. The act also states that the forfeiture shall not impinge on a community property interest of a current or former spouse.

Act 524 changed the final average compensation period from thirty-six to sixty months for members of Plan A and Plan B whose employment making them eligible for membership first occurred on or before June 30, 2006. The new final average compensation is phased in so that effective January 1, 2013, the period of final average compensation is thirty-six months plus the number of whole months since January 1, 2013, not to exceed sixty months. However, the actual final average compensation to be used for benefit calculations cannot be less than the highest thirty-six consecutive or joined months of compensation earned for employment prior to January 1, 2013.

Act 529 includes provisions to comply with IRS qualification requirements. It also provides additional survivor benefits in the case of a death of a member on or after January 1, 2007, while performing military service. The system will credit the member's qualified military service as

service credit for vesting purposes and for eligibility purposes as though the member had resumed employment immediately prior to the member's death. However, the time spent by the member in qualified military service will not be used for calculation of benefit accrual purposes. The act also allows the Board to enact future changes necessary to maintain its qualified status through the Administrative Procedures Act.

**Act 717** changed the employee contribution rate effective July 1, 2012. The rate for Plan A is changed from 9.25% to not less than 9.25% nor more than 10% as determined by the board of trustees. The rate for Plan B is changed from 5% to not less than 5% nor more than 6% as determined by the board of trustees.

Act 718 increases the required educational hours for trustees from two to four hours of actuarial science information and from one to two hours of education regarding the laws and rules of the system and from one to two hours of instruction on fiduciary duty and ethics.

Act 720 created a second tier of benefits for persons employed on or after January 1, 2013 in both Plan A and Plan B. Under the act, the eligibility requirements for retirement in Plan A Tier 2 and Plan B Tier 2 are as follows: seven years or more of service, at age sixty-seven; ten years or more of service, at age sixty-seven; ten years or more of service at any age, exclusive of military service and unused annual and sick leave, actuarially reduced from the earliest age at which the member would be entitled to a vested deferred benefit under any provision if the member had continued in service to that age. The accrual rates in the new tier remain at 3% for Plan A and 2% for Plan B. Contribution rates for the new tier are set by the Board between 8% and 10% for Plan A and 4% to 6% for Plan B.

The net effect of all changes in plan benefits was to reduce the employer normal cost rate by 1.7631% in Plan A and 1.0362% in Plan B.

#### 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.

	Market Value	Actuarial Value
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%
2009	-13.8% ‡	0.9% ‡*
2010	11.0%	5.9%
2011	10.5%	4.2%
2012	-4.8% †	0.7% †
	2004 2005 2006 2007 2008 2009 2010 2011	2003       4.4%         2004       9.6%         2005       7.2%         2006       8.6%         2007       18.1% ‡         2008       1.1%         2009       -13.8% ‡         2010       11.0%         2011       10.5%

		Market Value	Actuarial Value
PLAN B	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%
	2009	-13.7% ‡	0.9% **
	2010	10.9%	5.8%
	2011	10.5%	4.2%
	2012	-4.7% †	1.0% †

- \* Includes the effect of a change in asset valuation method.
- ‡ Includes the impact of inclusion of the prior period adjustment for investment income as income in fiscal year.
- † Based upon asset values which include an unaudited "best estimate" of the value of a receivable related to the FIA Leveraged Fund

The market rate of return gives a measure of investment return on a total return basis and includes realized and unrealized capital gains and losses as well as interest income. This rate of return gives an indication of performance for an actively managed portfolio where securities are bought and sold with the objective of producing the highest total rate of return. During 2012, the fund earned \$15,810,173 of dividends and interest and other recurring income for Plan A and \$3,311,344 for Plan B. Net income was decreased by realized and unrealized capital losses of \$45,297,722 for Plan A and \$9,452,810 for Plan B and further reduced by net investment expenses of \$2,971,392 for Plan A and \$683,002 for Plan B. The geometric mean of the market value rates of return measured over the last ten years was 4.8% for Plan A and 4.7% for Plan B. Over the last twenty years, these rates were 6.2% for Plan A and 6.0% for Plan B.

The actuarial rate of return is presented for comparison to the assumed long-term rate of return used for the valuation. The assumed long-term rate of return is 7.75% as of June 30, 2012, which represents a change from the 8% assumption used prior to June 30, 2012. 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 assets due to actuarial smoothing. Investment income used to calculate this yield is based upon a smoothing of gains or losses over a five-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. Beginning June 30, 2012, yields in excess of the 7.75% assumption will reduce future costs; yields below 7.75% will increase future costs. (For the period prior to June 30, 2012, yields in excess of the 8% assumption reduced future costs; yields below 8% increased future costs.) In addition to the smoothing of investment returns above or below the assumed rate of return, 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. For fiscal 2012, Plan A experienced net actuarial investment earnings of \$52,432,659 less than the actuarial assumed earnings rate of 8%. Plan B experienced net actuarial investment earnings of \$10,697,584 less than the actuarial assumed earnings rate of 8%. These actuarial losses increased the normal cost accrual rate by 4.3950% and 2.1944% 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 that have not been addressed in previous transfers of assets and liabilities between the Plan A and Plan B trust funds pursuant to the provisions of R.S. 11: 1862(F). In the course of reviewing data for the June 30, 2012 valuation we found two members of Plan A and no members of Plan B with such service and recommend a transfer of \$1.668 be made from the Plan B trust to the Plan A trust for fiscal 2012.

#### 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 10.26 years of service and an annual salary of \$33,362. The Plan's active membership decreased during the fiscal year by 8 members. The plan experienced an increase in the active plan population of 56 members between 2007 and 2012. Review of the active census by age indicates that over the last ten years the population in the thirty through fifty age group has decreased while the proportion of active members over-fifty increased. The population percentage under age 30 has remained constant. Over the same ten-year period the plan showed a decrease in the percentage of members with between five and fifteen years of service; the percentage of members with service under five years and over twenty-five years has increased.

The average regular retiree is 70 years old with a monthly benefit of \$1,452. The number of retirees and beneficiaries receiving benefits from the system increased by 39 during the fiscal year. Over the last five years the number of retirees has increased by 319; during this same period, annual benefits in payment increased by \$11,245,215.

Plan liability experience for fiscal 2012 was favorable. The primary factor contributing to the experience gain was salary increases below projected levels. In addition, withdrawals and deaths were above projected levels. All of these factors tend to reduce costs. These factors were partially offset by retirements and drop entries above projected levels. The net effect of all of these elements was a decrease in costs. Plan liability experience gains decreased the normal cost accrual rate by 1.2651%.

#### 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 9.72 years of service and an annual salary of \$30,817. The Plan's active membership decreased during the fiscal year by 20 members. Over the last five years the active population increased by 2 members. A review of the active census by age indicates that over the last ten years the population in the under 50 age group has decreased while the proportion of active members over age 50 has increased. Over the same ten-year period the system showed an increase in the percentage of members with service of five to ten years and a decrease in the percentage of members with service between ten and fifteen years.

The average regular retiree is 73 years old with a monthly benefit of \$882. The number of retirees and beneficiaries receiving benefits from the system increased by 14. Over the last five years this group increased by 85; during this same period, annual benefits in payment increased by \$1,597,100.

Plan liability experience for fiscal 2012 was favorable. The primary factor contributing to the liability experience gain for the year was salary increases below projected levels. In addition, retiree deaths were above projected levels. These factors tend to reduce costs. Partially offsetting these factors were DROP entries above projected levels. Retirements and disabilities were at projected levels. The net effect of all of these factors was a decrease in costs. Plan liability experience gains decreased the normal cost accrual rate by 0.4801%.

#### 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 accuarial 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 2013 as of July 1, 2012, is \$29,655,906. The amortization payment on the plan's frozen unfunded actuarial accrued liability as of July 1, 2012, is \$5,696,738. 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 15 of Exhibit I, the total actuarially required contribution for fiscal 2013 is \$37,573,585. When this amount is reduced by projected tax contributions and revenue sharing funds the resulting employers' net direct actuarially required contribution for fiscal 2013 is \$32,184,990. This is 18.67% of the projected Plan A payroll for fiscal 2013.

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 2012	17.3108%
Factors Increasing the Normal Cost Accrual Rate:	
Asset Experience Loss	4.3950%
Change in Assumptions	0.9465%
Contribution Loss	0.1222%
Factors Decreasing the Normal Cost Accrual Rate:	
Change in Benefits	-1.7631%
Liability Experience	-1.2651%
New Members	-0.8790%
Normal Cost Accrual Rate – Fiscal 2013	18.8673%

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 2013 as of July 1, 2012, is \$6,867,837. The amortization payment on the plan's frozen unfunded actuarial accrued liability as of July 1, 2012, is \$573,126. 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 15 of Exhibit XII, the total actuarially required contribution for fiscal 2013 is \$8,071,443. When this amount is reduced by projected tax contributions and revenue sharing funds the resulting employers' net direct actuarially required contribution for fiscal 2013 is \$5,935,137. This is 8.72% of the projected Plan B payroll for fiscal 2013.

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

Normal Cost Accrual Rate – Fiscal 2012	10.2853%
Factors Increasing the Normal Cost Accrual Rate:	
Asset Experience Loss	2.1944%
Change in Assumptions	0.4928%
Contribution Loss	0.0421%
Factors Decreasing the Normal Cost Accrual Rate:	
Changes in Benefits	-1.0362%
Liability Experience	-0.4801%
New Members	-0.3900%
Normal Cost Accrual Rate – Fiscal 2013	11.1083%

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 2013, the net effect of the change in payroll on amortization costs was an increase of 0.01% of payroll for Plan A; and a reduction of 0.05% for Plan B. 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 2013 will increase by 0.04% as a percent of payroll in Plan A and will increase by 0.04% of payroll in Plan B. Although the actuarially required net direct employer contribution rate for Plan A for fiscal 2013 is 18.67%, the actual employer contribution rate for fiscal 2013 is 17.00% of payroll. After accounting for the anticipated contribution shortfall in fiscal 2013 and rounding the result to the nearest 0.25% as required by R. S. 11:103, we recommend a minimum net direct employer contribution rate of 19.00% for fiscal 2014 for Plan A. Although the actuarially required net direct employer contribution rate for Plan B for fiscal 2013 is 8.72%, the actual employer contribution rate for fiscal 2013 is 8.00% of payroll. After accounting for the anticipated contribution shortfall in fiscal 2013 and rounding the result to the nearest 0.25% as required by R.S. 11:103, we recommend a minimum net direct employer contribution rate of 8.75% for fiscal 2014 for Plan B.

Both Plan A and Plan B have Funding Deposit Account Credit Balances. Since no contribution deposits or withdrawals were made to the accounts during fiscal 2012, the outstanding balances were credited with interest at the valuation interest rate. Funds in these accounts may be used to reduce the outstanding unfunded accrued liability, reduce the future normal costs or reduce contributions for specified fiscal years.

Due to the unavailability of an unqualified audit report for this valuation, our ability to determine with certainty the actuarially required contribution to the Fund is limited. It should be noted that any substantial reduction to the value of receivables given on the statement of assets may result in a significant increase in future contributions.

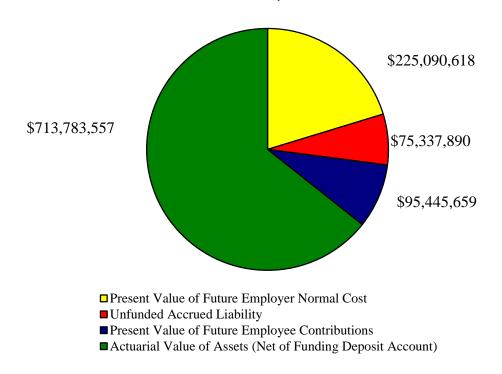
Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions, changes in economic or demographic assumptions, completion of amortization payments or credit schedules, and changes in plan provisions or applicable law. Analysis of the effect of all these factors is beyond the scope of this report. We have, however, calculated the sensitivity of the plans' costs to two factors. First, we have determined that based on current assets and demographics, for each percentage earnings in a single year under (or over) the assumed rate of return on the actuarial value of assets, there will be a corresponding increase (or reduction) in the normal cost accrual rate of 0.60% for Plan A, and 0.32% for Plan B. We have also determined that a 1% reduction in the valuation interest rate for each Plan would increase the actuarially required contribution rate for fiscal 2012 by 8.94% in Plan A and 4.92% in Plan B. Please note that the above results are only intended to serve as an illustration of the impact of a change in the valuation interest rate. Any actual change in the valuation interest rate should only be effected with a review of all other plan assumptions.

Notwithstanding recent contribution increases, a significant portion of investment losses incurred in fiscal 2009 have not yet been released into the actuarial value of assets due to the current asset smoothing methodology. These losses will be released over the next year. In addition, investment losses for fiscal 2012 can also be expected to put upward pressure on costs for several years.

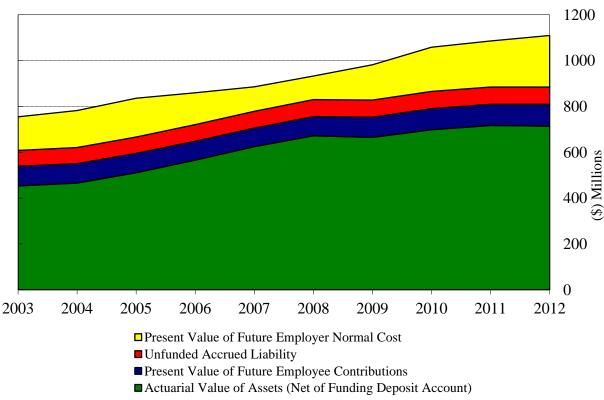
#### **COST OF LIVING INCREASES**

During fiscal 2012 the actual cost of living (as measured by the US Department of Labor CPI-U) increased by 1.66%. 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 30th of the initial year of such increase. The provisions of this subpart do not repeal provisions relative to cost of living adjustments contained within the individual laws governing systems; however, they are to be controlling in cases of conflict. All of the above provisions require that the system earn sufficient excess interest earnings to fund the increases. In addition, the ratio of the plan's assets to benefit obligations must meet the criteria established in R.S. 11:242. This section sets forth a minimum "target ratio" of the actuarial value of assets to the Pension Benefit Obligation. We have determined that for fiscal 2012, neither plan met the target ratio. In addition, neither plan had excess interest earnings; hence no cost of living increase is payable to regular retirees.

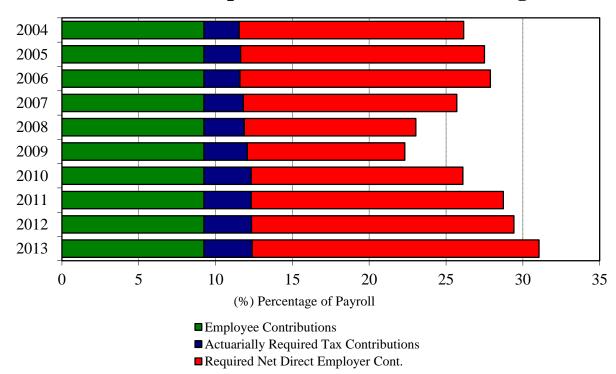
Plan A - Components of Present Value of Future Benefits June 30, 2012



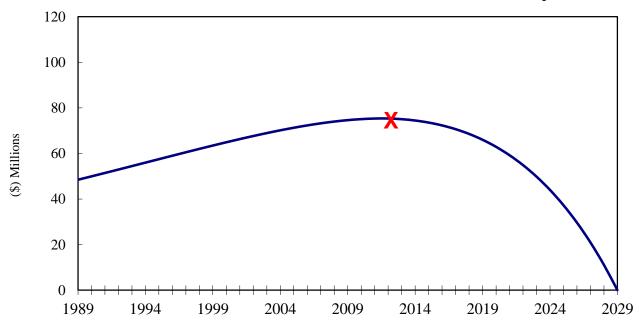
Plan A - Components of Present Value of Future Benefits



Plan A - Components of Actuarial Funding

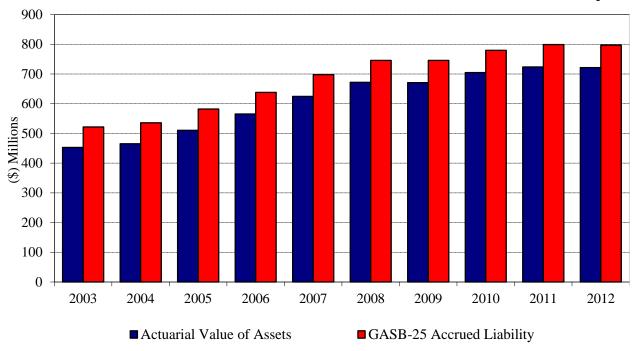


Plan A – Frozen Unfunded Accrued Liability

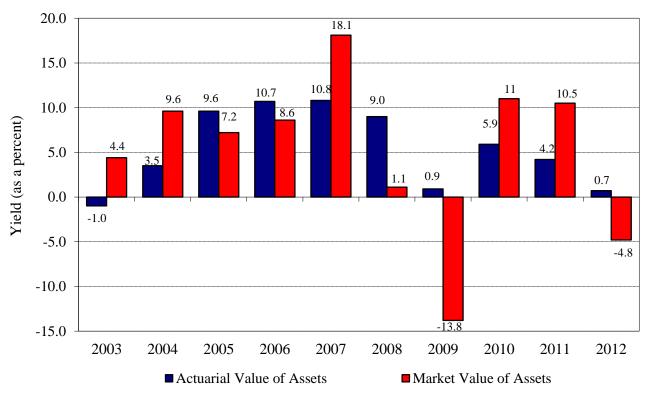


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Plan A
Actuarial Value of Assets vs. GASB-25 Accrued Liability

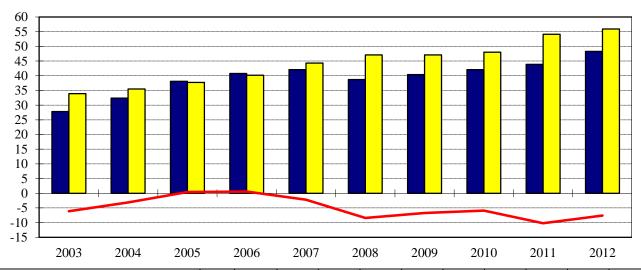


Plan A – Historical Asset Yield



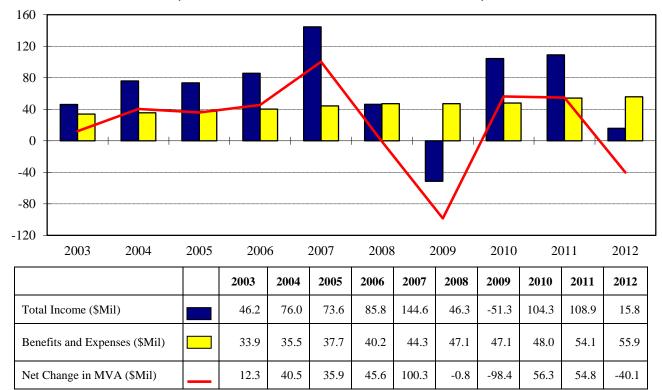
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Plan A - Net Non-Investment Income



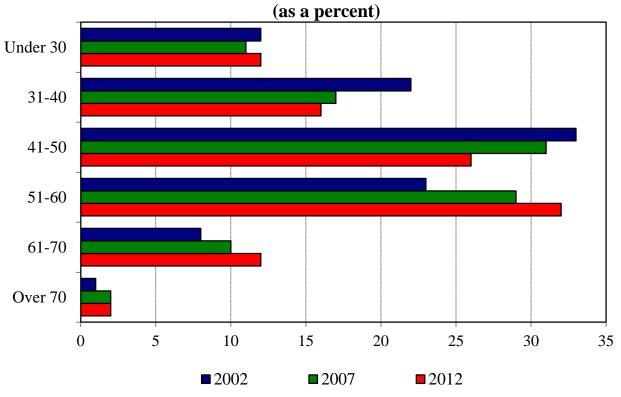
		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Non-Investment Income (\$Mil)		27.8	32.4	38.1	40.8	42.1	38.7	40.4	42.1	43.9	48.3
Benefits and Expenses (\$Mil)		33.9	35.5	37.7	40.2	44.3	47.1	47.1	48.0	54.1	55.9
Net Non-Investment Income (\$Mil)	_	-6.1	-3.1	0.4	0.6	-2.2	-8.4	-6.7	-5.9	-10.2	-7.6

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

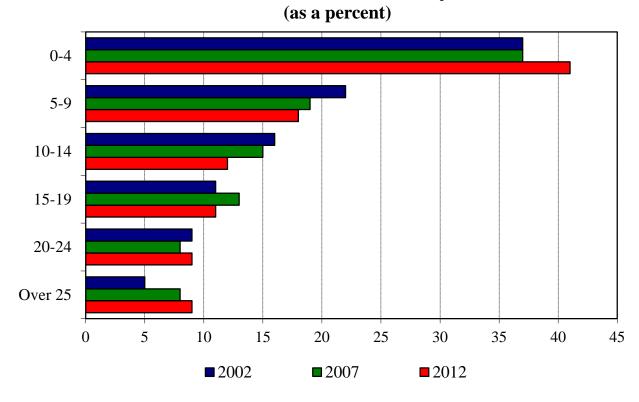


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Plan A - Active - Census By Age

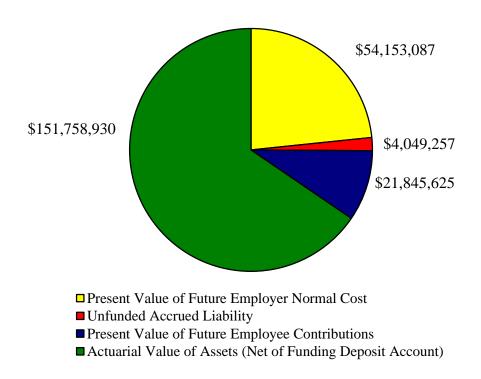


Plan A - Active - Census By Service

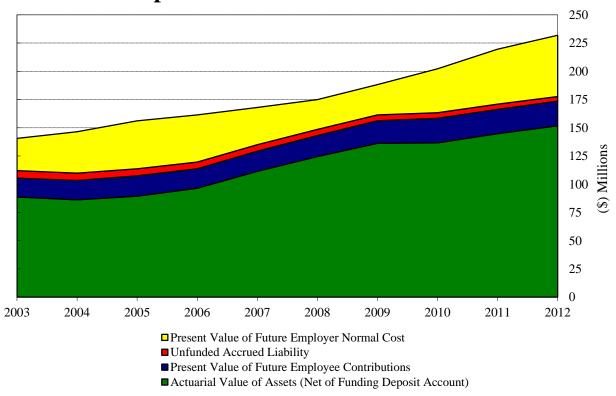


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Plan B - Components of Present Value of Future Benefits June 30, 2012

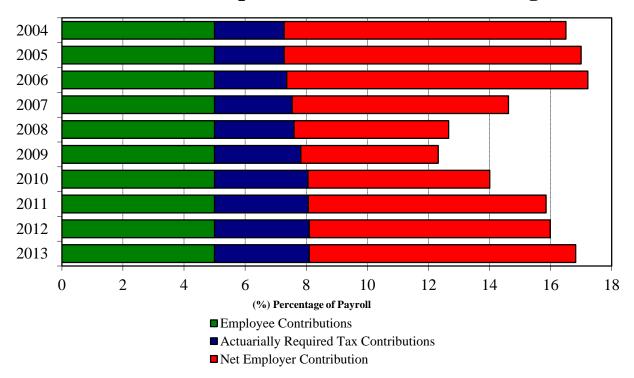


**Plan B - Components of Present Value of Future Benefits** 

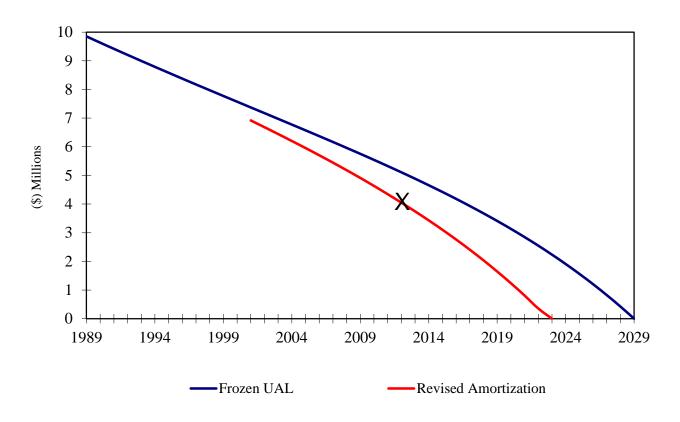


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**Plan B - Components of Actuarial Funding** 

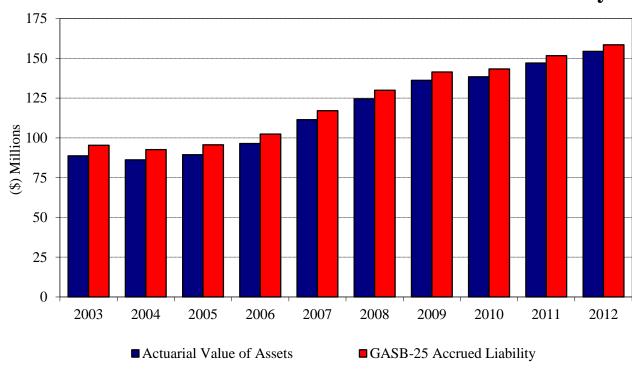


Plan B – Frozen Unfunded Accrued Liability

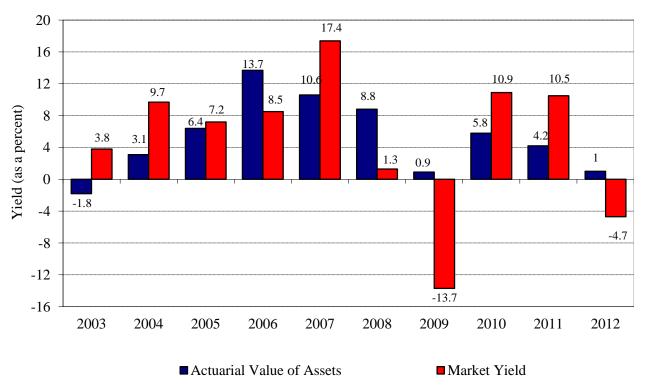


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Plan B
Actuarial Value of Assets vs. GASB-25 Accrued Liability

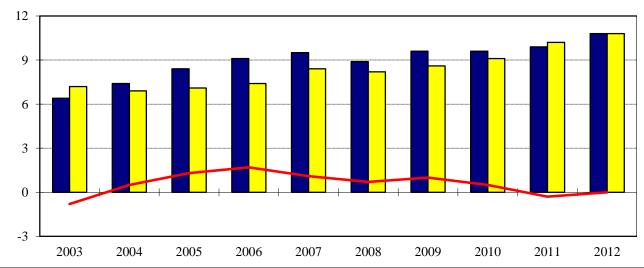


Plan B – Historical Asset Yield



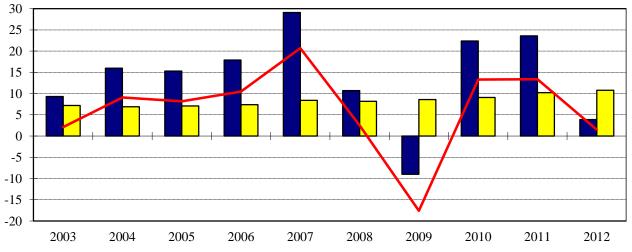
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Plan B - Net Non-Investment Income



	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Non-Investment Income (\$Mil)	6.4	7.4	8.4	9.1	9.5	8.9	9.6	9.6	9.9	10.8
Benefits and Expenses (\$Mil)	7.2	6.9	7.1	7.4	8.4	8.2	8.6	9.1	10.2	10.8
Net Non-Investment Income (\$Mil)	-0.8	0.5	1.3	1.7	1.1	0.7	1.0	0.5	-0.3	0.0

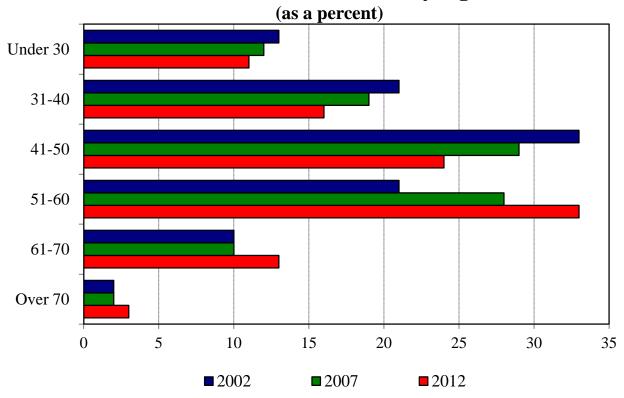
Plan B - Total Income vs. Expenses (Based on Market Value of Assets)



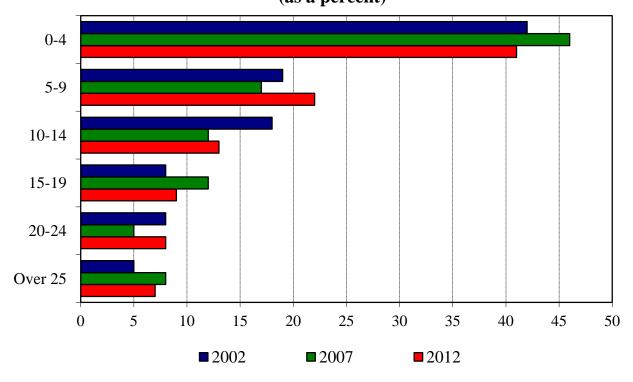
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Total Income (\$Mil)	9.3	16.0	15.3	17.9	29.1	10.7	-9.0	22.4	23.6	3.9
Benefits and Expenses (\$Mil)	7.2	6.9	7.1	7.4	8.4	8.2	8.6	9.1	10.2	10.8
Net Change in MVA (\$Mil)	2.1	9.1	8.2	10.5	20.7	2.5	-17.6	13.3	13.4	1.5

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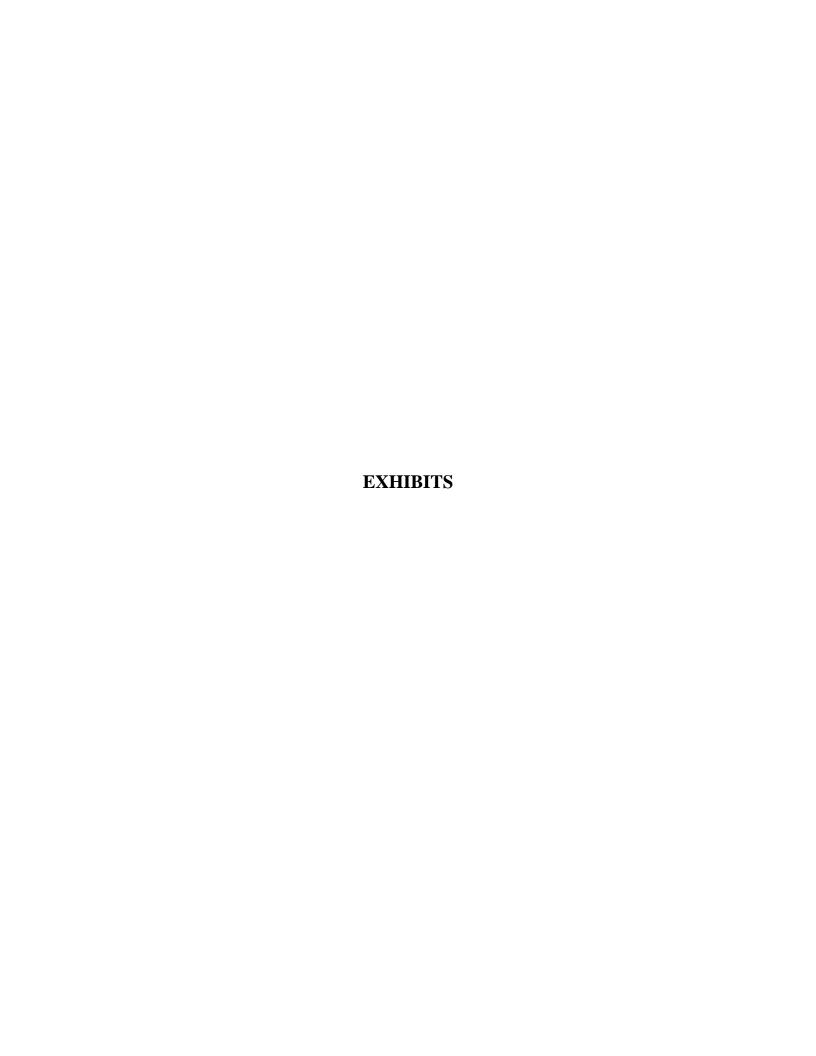
Plan B - Active - Census By Age



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



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

1. 2. 3. 4. 5. 6.	Present Value of Future Benefits	\$1 \$ \$ \$ \$	75,337,890 721,475,280 95,445,659 7,691,723 225,090,618
7.	Present Value of Future Salaries	\$ 1	1,193,019,251
8.	Employer Normal Cost Accrual Rate (6 ÷ 7)		18.867308%
9.	Projected Fiscal 2013 Salary for Current Membership	\$	157,181,436
10.	Employer Normal Cost as of July 1, 2012 (8 x 9)	\$	29,655,906
11.	Amortization Payment on Frozen Unfunded Accrued Liability of \$75,337,890 with Payments increasing at 4.25% per year	\$	5,696,738
12.	Total Employer Normal Cost & Amortization Payment (10 + 11)	\$	35,352,644
13.	Employer Normal Cost and Amortization Payment Interest Adjusted for Midyear Payment	\$	36,696,998
14.	Estimated Administrative Cost for Fiscal 2013	\$	876,587
15.	Gross Employer Actuarially Required Contribution for Fiscal 2013 (13 + 14)	\$	37,573,585
16.	Projected Ad Valorem Tax Contributions for Fiscal 2013	\$	5,273,506
17.	Projected Revenue Sharing Funds for Fiscal 2013	\$	115,089
18.	Net Direct Employer Actuarially Required Contribution for Fiscal 2013 (15 - 16 - 17)	\$	32,184,990
19.	Projected Payroll (July 1, 2012 through June 30, 2013)	\$	172,369,276
20.	Employers Minimum Net Direct Actuarially Required Contribution as a % of Projected Payroll for Fiscal 2013 (18 ÷19)		18.67%
21.	Actual Employer Contribution Rate for Fiscal 2013		17.00%
22.	Contribution Shortfall (Excess) as a % of Payroll (20 - 21)		1.67%
23.	Increase (Reduction) to Following Year Payment for Contribution Shortfall (Excess)		0.22%
24.	Minimum Recommended Net Direct Employer Contribution Rate for Fiscal 201 (20 + 23, Rounded to nearest 0.25%)	14	19.00%

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

### Present Value of Future Benefits for Active Members:

Retirement Benefits  Survivor Benefits  Disability Benefits  Vested Deferred Termination Benefits  Contribution Refunds	\$ 616,139,2 10,766,1 7,605,9 12,471,6 19,004,8	123 970 512	
TOTAL Present Value of Future Benefits for Active Members		\$	665,987,771
Present Value of Future Benefits for Terminated Members:			
Terminated Vested Members Due Benefits at Retirement Terminated Members with Reciprocals	\$ 14,858,3	357	
Due Benefits at Retirement	718,0	068	
Terminated Members Due a Refund	2,075,9		
TOTAL Present Value of Future Benefits for Terminated Member	ers	\$	17,652,338
Present Value of Future Benefits for Retirees:			
Regular Retirees	\$ 358,715,6	543	
Disability Retirees	18,010,8		
Survivors & Widows	45,537,4		
Reserve for Accrued Retiree DROP Account Balances	3,753,6		
TOTAL Present Value of Future Benefits for Retirees & Survivo	ors	\$	426,017,615
TOTAL Present Value of Future Benefits		\$	1,109,657,724

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

Current Assets:			
Cash\$	7,977,877		
Accrued Alternative Investments	5,618,851		
Accrued Interest and Dividends on Investments	433,790		
Contributions Receivable from Employers	2,458,313		
Contributions Receivable from Members	1,255,775		
Other Receivables	154,780		
Due From Plan B	50,324		
Due From Plan B (accrued)	1,668		
Investment Receivable	34,898,358		
TOTAL CURRENT ASSETS		\$	52,849,736
Property Plant & Equipment		\$	642,848
Mitigation Bank Capitalized Project Costs		\$	375,030
Prepaid Expense		\$	65,066
Other Assets		\$	248
Investments:			
Co-Mingled Funds \$ 1	28,150,761		
Common Stock	13,669,862		
Limited Partnerships	01,275,414		
Cash Equivalents	66,564,715		
Mitigation Credits	39,320,881		
Mutual Fund – Equities	38,322,069		
Mutual Fund – Fixed Income	28,496,012		
Limited Liability Companies	22,064,566		
Bonds	20,668,407		
Real Estate-Mitigation Banks and LLC	19,575,179		
Notes Receivable	14,844,603		
Line of Credit	13,575,020		
Convertible Notes	2,391,576		
TOTAL INVESTMENTS	, , , , , , , , , , , , , , , , , , ,	\$ 6	508,919,065
TOTAL ASSETS			562,851,993
		Ψ.	302,001,550
Current Liabilities:	004450		
Accounts Payable\$	984,158		
Other Payables	561,586		
Refunds Payable	435,010		
Long-Term Mitigation Liability	408,408		
Obligations under Securities Lending Program	163,120		
Investment Payable	56,880		
TOTAL CURRENT LIABILITIES		\$	2,609,162
OTHER CONTROLLING INTEREST		\$ (	21,033,313)
MARKET VALUE OF ASSETS		\$ (	639,209,518

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

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

Fiscal year 2012	\$	(86,502,955) 15,459,113
Fiscal year 2010		16,842,738
Fiscal year 2009		(144,474,440)
Fiscal year 2008	_	(45,633,930)
Total for five years	\$	(244,309,474)
Deferral of excess (shortfall) of invested income:		
Fiscal year 2012 (80%)	\$	(69,202,364)
Fiscal year 2011 (60%)		9,275,468
Fiscal year 2010 (40%)		6,737,095
Fiscal year 2009 (20%)		(28,894,888)
Fiscal year 2008 (0%)		0
Total deferred for year	\$	(82,084,689)
	Ф	<20.200.510
Market value of plan net assets, end of year	\$	639,209,518
Preliminary actuarial value of plan assets, end of year	\$	721,294,207
Actuarial value of assets corridor		
85% of market value, end of year	\$	543,328,090
115% of market value, end of year		735,090,946
110 /v of market value, end of year	Ψ	755,070,710
Allocated Chair of the Evinence Fried	φ	101.072
Allocated Share of the Expense Fund	<b>Þ</b>	181,073
Final actuarial value of plan net assets plus allocated share of the expense fund	\$	721,475,280

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

Employee Contributions to the Annuity Savings Fund	\$ 95,445,659
Employer Normal Contributions to the Pension Accumulation Fund	225,090,618
Employer Amortization Payments to the Pension Accumulation Fund	75,337,890
Funding Deposit Account Credit Balance	(7,691,723)
TOTAL PRESENT VALUE OF FUTURE CONTRIBUTIONS	\$ 388,182,444

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

Prior Year Frozen Unfunded Accrued Liability	\$	75,313,546
Interest on Frozen Unfunded Accrued Liability		
Employer Normal Cost for Prior Year		
Interest on the Normal Cost		
Administrative Expenses		
Interest on Expenses 44,556		
Credit to Funding Deposit Account		
TOTAL Increases to Frozen Unfunded Accrued Liability	\$	35,938,837
C P I F I C ( 'I ('		
Gross Regular Employer Contributions		
Interest on Employer Contributions 1,299,507		
Contribution Shortfall (Excess)		
Interest on Contribution Shortfall (Excess)		
MOTAL D	ф	25 01 4 402
TOTAL Decreases to Frozen Unfunded Accrued Liability	\$	35,914,493
CURRENT YEAR FROZEN UNFUNDED ACCRUED LIABILITY	\$	75,337,890

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

Actuarial Value of Assets (June 30, 2011)		<b>\$</b> <b>\$</b>	723,942,801 (50)
Income:  Member Contributions  Employer Contributions  Ad Valorem Taxes  Revenue Sharing Funds  Irregular Contributions  Due from Plan B (accrued)	\$ 14,398,103 27,971,336 5,038,180 115,419 727,819 1,668		
Total Contribution Income	 	\$	48,252,525
Net Appreciation in Fair Value of Investments  Interest and Dividend Income Income from Alternative Investments Securities Lending Investment Income Allocated from Expense Fund Net appreciation attributable to non-controllable interest Investment Expense	(44,160,336) 4,156,934 11,511,317 141,922 526 (1,137,386) (2,971,392)		
Net Investment Income	 	\$	(32,458,415)
TOTAL Income	 	\$	15,794,110
Expenses:			
Retirement Benefits DROP Disbursements Refunds of Contributions Funds Transferred to Another System Transfer of Funds from Plan B Allocated Share of Administrative Expenses Depreciation	\$ 45,356,979 5,290,672 3,765,929 1,200,555 (844,807) 1,107,702 28,044		
TOTAL Expenses	 	\$	55,905,074
Net Market Income for Fiscal 2012 (Income - Expenses)	 	\$	(40,110,964)
Adjustment for Change in Allocated Expense Fund Balance	 	\$	2,433
Adjustment for Actuarial Smoothing	 	\$	37,641,060
Actuarial Value of Assets (June 30, 2012)	 	\$	721,475,280

### EXHIBIT VII PLAN A: FUND BALANCE

Present Assets of the System Creditable to:

Annuity Savings Fund	\$ 108,959,487
Annuity Reserve Fund	422,263,952
Pension Accumulation Fund	74,422,220
Deferred Retirement Option Plan Account	25,872,136
Funding Deposit Account	7,691,723
NET MARKET VALUE OF ASSETS	\$ 639,209,518
ADJUSTMENT FOR ACTUARIAL SMOOTHING	82,084,689
ALLOCATED SHARE OF THE EXPENSE FUND	181,073
ACTUARIAL VALUE OF ASSETS	\$ 721,475,280

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

Present Value of Credited Projected Benefits Payable to Current Employees	\$ 467,608,259
Present Value of Benefits Payable to Terminated Employees	17,652,338
Present Value of Benefits Payable to Current Retirees and Beneficiaries	426,017,615
TOTAL PENSION BENEFIT OBLIGATION	\$ 911,278,212
TOTAL ACTUARIAL VALUE OF ASSETS	\$ 721,475,280
Ratio of Net Actuarial Value of Assets to Pension Benefit Obligation	79.17%

# **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:		30.29%
	Adjustments in Funded Ratio Due to Changes in Assumption(s):		
3.	Changes for Fiscal 1988		(0.89%)
	Changes for Fiscal 1988 Changes for Fiscal 1989 Changes for Fiscal 1995 Changes for Fiscal 1997 Changes for Fiscal 2000 Changes for Fiscal 2003 Changes for Fiscal 2005 Changes for Fiscal 2006 Changes for Fiscal 2009 Changes for Fiscal 2010 Changes for Fiscal 2010 Changes for Fiscal 2012	(3.98%) 1.52% 0.78% 1.72% 1.69% 0.54% (0.27%) (0.00%) (0.53%) (0.57%) 0.19% 0.00%	
4.	TOTAL Amortization of Adjustments		1.09%
5.	Target Ratio for Current Fiscal Year (Lesser of 1+2+3+4 or 100%).		95.54%
6.	Actuarial Value of Assets Divided by PBO as of June 30, 2012		79.17%

### EXHIBIT X PLAN A: CENSUS DATA

		Terminated with Funds			
	Active	on Deposit	DROP	Retired	Total
Number of members as of					
June 30, 2011	4,785	2,768	244	3,001	10,798
Additions to Census					
Initial membership	634	32			666
Death of another member				44	44
Omitted in error last year				1	1
Adjustment for multiple records					
Change in Status during Year					
Actives terminating service	(124)	124			
Actives who retired	(102)			102	
Actives entering DROP	(99)		99		
Term. members rehired	27	(27)			
Term. members who retire		(9)		9	
Retirees who are rehired					
Refunded who are rehired	12				12
DROP participants retiring			(47)	47	
DROP returned to work	37		(37)		
Eliminated from Census					
Refund of contributions	(394)	(74)			(468)
Deaths	(12)	(1)		(142)	(155)
Included in error last year				(17)	(17)
Suspended Benefits					
Adjustment for multiple records	(2)			(5)	(7)
Number of members as of					
June 30, 2012	4,762	2,813	259	3,040	10,874

PLAN A - ACTIVES CENSUS BY AGE:

Age	Number Male	Number Female	Total Number	Average Salary	Total Salary
16 - 20	19	0	19	21,417	406,918
21 - 25	180	65	245	22,542	5,522,877
26 - 30	227	122	349	26,659	9,303,994
31 - 35	239	132	371	28,748	10,665,476
36 - 40	270	157	427	30,340	12,955,039
41 - 45	378	201	579	33,483	19,386,495
46 - 50	478	243	721	34,670	24,997,015
51 - 55	561	292	853	35,866	30,594,001
56 - 60	512	236	748	36,612	27,385,780
61 - 65	291	138	429	38,001	16,302,366
66 - 70	134	50	184	37,722	6,940,923
71 - 75	55	12	67	30,588	2,049,387
76 - 80	13	7	20	32,291	645,820
81 - 85	5	3	8	38,282	306,259
86 - 90	0	1	1	49,200	49,200
TOTAL	3,362	1,659	5,021	33,362	167,511,550

THE ACTIVE CENSUS INCLUDES 2,066 ACTIVES WITH VESTED BENEFITS, INCLUDING 259 DROP PARTICIPANTS AND 179 ACTIVE FORMER DROP PARTICIPANTS.

PLAN A - TERMINATED MEMBERS DUE A DEFERRED RETIREMENT BENEFIT:

		Number	Number	Total	<b>Average</b>	Total
Ag	re	Male	<b>Female</b>	Number	Benefit	Benefit
31 -	35	1	1	2	14,751	29,501
36 -	40	5	1	6	9,421	56,523
41 -	45	9	8	17	12,000	204,000
46 -	50	24	15	39	13,740	535,854
51 -	55	27	28	55	13,718	754,469
56 -	60	33	19	52	16,088	836,598
61 -	65	3	0	3	14,094	42,281
66 -	70	2	2	4	3,376	13,503
71 -	75	2	1	3	3,157	9,470
TOT	'AL	106	75	181	13,714	2,482,199

PLAN A - TERMINATED MEMBERS DUE A REFUND OF CONTRIBUTIONS:

Contribu	tion	ns Ranging		Total
From		To	Number	Contributions
0	-	99	1,849	103,856
100	_	499	337	83,271
500	-	999	120	84,143
1000	_	1999	104	147,966
2000	_	4999	88	286,144
5000	-	9999	63	445,192
10000	-	19999	54	743,294
20000	-	99999	17	544,639
		TOTAL	2,632	2,438,505

PLAN A - REGULAR RETIREES:

	Number	Number	Total	Average	Total
Age	Male	Female	Number	Benefit	Benefit
41 - 45	1	2	3	26,054	78,163
46 - 50	30	8	38	21,964	834,613
51 - 55	86	54	140	23,918	3,348,495
56 - 60	150	55	205	25,721	5,272,853
61 - 65	252	110	362	21,020	7,609,198
66 - 70	306	120	426	15,936	6,788,544
71 - 75	291	112	403	15,858	6,390,630
76 - 80	222	69	291	14,089	4,099,991
81 - 85	148	52	200	12,930	2,586,004
86 - 90	64	31	95	10,801	1,026,081
91 - 99	28	15	43	9,188	395,066
TOTAL	1,578	628	2,206	17,421	38,429,638

#### PLAN A - DISABILITY RETIREES:

	Number	Number	Total	Average	Total
Age	Male	Female	Number	Benefit	Benefit
36 - 40	2	o	2	10,668	21,335
41 - 45	4	1	5	12,002	60,009
46 - 50	9	2	11	13,568	149,243
51 - 55	18	6	24	12,429	298,300
56 - 60	40	15	55	11,462	630,392
61 - 65	27	7	34	10,890	370,245
66 - 70	19	8	27	8,748	236,204
71 - 75	14	1	15	8,751	131,264
76 - 80	4	1	5	9,054	45,270
81 - 85	1	2	3	5,073	15,220
TOTAL	138	43	181	10,815	1,957,482

#### PLAN A - SURVIVORS:

	Number	Number	Total	Average	Total
Age	Male	<b>Female</b>	Number	Benefit	Benefit
0 - 25	1	3	4	5,742	22,968
26 - 30		1	1	9,798	9,798
31 - 35	-	o	1	6,127	6,127
36 - 40		2	4	6,310	25,238
41 - 45	· —	3	6	5,441	32,648
46 - 50		22	27	7,856	212,125
51 - 55		27	30	9,575	287,238
56 - 60		41	45	8,521	383,427
61 - 65		42	45	9,411	423,485
66 - 70		73	80	9,272	741,721
71 - 75		117	126	9,907	1,248,306
76 - 80		99	101	8,433	851,695
81 - 85		100	100	10,270	1,027,004
86 - 90		50	54	7,504	405,235
91 - 99	0	29	29	5,517	160,003
TOTAL	44	609	653	8,939	5,837,018

PLAN A - ACTIVE MEMBERS:

Completed Years of Service

Total 30&0ver 12 12 12 10 25-29 3 4 4 1 0 2 1 0 2 1 0 3 1 8 1 8 1 8 3 102 102 83 1115 91 66 66 16 15-19 50 69 81 91 91 107 107 17 10-14 5-4 84778787404 N 2325111112235 0 

- AVERAGE ANNUAL SALARY OF ACTIVE MEMBERS PLAN A

Attained Ages

22, 417 22, 542 26, 559 28, 759 33, 34, 670 35, 866 35, 866 35, 866 37, 722 31, 722 Average Salary 52,330 52,699 50,927 49,683 59,587 30gover 51,694 35,820 46,820 49,234 48,714 42,454 46,551 35,320 35,345 44,065 43,952 43,156 43,499 34,996 31,869 36,089 38,089 41,782 37,137 36,578 33,404 20,870 37,747 Completed Years of Service 22,013 33,918 35,911 33,989 33,710 33,710 33,745 43,400 34,425 28,286 28,286 31,553 31,979 31,343 31,343 31,376 31 32,021 224, 330 224, 330 227, 1173 227, 1173 225, 004 235, 594 23, 554 23, 554 23, 554 23, 554 23, 655 23, 65 23,937 29,458 26,281 28,429 28,330 29,363 26,650 27,352 31,090 31,051 222,922 224,922 226,000 226,044 225,787 227,064 34,849 37,830 19,869 27,391 

PLAN A - TERMINATED MEMBERS DUE A DEFERRED RETIREMENT BENEFIT:

Years Until Retirement Eligibility

Attained Ages	0	1	7	e	4	5-9	10-14	15-19	20-24	25-29	30&0ver	Total
0 - 30												0
31 - 35										7		7
36 - 40									9			9
41 - 45								17				17
46 - 50							39					39
51 - 55						55						55
26 - 60	80	11	15	o,	Q							52
61 - 65	e											e
02 - 99	4											4
71 - 75	m											m
76 & Over												0
Totals	18	11	15	0	ø.	55	39	17	ø	77	0	181

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

					Year	s Until 1	Retirement	Years Until Retirement Eligibility	ity			
Attained Ages	0	1	7	м	4	5-9	5- 9 10-14	15-19	20-24		25-29 30&Over	Average Benefit
0 - 30 31 - 35 36 - 40 41 - 45 46 - 50 61 - 65 61 - 65 71 - 75	20,257 14,094 3,376 3,157	15,609	17,738	15,609 17,738 14,234 12,075	12,075	13,718	13,740	12,000	9,421	14,750		14,750 9,421 12,000 13,740 13,740 16,088 14,094 3,376
Average	12,628	15,609	17,738	15,609 17,738 14,234 12,075 13,718 13,740 12,000	12,075	13,718	13,740	12,000	9,421	9,421 14,750	0	13,714

PLAN A - SERVICE RETIREES:

Completed Years Since Retirement

Attained Ages	0	1	71	m	4	5- 9	10-14	15-19	20-24	25-29	30£0ver	Total
0 - 20	4	10	o,	9	ო	7	7					41
51 - 55	18	23	o,	12	24	46	80					140
26 - 60	26	19	21	19	22	85	12		1			205
61 - 65	53	62	38	30	31	93	51	N	N			362
02 - 99	33	45	32	36	26	183	26	12	3			426
71 - 75	6	16	9	13	17	130	134	51	22	e	7	403
76 - 80	4	4	5	7	7	42	80	16	36	21		291
81 - 85		m	m		7	14	33	59	09	21	9	200
06 - 98		7				o,	4	11	33	30	7	95
91 & Over						7	7	1	Ŋ	17	17	43
Totals	147	183	123	123	125	610	382	227	162	92	32	2206

PLAN A - AVERAGE ANNUAL BENEFITS PAYABLE TO SERVICE RETIREES:

Completed Years Since Retirement

Ages	0	1	9	w	4	5- 9	10-14	15-19	20-24	25-29	30£0ver	Average Benefit
0 - 50	28,322	23,608	21,166	24,969	27,144	16,035	14,713					22,263
51 - 55	34,633	28,346	25,473	24,002	21,276	20,505	12,749					23,918
26 - 60	29,249	30,820	32,704	23,354	25,332	23,623	18,584		8,000			25,721
61 - 65	19,219	19,672	20,194	23,572	17,132	23,879	21,402	20,366	6,160			21,020
04 - 99	17,304	11,267	16,275	12,102	15,900	15,397	21,246	22,703	20,226			15,936
71 - 75	13,990	16,127	17,572	16,621	11,731	14,098	15,609	19,599	22,684	15,085	8,779	15,858
76 - 80	8,214	13,430	14,231	7,024	8,199	11,929	10,727	14,756	20,528	21,136		14,089
81 - 85		10,978	15,446		11,793	12,892	11,294	11,481	13,385	16,652	18,597	12,930
06 - 98		2,485				7,002	9,800	10,054	12,173	10,666	12,731	10,801
91 & Over						4,619	12,344	6,553	11,030	8,364	9,521	9,188
Average	22,079	19,385	21,282	18,615	18,506	17,514	15,765	15,199	15,920	14,141	11,879	

PLAN A - DISABILITY RETIREES:

Completed Years Since Retirement

Total 30&0ver 25-29 14 15-19 42 10-14 11 0 41 - 45 46 - 50 51 - 55 56 - 60 61 - 65 71 - 65 76 - 70 76 - 80 81 - 85 Attained Ages

PLAN A - AVERAGE ANNUAL BENEFITS PAYABLE TO DISABILITY RETIREES:

E a a factor												
Ages	0	7	7	m	4	5-9	10-14	15-19	20-24	25-29	30&Over	Average Benefit
0 - 35												0
36 - 40			12,839				8,496					10,667
41 - 45		16,643			11,503	10,156		11,550				12,002
46 - 50	13,117	17,557			21,596		10,207	8,096				13,568
51 - 55	13,774	21,282	12,106	11,268	16,379	14,655	10,478	8,953	2,753			12,429
26 - 60	12,855	12,859	10,985	17,801	13,831	13,672	9,642	10,347	6,803	1,344		11,462
61 - 65		24,542	10,267	8,338	10,420	8,938	10,279	14,329	7,028	8,115	2,767	10,890
02 - 99						6,581	7,204	10,938	11,046	11,274	3,541	8,748
71 - 75				5,808	5,321	4,877	9,580	10,757	8,702	9,154	5,876	8,751
26 - 80						6,939		4,695	16,440		10,257	9,054
81 - 85								5,992	4,614			5,073
86 & Over												0
Average	13,118	17,614	11,241	10,804	13,869	11,362	9,498	10,835	7,934	7,472	5,610	10,815

PLAN A - SURVIVING BENEFICIARIES OF FORMER MEMBERS:

					Comp	leted Yea	rs Since	Completed Years Since Retirement	11			
Attained Ages	0	1	N	<i>e</i>	41	5-9	10-14	15-19	20-24	25-29	30£0ver	Total
,					,	,						•
02 - 20	7				7	7	7					41 (
25 - 25						•						0 -
1			7			•						1 1
36 - 40	7		ſ			N		7				4
41 - 45		1	. 1			N	1				1	6
46 - 50			1		1	10	7	3	N	1	7	27
51 - 55	1	e	7		7	80	10	4	4	N		30
26 - 60			7	04	7	14	11	8	6	1		45
61 - 65	7	1		7	7	12	12	4	89	4		45
02 - 99		7		4	n	18	18	19	Q	7		80
71 - 75		1	1	m	4	23	28	30	23	o)	4	126
26 - 80				1	1	m	19	25	25	19	8	101
81 - 85		1				10	es	13	33	29	11	100
06 - 98	7						1	7	12	25	14	54
91 & Over										7	22	29
Totals	9	o,	7	11	14	104	106	108	122	104	62	653

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

			•		Com	leted Yea	ars Since	Completed Years Since Retirement	ĭt			
Attained Ages	0	1	7	т	4	5- 9	10-14	15-19	20-24	25-29	30&Over	Average Benefit
0 - 20	6,027				5,620	868'9	4,422					5,742
21 - 25												0
26 - 30						9,798						9,798
31 - 35			6,127									6,127
36 - 40	11,084					3,449		7,255				6,309
41 - 45		5,202	6,127			8,135	4,227				821	5,441
46 - 50					9,715	10,256	8,191	5,955	2,337	4,849	821	7,857
51 - 55		14,162			7,339	12,931	8,593	6,210	3,666	5,734		9,575
26 - 60				8,679	4,665	11,010	9,406	6,499	4,534	4,925		8,521
61 - 65	15,698	25,698		9,492	8,687	8,911	13,521	7,503	4,432	3,390		9,411
02 - 99		11,109		12,413	7,604	10,986	11,264	8,213	5,419	5,958		9,272
71 - 75		8,510	9,167	7,709	9,278	11,188	10,276	10,541	806'6	6,443	5,809	9,907
76 - 80				5,547	6,360	4,194	8,596	8,727	9,611	8,944	4,435	8,433
81 - 85		4,046				15,553	9,114	10,401	10,208	10,275	6,366	10,270
06 - 98	8,523						3,637	8,169	8,093	9,034	4,424	7,504
91 & Over										7,218	4,976	5,517
Average	12,986	12,018	9,485	9,562	7,832	10,866	9,995	8,943	8,467	8,450	4,881	8,939

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

Number of Active Members Number of Retirees and Survivors Number Terminated Due Deferred Benefits Number Terminated Due Refund		Fiscal 2012 5,021 3,040 181 2,632		Fiscal 2011 5,029 3,001 174 2,594		Fiscal 2010 5,068 2,907 183 2,590		Fiscal 2009 5,052 2,861 172 2,596
Active Lives Payroll	\$	167,511,550	\$	164,262,655	\$	162,546,523	\$	157,082,727
Retiree Benefits in Payment	\$	46,224,138	\$	44,218,709	\$	41,527,971	\$	39,834,118
Market Value of Assets	\$	639,209,518	\$	679,285,361	\$	624,427,505	\$	568,167,813
Ratio of Actuarial Value of Assets to Actuarial Accrued Liability		90.55%		90.58%		90.37%		89.99%
Actuarial Accrued Liability (As defined by GASB– 25)	\$	796,813,170	\$	799,256,347	\$	779,800,094	\$	745,526,637
Actuarial Value of Assets	\$	721,475,280	\$	723,942,801	\$	704,735,602	\$	670,910,030
Unfunded Actuarial Accrued Liability	\$	75,337,890	\$	75,313,546	\$	75,064,492	\$	74,616,607
Present Value of Future Employer Normal Cost	\$	225,090,618	\$	201,003,138	\$	192,786,430	\$	154,002,240
Present Value of Future Employee Contributions	\$	95,445,659	\$	92,535,571	\$	92,383,724	\$	88,362,181
Funding Deposit Account Credit Balance	\$	7,691,723	\$	7,121,966	\$	6,594,413	\$	6,105,938
Present Value of Future Benefits	\$1	1,109,657,724	\$1	,085,673,090	\$1	1,058,375,835	\$	981,785,120
************	**	******	**	*******	**	******	**	******
		Fiscal 2013		Fiscal 2012		Fiscal 2011		Fiscal 2010
Employee Contribution Rate		9.25%		9.25%		9.25%		9.25%
Proj. Tax Contribution as % of Projected Payroll		3.13%		3.09%		3.07%		3.07%
Actuarially Req'd Net Direct Employer Cont. Rate		18.67%		17.08%		16.41%		13.78%
Actual Employer Direct Contribution Rate		17.00%		16.75%		14.25%		13.50%

	5,030 2,794 184 2,561		Fiscal 2007 4,965 2,721 209 2,553		Fiscal 2006 5,109 2,588 179 2,148		Fiscal 2005 5,289 2,512 186 2,263		Fiscal 2004 5,325 2,448 193 2,266		Fiscal 2003 5,533 2,372 192 2,185
\$	148,644,512	\$	141,232,448	\$	140,773,796	\$	140,020,164	\$	135,925,550	\$	135,876,426
\$	37,650,335	\$	34,978,923	\$	32,315,373	\$	30,555,460	\$	29,043,640	\$	27,431,127
\$	666,534,551	\$	667,345,480	\$	567,015,013	\$	521,411,279	\$	485,539,046	\$	444,996,698
	90.08%		89.51%		88.67%		87.75%		86.90%		86.79%
\$	745,714,562	\$	697,658,641	\$	637,909,978	\$	581,801,281	\$	535,579,287	\$	521,766,411
\$	671,721,084	\$	624,442,059	\$	565,604,518	\$	510,523,409	\$	465,429,341	\$	452,830,104
\$	73,993,478	\$	73,216,582	\$	72,305,460	\$	71,277,872	\$	70,149,946	\$	68,936,307
\$	102,751,307	\$	106,821,650	\$	138,753,419	\$	169,264,548	\$	161,387,026	\$	146,656,618
\$	84,164,497	\$	81,084,751	\$	82,859,110	\$	84,762,421	\$	85,111,124	\$	86,226,350
	N/A		N/A		N/A		N/A		N/A		N/A
\$	932,630,366	\$	885,565,042	\$	859,522,507	\$	835,828,250	\$	782,077,437	\$	754,649,379
**	******	***	******	***	******	***	******	***	*******	***	*****
	Fiscal 2009		Fiscal 2008	]	Fiscal 2007	]	Fiscal 2006	I	Fiscal 2005	I	Fiscal 2004
	9.25%		9.25%		9.25%		9.25%		9.25%		9.25%
	2.82%		2.62%		2.56%		2.34%		2.38%		2.29%
	10.25%		11.17%		13.89%		16.30%		15.87%		14.61%
	13.50%		13.50%		16.25%		16.00%		15.00%		11.00%

- 40 -G. S. CURRAN & COMPANY, LTD.

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

1. 2. 3. 4. 5.	Present Value of Future Benefits  Frozen Unfunded Actuarial Accrued Liability  Actuarial Value of Assets  Present Value of Future Employee Contributions  Funding Deposit Account Credit Balance  Present Value of Future Employer Normal Costs (1 – 2 – 3 – 4 + 5)	\$ \$ \$ \$ \$	231,806,899 4,049,257 154,451,871 21,845,625 2,692,941 54,153,087
7.	Present Value of Future Salaries	\$	487,499,298
8.	Employer Normal Cost Accrual Rate (6 ÷ 7)		11.108342%
9.	Projected Fiscal 2013 Salary for Current Membership	\$	61,825,939
10.	Employer Normal Cost as of July 1, 2012 (8 x 9)	\$	6,867,837
11.	Amortization Payment on Frozen Unfunded Accrued Liability of \$4,049,257 with Payments decreasing at 2% per year	\$	573,126
12.	TOTAL Employer Normal Cost & Amortization Payment (10 + 11)	\$	7,440,963
13.	Employer Normal Cost and Amortization Payment Interest Adjusted for Midyear Payment	\$	7,723,920
14.	Estimated Administrative Cost for Fiscal 2013	\$	347,523
15.	TOTAL Employer Actuarially Required Contribution for Fiscal 2013 (13 + 14)	\$	8,071,443
16.	Projected Ad Valorem Tax Contributions for Fiscal 2013	\$	2,090,679
17.	Projected Revenue Sharing Funds for Fiscal 2013	\$	45,627
18.	Net Direct Employer Actuarially Required Contribution for Fiscal 2013 (15-16-17)	\$	5,935,137
19.	Projected Payroll (July 1, 2012 through June 30, 2013)	\$	68,024,505
20.	Employers' Minimum Net Direct Actuarially Required Contribution as a % of Projected Payroll for Fiscal 2013 (18 ÷ 19)		8.72%
21.	Actual Employer Contribution Rate for Fiscal 2013		8.00%
22.	Contribution Shortfall (Excess) as a % of Payroll (20 - 21)		0.72%
23.	Increase (Reduction) to Following Year Payment for Contribution Shortfall (Excess)		0.09%
21.	Minimum Recommended Net Direct Employer Contribution Rate for Fiscal 201 (20 + 23, Rounded to nearest 0.25%)	14	8.75%

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

### Present Value of Future Benefits for Active Members:

Retirement Benefits	\$	155,974,303
TOTAL Fresent value of Future Benefits for Active Members	φ	133,974,303
Present Value of Future Benefits for Terminated Members:		
Terminated Vested Members Due Benefits at Retirement \$ 2,792,557 Terminated Members with Reciprocals		
Due Benefits at Retirement		
Terminated Members Due a Refund		
TOTAL Present Value of Future Benefits for Terminated Members	\$	3,578,311
Present Value of Future Benefits for Retirees:		
Regular Retirees		
Disability Retirees		
Survivors & Widows		
Reserve for Accrued Retiree DROP Account Balances 731,760		
TOTAL Present Value of Future Benefits for Retirees & Survivors	\$	72,254,285

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

Current Assets:				
Cash	\$	4,032,832		
Accrued Alternative Investments		1,143,472		
Accrued Interest on Investments		79,541		
Contributions Receivable from Employers		483,455		
Contributions Receivable from Members		283,988		
Dividends Receivable		14,414		
Other		46,168		
Due to Plan A (accrued)		(1,668)		
Due To Other Funds		(50,324)		
Investments Receivable		7,277,920		
TOTAL CURRENT ASSETS			\$	13,309,798
Property, Plant & Equipment			\$	214,519
Mitigation Bank Capitalized Project Costs				78,288
Prepaid Expense			\$	13,437
Other Assets			\$	52
Investments:	•••••	••••••	Ψ	32
Co-Mingled Funds	\$	27,002,319		
Common Stock	Ψ	24,125,932		
Limited Partnerships		21,293,982		
Cash Equivalents		14,461,090		
Mitigation Credits		8,208,287		
Mutual Fund – Equities		8,057,494		
Mutual Fund – Equities		5,964,345		
		4,660,852		
Limited Liability Companies  Bonds		4,335,700		
Bonds Real Estate-Mitigation Banks and LLC				
		4,062,895		
Notes Receivable		3,109,063		
Line of Credit		2,863,877		
Convertible Notes		501,286	Φ	100 647 100
TOTAL ASSETS				128,647,122
TOTAL ASSETS	•••••	•••••	Þ	142,263,216
Current Liabilities:	ф	220 700		
Accounts Payable	\$	320,700		
Refunds Payable		120,657		
Other Payables		117,708		
Long-Term Mitigation Liability		85,256		
Obligations under Securities Lending Program		34,051		
Investments Payable		11,484		
TOTAL CURRENT LIABILITIES			Φ	600 056
OTHER CONTROLLING INTEREST			\$ \$	689,856
OTHER CONTROLLING INTEREST	•••••	•••••	Ф	(4,408,871)
MARKET VALUE OF ASSETS			\$	137,164,489

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

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

Fiscal year 2012	\$ (18,345,178) 3,285,686 3,382,611 (29,319,546) (8,919,684) (49,916,111)
Deferral of excess (shortfall) of invested income:	
Fiscal year 2012 (80%) Fiscal year 2011 (60%) Fiscal year 2010 (40%) Fiscal year 2009 (20%) Fiscal year 2008 (0%)	(14,676,141) 1,971,411 1,353,044 (5,863,909) 0
Total deferred for year	\$ (17,215,595)
Market value of plan net assets, end of year	\$ 137,164,489
Preliminary actuarial value of plan assets, end of year	\$ 154,380,084
Actuarial value of assets corridor	
85% of market value, end of year	116,589,816 157,739,162
Allocated Share of the Expense Fund	\$ 71,787
Final actuarial value of plan net assets plus allocated share of the expense fund	\$ 154,451,871

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

Employee Contributions to the Annuity Savings Fund	\$ 21,845,625
Employer Normal Contributions to the Pension Accumulation Fund	54,153,087
Employer Amortization Payments to the Pension Accumulation Fund	4,049,257
Funding Deposit Credit Account	(2,692,941)
TOTAL PRESENT VALUE OF FUTURE CONTRIBUTIONS	\$ 77,355,028

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

Prior Year Frozen Unfunded Accrued Liability	\$ 4,346,525
Interest on Frozen Unfunded Accrued Liability \$ 347,722	
Employer Normal Cost for Prior Year	
Interest on the Normal Cost	
Administrative Expenses	
Interest on Expenses 17,616	
Credit to Funding Deposit Account	
TOTAL Increases to Frozen Unfunded Accrued Liability	\$ 7,561,168
Gross Employer Contributions \$ 7,356,698	
Interest on Employer Contributions	
Contribution Shortfall (Excess)	
Interest on Contribution Shortfall (Excess)	
TOTAL Decreases to Frozen Unfunded Accrued Liability	\$ 7,858,436
CURRENT YEAR FROZEN UNFUNDED ACCRUED LIABILITY	\$ 4,049,257

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

Actuarial Value of Assets (June 30, 2011)	\$ 152,966,837
Prior Period Adjustment	(11)
Income:	
Member Contributions\$ 3,132,800Employer Contributions5,303,594Ad Valorem Taxes2,007,123Irregular Contributions266,185Revenue Sharing Funds45,981Transfer to Plan A (accrued)(1,668)	
Total Contribution Income	\$ 10,754,015
Net Depreciation in Fair Value of Investments\$ (9,215,182)Income from Alternative Investments2,397,845Interest and Dividend Income884,755Securities Lending28,744Investment Income Allocated from Expense Fund209Net appreciation attributable to non-controllable interest(237,628)Investment Expense(683,002)Net Investment Income(683,002)	\$ (6,824,259)
TOTAL Income	\$ 3,929,756
Expenses:	
Retirement Benefits\$ 8,007,904Refunds of Contributions908,418Transfer to Plan A844,807DROP Disbursements532,267Funds Transferred to Another System61,798Allocated Share of Administrative Expenses439,148Depreciation9,892	
TOTAL Expenses	\$ 10,804,234
Net Market Income for Fiscal 2012 (Income - Expenses)	\$ (6,874,478)
Adjustment for Change in Allocated Expense Fund Balance	\$ (2,433)
Adjustment for Actuarial Smoothing	\$ 8,361,956
Actuarial Value of Assets (June 30, 2012)	\$ 154,451,871

### EXHIBIT XVIII PLAN B: FUND BALANCE

Present Assets of the System Creditable to:

Annuity Savings Fund	\$ 22,773,659
Annuity Reserve Fund	71,522,525
Pension Accumulation Fund	34,294,013
Deferred Retirement Option Plan Account	5,881,351
Funding Deposit Account	2,692,941
NET MARKET VALUE OF ASSETS	\$ 137,164,489
ADJUSTMENT FOR ACTUARIAL SMOOTHING	17,215,595
ALLOCATION OF EXPENSE FUND	71,787
ACTUARIAL VALUE OF ASSETS	\$ 154,451,871
EXHIBIT XIX	
PLAN B: PENSION BENEFIT OBLIGATION	
Present Value of Credited Projected Benefits Payable to Current Employees	\$ 103,994,242
Present Value of Benefits Payable to Terminated Employees	3,578,311
Present Value of Benefits Payable to Current Retirees and Beneficiaries	72,254,285
TOTAL PENSION BENEFIT OBLIGATION	\$ 179,826,838
NET ACTUARIAL VALUE OF ASSETS	\$ 154,451,871
Ratio of Net Actuarial Value of Assets to Pension Benefit Obligation	85.89%

## 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:		31.69%
	Adjustments in Funded Ratio Due to Changes in Assumption(s):		
	Changes for Fiscal 1988 Changes for Fiscal 1989 Changes for Fiscal 1995 Changes for Fiscal 1997 Changes for Fiscal 2000 Changes for Fiscal 2001 Changes for Fiscal 2003 Changes for Fiscal 2005 Changes for Fiscal 2006 Changes for Fiscal 2009 Changes for Fiscal 2009 Changes for Fiscal 2010 Changes for Fiscal 2010 Changes for Fiscal 2010	2.40% (2.94%) (1.22%) (3.84%) (3.71%) (2.29%) 1.21% 0.53% (1.12%) 5.18% 6.13% (3.99%) (0.67%)	
3.	TOTAL Adjustments		(4.33%)
	Amortization of Adjustments in Funded Ratio over 30 years:  Changes for Fiscal 1988	(1.92%) 2.25% 0.69% 1.92% 1.73% 0.92% (0.44%) (0.16%) 0.26% (1.04%)	
	Changes for Fiscal 2006  Changes for Fiscal 2010  Changes for Fiscal 2012  Changes for Fiscal 2012	(1.04%) (0.61%) 0.27% 0.00%	
4.	TOTAL Amortization of Adjustments		3.87%
5.	Target Ratio for Current Fiscal Year (Lesser of 1+2+3+4 or 100%).		94.67%
6.	Actuarial Value of Assets Divided by PBO as of June 30, 2012		85.89%

### EXHIBIT XXI PLAN B - CENSUS DATA

		Terminated with Funds			
	Active	on Deposit	DROP	Retired	Total
Number of members as of					
June 30, 2011	2,096	1,124	79	865	4,164
Additions to Census					
Initial membership	257	35			292
Death of another member				12	12
Omitted in error last year					
Adjustment for multiple records					
Change in Status during Year					
Actives terminating service	(63)	63			
Actives who retired	(23)			23	
Actives entering DROP	(41)		41		
Term. members rehired	9	(9)			
Term. members who retire		(8)		8	
Retirees who are rehired					
Refunded who are rehired	6				6
DROP participants retiring			(13)	13	
DROP returned to work	17		(17)		
Eliminated from Census					
Refund of contributions	(181)	(43)			(224)
Deaths	(12)	(1)		(40)	(53)
Included in error last year				(1)	(1)
Adjustment for multiple records				(1)	(1)
Moved to Plan A					
Number of members as of					
June 30, 2012	2,065	1,161	90	879	4,195

PLAN B - ACTIVES CENSUS BY AGE:

	Number	Number	Total	Average	Total
Age	Male	<b>Female</b>	Number	Salary	Salary
16 - 20	5	1	6	18,617	111,699
21 - 25	79	20	99	21,222	2,100,962
26 - 30	88	34	122	24,400	2,976,824
31 - 35	117	58	175	27,732	4,853,117
36 - 40	110	51	161	29,297	4,716,815
41 - 45	156	81	237	29,846	7,073,479
46 - 50	196	88	284	31,996	9,086,988
51 - 55	261	147	408	32,051	13,076,731
56 - 60	204	107	311	33,352	10,372,583
61 - 65	154	66	220	35,265	7,758,309
66 - 70	54	19	73	32,816	2,395,595
71 - 75	33	7	40	30,538	1,221,515
76 - 80	11	2	13	41,369	537,796
81 - 85	6	0	6	21,247	127,483
TOTAL	1,474	681	2,155	30,817	66,409,896

THE ACTIVE CENSUS INCLUDES 798 ACTIVES WITH VESTED BENEFITS, INCLUDING 90 DROP PARTICIPANTS AND 70 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	o	1	1	4,732	4,732
41 - 45	4	2	6	8,415	50,487
46 - 50	5	3	8	9,376	75,011
51 - 55	12	8	20	8,488	169,769
56 - 60	17	6	23	7,585	174,456
61 - 65	1	1	2	4,265	8,530
66 - 70	1	0	1	494	494
TOTAL	40	21	61	7,926	483,479

PLAN B - TERMINATED MEMBERS DUE A REFUND OF CONTRIBUTIONS:

Contribu	tions	Ranging		Total
From		To	Number	Contributions
0	-	99	733	21,313
100	-	499	197	44,045
500	-	999	47	32,640
1000	-	1999	39	56,593
2000	-	4999	49	165,996
5000	-	9999	27	192,803
10000	-	19999	8	106,087
	TO	TAL	1,100	619,477

PLAN B - REGULAR RETIREES:

	Number	Number	Total	Average	Total
Age	Male	<b>Female</b>	Number	Benefit	Benefit
46 - 50	1	0	1	19,858	19,858
51 - 55	8	3	11	19,835	218,187
56 - 60	23	4	27	19,839	535,655
61 - 65	52	30	82	12,419	1,018,319
66 - 70	93	25	118	11,918	1,406,285
71 - 75	90	35	125	9,467	1,183,384
76 - 80	85	30	115	9,065	1,042,491
81 - 85	43	24	67	8,491	568,887
86 - 90	30	6	36	6,967	250,816
91 - 99	10	7	17	5,768	98,061
TOTAL	435	164	599	10,588	6,341,943

#### PLAN B - DISABILITY RETIREES:

	Number	Number	Total	Average	Total
Age	Male	Female	Number	Benefit	Benefit
36 - 40	1	0	1	6,324	6,324
41 - 45	1	0	1	6,872	6,872
46 - 50	3	0	3	8,362	25,086
51 - 55	8	3	11	11,004	121,047
56 - 60	19	3	22	11,278	248,123
61 - 65	9	2	11	8,839	97,229
66 - 70	3	· 1	4	5,593	22,373
71 - 75	3	0	3	7,975	23,925
76 - 80	1	0	1	10,484	10,484
86 - 90	0	1	1	4,033	4,033
TOTAL	48	10	58	9,750	565,496

#### PLAN B - SURVIVORS:

	Number	Number	Total	Average	Total
Age	Male	Female	Number	Benefit	Benefit
31 - 35	1	. 0	1	10,042	10,042
36 - 40	0	1	1	4,280	4,280
46 - 50	2	4	6	3,552	21,312
51 - 55	1	9	10	7,753	77,532
56 - 60	2	16	18	7,297	131,348
61 - 65	1	15	16	7,168	114,690
66 - 70	0	26	26	6,178	160,620
71 - 75	2	37	39	5,948	231,964
76 - 80	0	39	39	6,932	270,340
81 - 85	1	28	29	6,726	195,068
86 - 90	2	26	28	5,084	142,349
91 - 99	o	9	9	2,030	18,273
TOTAL	12	210	222	6,206	1,377,818

PLAN B - ACTIVE MEMBERS:

Total 30&0ver 25-29 Completed Years of Service 4 6 2 4 6 7 4 6 4 7 5-4 2 2 4 2 7 4 8 11 7 1 1122112211 3 1322138119 0

220 220 231 24 251 261 261 261 261

PLAN B - AVERAGE ANNUAL SALARY OF ACTIVE MEMBERS:

Completed Years of Service

- 20 18,617 21,254 19,374 25,928 - 30 21,993 21,141 25,346 30,267 - 35 21,155 27,941 25,346 30,267 - 40 20,951 25,541 25,520 23,444 25,520 25,724 26,198 - 50 21,997 25,093 25,495 24,943 24,084 27,167 - 65 20,247 23,578 34,470 18,493 34,413 29,293 22,773 & Over		4 5 - 6	9 10-14	15-19	20-24	25-29	30&Over	Average Salary
20,178 21,254 19,374 21,993 21,141 25,346 21,993 21,141 25,346 20,951 25,441 25,520 21,997 25,093 25,495 22,885 24,943 24,084 25,520 25,724 23,897 25,493 25,495 20,247 25,407 25,507 25,407 25								18,617
21,993 21,141 25,346 20,951 20,951 22,463 20,951 22,463 21,484 25,520 25,520 21,997 25,093 25,495 22,885 24,943 24,084 23,897 25,402 29,293 20,247 23,578 34,692 18,493 34,470 47,139 25		.4	2					21,222
21,155 27,941 22,463 20,951 25,441 25,520 21,997 25,093 25,424 21,997 25,093 25,424 22,885 24,943 24,084 23,897 25,402 29,293 20,247 23,578 34,692 26,621 16,416 25	•	23,283 25,790	,					24,400
20,951 25,441 25,520 21,484 25,520 25,724 21,997 25,093 25,495 22,885 24,943 24,084 23,897 25,402 29,293 20,247 25,402 34,692 18,493 34,470 47,139 r		117		29,495				27,732
21,484 25,520 25,724 21,997 25,093 25,495 22,885 24,943 24,084 23,897 25,402 29,293 20,247 23,470 47,139 26,621 16,416	200	(1)	",	35,360	36,215			29,297
21,997 25,093 25,495 22,885 24,943 24,084 23,897 25,402 29,293 20,247 23,578 34,692 18,493 26,621 16,416 2	•	"4	,	34,379	37,775	39,591		29,846
22,885 24,943 24,084 23,897 25,402 29,293 20,247 23,578 34,692 18,493 34,470 47,139 25,621 16,416		(1)	,,,	33,233	44,976	47,898	39,557	31,996
23,897 25,402 29,293 20,247 23,578 34,692 18,493 34,470 47,139 18		(1)	(1)	33,128	36,953	40,506	44,454	32,051
23,578 34,692 34,470 47,139 26,621 16,416		(1)	117	32,340	42,004	38,874	47,219	33,352
34,470 47,139 26,621 16,416	•	m	""	36,256	38,749	41,542	46,376	35,265
26,621 16,416		m	""	31,956	25,757	27,289	40,400	32,816
	151 <b>5</b> .	(1)	2 35,202	20,258	37,308	22,159	44,234	31,980
erage 21,648 24,727 26,344 26,	26,898 27	27,509 32,453	3 33,156	33,047	38,922	38,923	45,101	30,817

PLAN B - TERMINATED MEMBERS DUE A DEFERRED RETIREMENT BENEFIT:

					rear	S OUEIT	rears oncil kecirement siigibiiity	rearging	157			
tained Ages	0	1	7	m	41	5- 9	10-14	15-19	20-24	25-29	25-29 30&Over	Total
0 - 35 6 - 40 6 - 45 6 - 50 11 - 65 11 - 65 12 - 70 13 & OVer	401	1	∞ ∞	7	m	20	¢s.	6	ī			0 11 8 73 8 0 11 0
Totals	7	1	80	7	e	20	60	6	7	0	0	19
AN B - AVERAGE ANNUAL BENEFITS OF TERMINATED MEMBERS DUE A DEFERRED RETIREMENT BENEFIT: Years Until Retirement Eligibility	E ANNUAL	BENEFITS	0F 1	erminated	MEMBERS D Year	VE A DEF	RS DUE A DEFERRED RETIREMENT BENEF. Years Until Retirement Eligibility	IREMENT BE E Eligibil	INEFIT:			

PLAN

Ages	0	1	a	m	4	5 - 9	5- 9 10-14	15-19	20-24		25-29 30&Over	Averag Benefi
36 - 35 36 - 45 41 - 45 46 - 50 51 - 55 61 - 60 65 - 70 71 & OVET	6,875 4,265 494	9,202	10,190	4,408	8,459	8,488	9,376	8,415	4,732			4 8 0 8 7 4 F 4 E 4 E 5 4 E H F 8 8 6 9
Average	5,218	9,202	10,190	4,408	8,459	8,488	9,376	8,415	4,732	0	0	7,92

PLAN B - SERVICE RETIREES:

Completed Years Since Retirement

Attained Ages	0	1	7	m	4.	5-9	10-14	15-19	20-24	25-29	30&0ver	Total
	1											
0 - 50	1											1
51 - 55	7	9	1	1		1						11
26 - 60	7	80	n	7	1	9	1					27
61 - 65	15	18	89	18	80	10	5					82
02 - 99	00	15	7	19	10	20	7	7				118
71 - 75	m	4	9	n	7	53	39	6	1			125
08 - 92		e	1	n	m	17	52	32	n	1		115
81 - 85		7	7	01	1	4	7	30	18	7	1	29
06 - 98	1					m		7	15	14	7	36
91 & Over						1		7		Q.	Ŋ	17
Totals	37	55	27	47	30	145	111	77	37	26	7	599

PLAN B - AVERAGE ANNUAL BENEFITS PAYABLE TO SERVICE RETIREES:

Attained Ages

Completed Years Since Retirement

	30&Over								6,941	17,048	2,570
	25-29					H		13,908	15,156	5,622	6,764
	20-24						457	12,034	7,305	8,330	
	15-19					8,821	15,240	8,128	9,810	6,407	10,318
1	10-14			19,256	14,322	16,646	8,494	8,805	7,937		
	5- 9		9,042	18,526	20,925	11,451	10,005	11,429	7,090	3,975	3,699
	4			28,820	7,524	11,388	6,814	5,965	6,812		
	E		13,978	20,695	8,890	12,901	10,020	4,222	3,071		¥
	7		18,036	22,541	11,449	10,388	11,133	13,156	3,167		
		Í	2	3	4	9	9	9	4		

119,858 112,435 111,94139 111,9419 9,065 6,467 7,68

5,263

7,070

7,919

9,645

9,478

11,521

9,177

10,398

12,337

13,966

13,456

Average

0 - 50 51 - 55 56 - 60 61 - 65 66 - 70 71 - 87 81 - 85 86 - 90 91 & OVER

PLAN B - DISABILITY RETIREES:

Completed Years Since Retirement

	,   0	1	7	e	4	5- 9	10-14	15-19	20-24	25-29	25-29 30£0ver	Total
35												0
		1										1
						7						1
	1					7						e
		7		7	01	4		7	1			11
	4	4	7	4		ĸ	4					22
			7		m	Н	e	1	7			11
						1	7	1			1	4
							7		1	1		c
									1			1
												0
										1		7
												0
	5	9	8	b	Ŋ	14	Ø	e	ĸ	4	1	58

PLAN B - AVERAGE ANNUAL BENEFITS PAYABLE TO DISABILITY RETIREES:

					Сощ	leted Yea	Completed Years Since Retirement	Retiremen	tı			
jes	0	1	0	<i>w</i>	4	5- 9	10-14	15-19	20-24	25-29	30&Over	Average Benefit
- 35												0
- 40		6,324										6,324
- 45						6,872						6,872
- 50	6,138					9,474						8,362
- 55		10,680		20,917	11,008	9,170		4,766	5,071			11,004
- 60	11,055	16,737	11,631	12,067		11,025	5,483					11,278
- 65			9,564		13,382	6,074	6,282	5,784	8,407			8,839
- 70						5,132	7,002	4,056			6,183	5,593
- 75							10,507		9,802	3,616		7,975
- 80									10,484			10,484
- 85												0
- 90										4,033		4,033
& Over												0
rerage	10,071	13,992	10,598	15,017	12,433	9,202	6,476	4,869	8,434	3,825	6,183	9,750

PLAN B - SURVIVING BENEFICIARIES OF FORMER MEMBERS:

					Comp	leted Yea	rs Since	Completed Years Since Retirement	44			
ttained Ages	0	1	0	e	4	5- 9	10-14	15-19	20-24	25-29	30&0ver	Total
0												c
31 - 35	1											7
36 - 40								Н				н
41 - 45												0
46 - 50						7	1	7	7			9
51 - 55	7		7	1		7	7	7		7		10
26 - 60		7		7	7	4	4	4	1	7		18
61 - 65	1			7	1	e	4	1	7	7		16
04 - 99	1					11	8	5	н			26
71 - 75						7	15	10	7			39
76 - 80			1		7	7	7	10	10	80		39
81 - 85		7				7	4	4	13	4	7	29
06 - 98						7	7		7	7	11	28
91 & Over							7	1		7	9	o,
Totals	5	4	71	5	E	39	47	33	43	24	19	222

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

					Com	oleted Yea	ars Since	Completed Years Since Retirement	t)			
ttained Ages	0	1	N	8	4	5- 9	10-14	15-19	20-24	25-29	30&Over	Average Benefit
0 - 30												0
31 - 35	10,042											10,042
36 - 40								4,280				4,280
41 - 45												0
46 - 50						7,555	2,242	1,677	1,142			3,552
51 - 55	7,209		1,520	5,675		10,095	6,488	17,595		5,159		7,753
09 - 99		22,180		7,511	3,823	9,839	6,369	3,941	6,888	2,836		7,297
61 - 65	18,149			5,947	8,078	3,785	10,309	5,024	5,544	3,933		7,168
04 - 99	8,962					5,440	7,296	5,851	4,196			6,178
71 - 75						7,594	5,357	4,659	7,409			5,948
08 - 94			1,176		11,678	5,828	6,713	6,223	8,284	896'9		6,932
81 - 85		4,586				507	6,230	7,530	7,372	4,935	9,674	6,726
06 - 98						12,358	2,415		5,363	5,654	3,464	5,084
91 & Over							2,131	2,725		2,086	1,888	2,030
Average	10,314	13,383	1,348	6,518	7,860	961'9	6,321	5,580	6,803	5,542	3,620	6,206

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

Number of Active Members Number of Retirees and Survivors Number Terminated Due Deferred Benefits Number Terminated Due Refund	-	Fiscal 2012 2,155 879 61 1,100	]	Fiscal 2011 2,175 865 62 1,062		Fiscal 2010 2,197 836 72 1,062		Fiscal 2009 2,269 833 67 1,022
Active Lives Payroll	\$	66,409,896	\$	65,427,477	\$	65,241,810	\$	64,816,945
Retiree Benefits in Payment	\$	8,285,257	\$	7,953,795	\$	7,339,269	\$	7,149,177
Market Value of Assets	\$	137,164,489	\$	144,028,034	\$	130,596,777	\$	117,258,410
Ratio of Actuarial Value of Assets to Actuarial Accrued Liability		97.45%		97.24%		96.94%		96.57%
Actuarial Accrued Liability (As defined by GASB– 25)	\$	158,501,128	\$	157,313,362	\$	151,680,103	\$	143,353,668
Actuarial Value of Assets	\$	154,451,871	\$	152,966,837	\$	147,046,143	\$	138,441,127
Unfunded Actuarial Accrued Liability	\$	4,049,257	\$	4,346,525	\$	4,633,960	\$	4,912,541
Present Value of Future Employer Normal Cost	\$	54,153,087	\$	49,451,626	\$	48,645,557	\$	38,895,181
Present Value of Future Employee Contributions		21,845,625	\$	21,582,459	\$	21,546,957	\$	21,769,886
Funding Deposit Account Credit Balance		2,692,941	\$	2,493,464	\$	2,308,763	\$	1,806,555
Present Value of Future Benefits		231,806,899	\$	225,853,983	\$	219,563,854	\$	202,212,180
***********	***	******	***	*******	***	*******	***	******
	]	Fiscal 2013	]	Fiscal 2012		Fiscal 2011		Fiscal 2010
Employee Contribution Rate		5.00%		5.00%		5.00%		5.00%
Proj. Tax Contribution as % of Projected Payroll		3.14%		3.10%		3.07%		3.06%
Actuarially Req'd Net Direct Employer Cont. Rate		8.72%		7.89%		7.78%		5.95%
Actual Employer Direct Contribution Rate		8.00%		8.00%		6.75%		6.75%

	Fiscal 2008 2,191 793 68 998		Fiscal 2007 2,153 794 74 928		Fiscal 2006 2,060 763 77 777		Fiscal 2005 2,038 745 79 806		Fiscal 2004 2,052 734 74 820	]	Fiscal 2003 2,064 720 63 790
\$	59,233,705	\$	54,572,935	\$	51,055,201	\$	48,690,316	\$	47,676,817	\$	45,260,679
\$	6,625,934	\$	6,328,157	\$	5,872,330	\$	5,649,984	\$	5,476,263	\$	5,216,962
\$	134,832,148	\$	132,326,073	\$	111,581,452	\$	101,109,899	\$	92,904,743	\$	83,836,074
	96.33%		95.81%		95.13%		94.18%		93.51%		93.04%
\$	141,390,296	\$	129,930,047	\$	117,108,583	\$	102,373,290	\$	95,618,087	\$	92,615,633
\$	136,207,119	\$	124,483,332	\$	111,404,638	\$	96,417,685	\$	89,415,704	\$	86,170,714
\$	5,183,177	\$	5,446,715	\$	5,703,945	\$	5,955,605	\$	6,202,383	\$	6,444,919
\$	26,827,388	\$	26,365,299	\$	32,959,966	\$	41,742,178	\$	42,458,765	\$	36,670,550
\$	19,992,613	\$	18,627,179	\$	17,883,419	\$	17,253,376	\$	18,040,618	\$	17,184,709
	N/A										
\$	188,210,297	\$	174,922,525	\$	167,951,968	\$	161,368,844	\$	156,117,470	\$	146,470,892
**	************************										
	Fiscal 2009		Fiscal 2008	]	Fiscal 2007	F	Fiscal 2006	F	Fiscal 2005	F	Fiscal 2004
	5.00%		5.00%		5.00%		5.00%		5.00%		5.00%
	2.82%		2.60%		2.54%		2.36%		2.37%		2.28%
	4.50%		5.06%		7.08%		9.86%		9.72%		9.22%
	6.75%		6.75%		9.75%		9.75%		9.50%		7.75%

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#### 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, 2012, 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. Effective July 1, 2012, the Board of Trustees may set this rate not less than 9.25% nor more than 10.00%. In addition, each sheriff and ex officio tax collector deducts one-fourth of one percent of the aggregate amount of the tax shown to be collected by the tax roll of each respective parish, excepting Orleans Parish, and remits the money to the system on an annual basis. Taxes are apportioned between Plan A and Plan B in proportion to salaries of plan participants. Taxes received from East Baton Rouge Parish are apportioned between the Municipal Employees' Retirement System and the Employees' Retirement System of the City of Baton Rouge. The system also receives revenue sharing funds each year as appropriated by the legislature. The remaining employer contributions are determined according to actuarial requirements and are set annually.

RETIREMENT BENEFITS - 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.

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

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

CONTRIBUTION RATES - Employee contributions in Plan B are 5.00% of the member's earnings. Effective July 1, 2012, the Board of Trustees may set this rate not less than 5.00% nor more than 6.00%. In addition, each sheriff and ex officio tax collector deducts one-fourth of one percent of the aggregate amount of the tax shown to be collected by the tax roll of each respective parish, excepting Orleans Parish, and remits the money to the system on an annual basis. Taxes are apportioned between Plan A and Plan B in proportion to salaries of plan participants. Taxes received from East Baton Rouge Parish are apportioned between the Municipal Employees' Retirement System and the Employees' Retirement System of the City of Baton Rouge. The system also receives revenue sharing funds each year as appropriated by the legislature. The remaining employer contributions are determined according to actuarial requirements and are set annually.

RETIREMENT BENEFITS - 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.

TIER 2 PROVISIONS: Employees whose first employment making them eligible for membership occurs on or after January 1, 2013 will become members of Tier 2. Normal retirement eligibility in Tier 2 is at age 65 with seven years of service credit, at age 62 with the years of service credit, or age 55 with thirty years of service credit. Members are eligible for an actuarially reduced early retirement at twenty-five years of service credit. Retirement benefits are based on a 2% accrual rate. Employee contributions are set by the Board of Trustees within a range of 4% to 6%.

#### 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 may not exceed 115% of the preceding twelve month period. Effective January 1, 2013, final average compensation for members of the system is redefined to be thirty-six months plus the number of whole months since January 1, 2013 not to exceed sixty months. However, the actual monthly final average compensation used to determine the member's benefit cannot be less than the thirty-six month final average compensation as of January 1, 2013.

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

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

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

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

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

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

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

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

Upon termination of employment prior to, or at the end of, the specified period of participation, a participant in the plan may receive, at his option, a lump sum payment from the account equal to

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

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

#### **ACTUARIAL ASSUMPTIONS**

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

Factor Increase in Factor Results in

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

ACTUARIAL COST METHOD: Frozen Attained Age Normal Actuarial Cost

Method with allocation based on earnings. The frozen actuarial accrued liabilities were calculated on the projected unit credit cost

method.

ACTUARIAL ASSET VALUES: Invested assets are valued at market value

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

smoothed value.

VALUATION INTEREST RATE: 7.75% (Net of Investment Expense)

ANNUAL SALARY INCREASE RATE: 5.75% (3.00% Inflation / 2.75% Merit)

ACTIVE MEMBER MORTALITY: RP 2000 Employee Table for males and

females

ANNUITANT, AND RP 2000 Healthy Annuitant Table for males

BENEFICIARY MORTALITY: and females

RETIREE COST OF LIVING INCREASES:

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

**RATES OF RETIREMENT:** 

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

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

RETIREMENT RATES FOR ACTIVE FORMER DROP PARTICIPANTS:

Retirement rates for active former DROP participants are as follows:

Ages	Retirement Rates
Below 89	0.19
90	1.00

RATES OF WITHDRAWAL:

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

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

9	0.06	0.05
10	0.06	0.05
11	0.05	0.05
12	0.05	0.05
13	0.05	0.05
14	0.03	0.05
15	0.03	0.05
16	0.03	0.03
17	0.01	0.03
18	0.01	0.03
19	0.01	0.03
20	0.01	0.02
over 20	0.01	0.02

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

RATES OF DISABILITY: 20% of the disability rates used for the 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:

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

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

Males and Females

VESTING ELECTING PERCENTAGE: 30% of those members under age 40 who are

terminated vested elect deferred benefits in lieu of contribution refunds. 45% of those who are between the ages of 40 - 49 who are terminated vested elect deferred benefits in lieu of contribution refunds. 60% of those who are at least age 50 who are terminated vested elect deferred benefits in lieu of

contribution refunds.

## PLAN A ACTUARIAL TABLES AND RATES

Age	Retired Male	Retired Female	Active Male	Active Female	Retirement	DROP Entry	Disability	Remarriage
	Mortality	Mortality	Mortality	Mortality	Rates	Rates	Rates	Rates
18	0.00032	0.00019	0.00032	0.00019	0.00000	0.00000	0.00030	0.05665
19	0.00032	0.00019	0.00032	0.00019	0.00000	0.00000	0.00030	0.05665
20	0.00035	0.00019	0.00035	0.00019	0.00000	0.00000	0.00030	0.05665
21	0.00036	0.00019	0.00036	0.00019	0.00000	0.00000	0.00030	0.05213
22	0.00037	0.00019	0.00037	0.00019	0.00000	0.00000	0.00030	0.04834
23	0.00037	0.00020	0.00037	0.00020	0.00000	0.00000	0.00030	0.04522
24	0.00038	0.00020	0.00038	0.00020	0.00000	0.00000	0.00030	0.04270
25	0.00038	0.00021	0.00038	0.00021	0.00000	0.00000	0.00030	0.04070
26	0.00038	0.00021	0.00038	0.00021	0.00000	0.00000	0.00030	0.03915
27	0.00038	0.00022	0.00038	0.00022	0.00000	0.00000	0.00030	0.03799
28	0.00039	0.00024	0.00039	0.00024	0.00000	0.00000	0.00030	0.03714
29	0.00041	0.00025	0.00041	0.00025	0.00000	0.00000	0.00030	0.03654
30	0.00044	0.00026	0.00044	0.00026	0.00000	0.00000	0.00030	0.03611
31	0.00050	0.00031	0.00050	0.00031	0.00000	0.00000	0.00030	0.03578
32	0.00056	0.00035	0.00056	0.00035	0.00000	0.00000	0.00030	0.03549
33	0.00063	0.00039	0.00063	0.00039	0.00000	0.00000	0.00030	0.03515
34	0.00070	0.00044	0.00070	0.00044	0.00000	0.00000	0.00030	0.03471
35	0.00077	0.00047	0.00077	0.00047	0.00000	0.00000	0.00034	0.03409
36	0.00084	0.00051	0.00084	0.00051	0.00000	0.00000	0.00038	0.03286
37	0.00090	0.00055	0.00090	0.00055	0.00000	0.00000	0.00042	0.03139
38	0.00096	0.00060	0.00096	0.00060	0.00000	0.00000	0.00048	0.02973
39	0.00102	0.00065	0.00102	0.00065	0.00000	0.00000	0.00054	0.02787
40	0.00108	0.00071	0.00108	0.00071	0.00000	0.00000	0.00062	0.02585
41	0.00114	0.00077	0.00114	0.00077	0.06000	0.27000	0.00070	0.02352
42	0.00122	0.00085	0.00122	0.00085	0.06000	0.27000	0.00078	0.02111
43	0.00130	0.00094	0.00130	0.00094	0.06000	0.27000	0.00088	0.01868
44	0.00140	0.00103	0.00140	0.00103	0.06000	0.27000	0.00100	0.01629
45	0.00151	0.00112	0.00151	0.00112	0.06000	0.27000	0.00114	0.01400
46	0.00162	0.00122	0.00162	0.00122	0.06000	0.27000	0.00130	0.01208
47	0.00173	0.00133	0.00173	0.00133	0.06000	0.27000	0.00146	0.01034
48	0.00186	0.00143	0.00186	0.00143	0.06000	0.27000	0.00166	0.00879
49 50	0.00200 0.00535	0.00155 0.00234	0.00200	0.00155	0.06000 0.06000	0.27000	0.00188 0.00214	0.00744
50 51			0.00214 0.00229	0.00168	0.06000	0.27000		0.00629 0.00551
52	0.00553 0.00564	0.00246 0.00265	0.00229	0.00181 0.00197	0.06000	0.27000 0.27000	0.00244 0.00276	0.00331
53	0.00504	0.00203	0.00243	0.00137	0.06000	0.27000	0.00270	0.00453
54	0.00572	0.00290	0.00281	0.00213	0.06000	0.27000	0.00314	0.00431
55	0.00580	0.00319	0.00281	0.00252	0.06000	0.27000	0.00330	0.00423
56	0.00570	0.00333	0.00303	0.00233	0.06000	0.27000	0.00460	0.00000
57	0.00612	0.00333	0.00363	0.00276	0.06000	0.27000	0.00522	0.00000
58	0.00690	0.00438	0.00303	0.00301	0.06000	0.27000	0.00522	0.00000
59	0.00749	0.00553	0.00441	0.00329	0.06000	0.27000	0.00674	0.00000
60	0.00749	0.00533	0.00441	0.00393	0.14000	0.27000	0.00976	0.00000
61	0.00920	0.00692	0.00538	0.00429	0.14000	0.12000	0.01060	0.00000
62	0.00901	0.00769	0.00592	0.00466	0.14000	0.12000	0.01156	0.00000
63	0.01095	0.00851	0.00647	0.00504	0.14000	0.12000	0.01110	0.00000
64	0.01212	0.00939	0.00703	0.00543	0.14000	0.12000	0.00702	0.00000
65	0.01342	0.01036	0.00757	0.00582	0.14000	0.12000	0.00126	0.00000

## PLAN B ACTUARIAL TABLES AND RATES

Age	Retired Male	Retired Female	Active Male	Active Female	Retirement	DROP Entry	Disability	Remarriage
	Mortality	Mortality	Mortality	Mortality	Rates	Rates	Rates	Rates
18	0.00032	0.00019	0.00032	0.00019	0.00000	0.00000	0.00030	0.05665
19	0.00033	0.00019	0.00033	0.00019	0.00000	0.00000	0.00030	0.05665
20	0.00035	0.00019	0.00035	0.00019	0.00000	0.00000	0.00030	0.05665
21	0.00036	0.00019	0.00036	0.00019	0.00000	0.00000	0.00030	0.05213
22	0.00037	0.00019	0.00037	0.00019	0.00000	0.00000	0.00030	0.04834
23	0.00037	0.00020	0.00037	0.00020	0.00000	0.00000	0.00030	0.04522
24	0.00038	0.00020	0.00038	0.00020	0.00000	0.00000	0.00030	0.04270
25	0.00038	0.00021	0.00038	0.00021	0.00000	0.00000	0.00030	0.04070
26	0.00038	0.00021	0.00038	0.00021	0.00000	0.00000	0.00030	0.03915
27	0.00038	0.00022	0.00038	0.00022	0.00000	0.00000	0.00030	0.03799
28	0.00039	0.00024	0.00039	0.00024	0.00000	0.00000	0.00030	0.03714
29	0.00041	0.00025	0.00041	0.00025	0.00000	0.00000	0.00030	0.03654
30	0.00044	0.00026	0.00044	0.00026	0.00000	0.00000	0.00030	0.03611
31	0.00050	0.00031	0.00050	0.00031	0.00000	0.00000	0.00030	0.03578
32	0.00056	0.00035	0.00056	0.00035	0.00000	0.00000	0.00030	0.03549
33	0.00063	0.00039	0.00063	0.00039	0.00000	0.00000	0.00030	0.03515
34	0.00070	0.00044	0.00070	0.00044	0.00000	0.00000	0.00030	0.03471
35	0.00077	0.00047	0.00077	0.00047	0.00000	0.00000	0.00034	0.03409
36	0.00084	0.00051	0.00084	0.00051	0.00000	0.00000	0.00038	0.03286
37	0.00090	0.00055	0.00090	0.00055	0.00000	0.00000	0.00042	0.03139
38	0.00096	0.00060	0.00096	0.00060	0.00000	0.00000	0.00048	0.02973
39	0.00102	0.00065	0.00102	0.00065	0.00000	0.00000	0.00054	0.02787
40	0.00108	0.00071	0.00108	0.00071	0.00000	0.00000	0.00062	0.02585
41	0.00114	0.00077	0.00114	0.00077	0.00000	0.00000	0.00070	0.02352
42	0.00122	0.00085	0.00122	0.00085	0.00000	0.00000	0.00078	0.02111
43	0.00130	0.00094	0.00130	0.00094	0.00000	0.00000	0.00088	0.01868
44	0.00140	0.00103	0.00140	0.00103	0.00000	0.00000	0.00100	0.01629
45	0.00151	0.00112	0.00151	0.00112	0.00000	0.00000	0.00114	0.01400
46	0.00162	0.00122	0.00162	0.00122	0.06000	0.24000	0.00130	0.01208
47	0.00173	0.00133	0.00173	0.00133	0.06000	0.24000	0.00146	0.01034
48	0.00186	0.00143	0.00186	0.00143	0.06000	0.24000	0.00166	0.00879
49	0.00200	0.00155	0.00200	0.00155	0.06000	0.24000	0.00188	0.00744
50	0.00535	0.00234	0.00214	0.00168	0.06000	0.24000	0.00214	0.00629
51	0.00553	0.00246	0.00229	0.00181	0.06000	0.24000 0.24000	0.00244	0.00551 0.00493
52 53	0.00564 0.00572	0.00265 0.00290	0.00245 0.00262	0.00197 0.00213	0.06000 0.06000	0.24000	0.00276 0.00314	0.00493
55 54	0.00572	0.00290	0.00282	0.00213	0.06000	0.24000	0.00314	0.00431
55	0.00580	0.00319	0.00281	0.00252	0.36000	0.24000	0.00330	0.00423
56	0.00590	0.00333	0.00303	0.00233	0.22000	0.38000	0.00404	0.00400
57	0.00612	0.00393	0.00331	0.00270	0.22000	0.38000	0.00400	0.00000
58	0.00644	0.00438	0.00303	0.00301	0.22000	0.38000	0.00322	0.00000
59	0.00090	0.00492	0.00400	0.00329	0.22000	0.38000	0.00392	0.00000
60	0.00749	0.00555	0.00441	0.00300	0.12000	0.16000	0.00074	0.00000
61	0.00820	0.00620	0.00488	0.00393	0.12000	0.16000	0.00970	0.00000
62	0.00901	0.00072	0.00592	0.00429	0.12000	0.16000	0.01000	0.00000
63	0.00991	0.00765	0.00572	0.00504	0.12000	0.16000	0.01130	0.00000
64	0.01033	0.00031	0.00703	0.00543	0.12000	0.16000	0.01110	0.00000
65	0.01212	0.01036	0.00757	0.00515	0.12000	0.12000	0.00126	0.00000
			, ···	2.22 <b>202</b>		2.23000	2.29. <b>2</b> 0	2.20000

### PRIOR YEAR ACTUARIAL ASSUMPTIONS

VALUATION INTEREST RATE: 8.00% (Net of Investment Expense)

ANNUAL SALARY INCREASE RATE: 6.00% (3.25% Inflation / 2.75% Merit)

DROP PARTICIPATION PERIOD: DROP participants are assumed to

participate for 3 years and retire at the end of

the participation period.

#### **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.