### MUNICIPAL EMPLOYEES' RETIREMENT SYSTEM

ACTUARIAL VALUATION AS OF JUNE 30, 2011

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

**Actuarial Services** 

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December 12, 2011

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, 2011. 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, 2012, to recommend the net direct employer contribution rate for fiscal 2013, and to provide information for the system's financial statements. This report was prepared exclusively for the Municipal Employees' Retirement System for a specific limited purpose. It is not for the use or benefit of any third party for any purpose.

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

Sincerely,

G. S. CURRAN & COMPANY, LTD.

a Curran, F.C.A., M.A.A.A By: rran, 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, 2011	Ju	ne 30, 2010
Census Summary:	Active Members Retirees and Beneficiaries Terminated Due a Deferred Benefit Terminated Due a Refund		5,029 3,001 174 2,594		5,068 2,907 183 2,590
Payroll:		\$	164,262,655	\$ 1	62,546,523
Benefits in Paymer	it:	\$	44,218,709	\$	41,527,971
Frozen Unfunded A	Actuarial Accrued Liability:	\$	75,313,546	\$	75,064,492
Market Value of A	ssets:	\$	679,285,361	\$ 6	24,427,505
Actuarial Asset Va	lue:	\$	723,942,801	\$ 7	04,735,602
Actuarial Accrued	Liability (as defined by GASB-25)	\$	799,256,347	\$ 7	79,800,094
Ratio of Actuarial	Value of Assets to Actuarial Accrued Liability	y:	90.58%		90.37%
*****	****	****	*****	******	*****
		ł	FISCAL 2012	FIS	SCAL 2011
Employer Normal	Cost (July 1):	\$	26,605,047	\$	25,342,972
Amortization Cost	(July 1):	\$	5,556,240	\$	5,329,727
Interest Adjusted C Contribution Includ	ross Employer Actuarially Required ling Estimated Administrative Costs:	\$	34,122,855	\$	32,574,340
Projected Ad Valor	rem and Revenue Sharing Funds	\$	5,228,362	\$	5,130,645
Net Direct Employ	er Actuarially Required Contribution:	\$	28,894,493	\$	27,443,695
Actuarially Require	ed Net Direct Employer Contribution Rate		17.08%		16.41%
Actual Net Direct I	Employer Contribution Rate:		16.75%		14.25%
*****	*******	****	******	*******	*****
Minimum Recom	mended Net Direct Employer Contribution	Rate	e Fiscal 2013: 17.009	% Fiscal	2012: 16.75%

Employee Contribution Rate: 9.25% of Payroll

Actuarial Cost Method: Frozen Attained Age Normal Actuarial Cost Method

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

Exclusions from Census: None

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

Changes in Valuation Methods, Assumptions, and/or Amortization Periods: None

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

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

Valuation Date:			June 30, 2011		Ju	ine 30, 2010
Census Summary:	Active Members Retirees and Beneficiaries Terminated Due a Deferred I Terminated Due a Refund	Benefit	2,175 865 62 1,062			2,197 836 72 1,062
Payroll:		\$	65,427,477		\$	65,241,810
Benefits in Paymer	ıt:	\$	7,953,795		\$	7,339,269
Frozen Unfunded A	Actuarial Accrued Liability:	\$	4,346,525		\$	4,633,960
Market Value of A	ssets:	\$	144,028,034		\$	130,596,777
Actuarial Asset Va	lue:	\$	152,966,837		\$	147,046,143
Actuarial Accrued	Liability (as defined by GASI	3-25) \$	157,313,362		\$	151,680,103
Ratio of Actuarial	Value of Assets to Actuarial A	ccrued Liability:	97.24 %			96.94%
*****	*****	**************************************	************** FISCAL 2012	********	***** F	**************** TSCAL 2011
Employer Normal	Cost (July 1):	\$	6,247,028		\$	6,123,501
Amortization Cost	(July 1):	\$	597,212		\$	609,400
Interest Adjusted C Contribution Includ	ross Employer Actuarially Re ling Estimated Administrative	equired Costs: \$	7,391,507		\$	7,277,329
Projected Ad Valor	em and Revenue Sharing Fun	ds \$	2,082,510		\$	2,059,304
Net Direct Employ	er Actuarially Required Contr	ibutions: \$	5,308,997		\$	5,218,025
Actuarially Require	ed Net Direct Employer Contr	ibution Rate	7.89%			7.78%
Actual Net Direct H	Employer Contribution Rate:		8.00%			6.75%
**************************************	**************************************	**************************************	**************************************	*********** 8.00%	Fisca	**************************************
Employee Contribu	tion Rate: 5.00% of Payroll					
Actuarial Cost Met	hod: Frozen Attained Age	Normal Actuarial Co	st Method			
Valuation Interest l	Rate: 8% (Net of Investmen	t Expense)				
Exclusions from Co	ensus: None					
Basis of Actuarial A	Asset Value: The actuarial va asset earnings limits set at 85 falls outside of and adjusted va	lue of assets is based above or below the a % and 115% of the the limits, the actua alue.	d on the market assumed rate of market value o rial value is set	value of ass return over f assets. W equal to the	sets adj a five- √hen th e avera	usted to phase in year period with a adjusted value ge of the limited

Changes in Valuation Methods, Assumptions, and/or Amortization Periods: None

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

### **COMMENTS ON DATA**

For the valuation, the administrative director of the system furnished a census on compact disk derived from the system's master data processing file indicating each active covered employee's sex, date of birth, service credit, annual salary, and accumulated contributions. Information on retirees detailing dates of birth of retirees and beneficiaries, as well as option categories and benefit amounts, was provided in like manner. In addition, data was supplied on former employees who are vested or who have contributions remaining on deposit. As illustrated in Exhibit X, there are 5,029 active members in Plan A of whom 2,133 have vested retirement benefits including 244 participants in the Deferred Retirement Option Plan (DROP); 3,001 former Plan A members or their beneficiaries are receiving retirement benefits. An additional 2,768 Plan A members have contributions remaining on deposit with the system; of this number, 174 have vested rights for future retirement benefits. Census data on Plan B members may be found in Exhibit XXI. There are 2,175 active members in Plan B of whom 782 have vested retirement benefits including 79 participants in the Deferred Retirement Option Plan (DROP); 865 former Plan B members or their beneficiaries are receiving retirement benefits. An additional 1,124 Plan B members have contributions remaining on deposit with the system; of this number, 62 have vested rights for future retirement benefits. All individuals submitted were included in the valuation.

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

In addition to the statistical information provided on the system's participants, the system's administrative director furnished general information related to other aspects of the system's expenses, benefits and funding. Valuation asset values as well as income and expenses for the fiscal year were based on information furnished by the system's auditor, the firm of Duplantier, Hrapmann, Hogan & Maher, L.L.P. As indicated in the system's audit report, the net market value of Plan A's assets was \$679,285,361 as of June 30, 2011. Net investment income for fiscal 2011 measured on a market value basis for Plan A amounted to \$65,014,850. Contributions to the Plan for the fiscal year totaled \$43,949,827; benefits and expenses paid by Plan A amounted to \$54,106,821. The net market value of Plan B's assets was \$144,028,034 as of June 30, 2011. Net investment income for fiscal 2011 measured on a market value basis for Plan B's assets was \$144,028,034 as of June 30, 2011. Net investment income for fiscal 2011 measured on a market value basis for Plan B's assets was \$144,028,034 as of June 30, 2011. Net investment income for fiscal 2011 measured on a market value basis for Plan B amounted to \$13,722,021. Contributions to the Plan for the fiscal year totaled \$9,949,931; benefits and expenses

paid by Plan B amounted to \$10,240,695. 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 \$341,267 and at the end of the year the balance was \$298,975.

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. 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 62 through 66. The assumptions used are the same as those used for the prior year report. In the aggregate the assumptions represent our "best estimate" of future long-term experience for the fund. All calculations, recommendations, and conclusions are based on the assumptions specified. To the extent that prospective experience differs from that assumed, adjustments to contribution levels will be required. Such differences will be revealed in future actuarial valuations.

### CHANGES IN PLAN PROVISIONS

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

Act 238 made changes recommended by the Funding Review Panel. In addition to specific changes made to the Firefighters' Retirement System and the Municipal Police Employees' Retirement System, the act changed the structure of the Funding Review Panel and required that the systems, the Louisiana Municipal Association, and the Louisiana Conference of Mayors provide such staff and facilities as needed by the panel. In addition, the act changed the anti-spiking provisions of the system to reduce the limit by which the salaries used in the calculation of the average final compensation could increase year over year from a maximum of twenty-five percent to a maximum of fifteen percent. The act set a minimum on the average compensation to be used to calculate retirement benefits equal to the average compensation as it existed prior to the effective date of the act and excludes any salary increases due to promotion within civil service from the anti-spiking provision.

#### 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
PLAN A	2002	-1.8%	1.1%
	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%
		Market Value	Actuarial Value
PLAN B	2002	-2.8%	0.3%
	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%

<sup>4</sup> Includes the effect of a change in asset valuation method.

<sup>†</sup> Includes the impact of inclusion of the prior period adjustment for investment income as income in fiscal year.

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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 2011, the fund earned \$11,067,614 of dividends and interest and other recurring income for Plan A and \$2,406,076 for Plan B. Net income was increased by realized and unrealized capital gains of \$58,655,525 for Plan A and \$12,299,287 for Plan B and further reduced by net investment expenses of \$4,708,289 for Plan A and \$983,342 for Plan B. The geometric mean of the market value rates of return measured over the last ten years was 5.1% for Plan A and 4.9% for Plan B. Over the last twenty years, these rates were 7.1% for Plan A and 7.0% for Plan B.

The actuarial rate of return is presented for comparison to the assumed long-term rate of return of 8% used for the valuation. This rate is calculated based on the actuarial value of assets and all interest, dividends, other investment income, and capital gains or losses as given in Exhibit VI for Plan A and Exhibit XVII for Plan B, adjusted for any change in 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. In addition to the smoothing of investment returns above or below the assumed rate of return of 8.0%, the actuarial and market rates of return differ due to the allocation of expense fund assets and income to both Plan A and Plan B. Yields in excess of the 8% assumption will reduce future costs; yields below 8% will increase future costs. Plan A experienced net actuarial investment earnings of \$26,584,705 less than the actuarial assumed earnings rate of 8%. Plan B experienced net actuarial investment earnings of \$5,527,510 less than the actuarial assumed earnings rate of 8%. These actuarial losses increased the normal cost accrual rate by 2.2895% and 1.14973% 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, 2011 valuation we found three members of Plan A and one member of Plan B with such service and recommend a transfer of \$17,193 be made from the Plan A trust to the Plan B trust for fiscal 2011.

### 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 10.34 years of service and an annual salary of \$32,663. The Plan's active membership decreased during the fiscal year by 39 members. The plan has experienced a decline in the active plan population of 80 members between 2006 and 2011. Should the five year trend in plan population continue, a change in the structure of the amortization of the frozen unfunded actuarial accrued liability will be required to prevent continual increases in contributions as a percentage of payroll. 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 less

than fifteen years of service; the percentage of members with service over fifteen years has increased.

The average regular retiree is 70 years old with a monthly benefit of \$1,411. The number of retirees and beneficiaries receiving benefits from the system increased by 94 during the fiscal year. Over the last five years the number of retirees has increased by 413; during this same period, annual benefits in payment increased by \$11,903,336.

Plan liability experience for fiscal 2011 was favorable. The primary factor contributing to the experience gain was salary increases below projected levels. In addition, disabilities were below projected levels and deaths were above projected levels. All of these factors tend to reduce costs. These factors were partially offset by retirements well 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 1.2098%.

### 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 9.47 years of service and an annual salary of \$30,082. The Plan's active membership decreased during the fiscal year by 22 members. Over the last five years the active population increased by 115 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 a decrease in the percentage of members with service of five to fourteen years and a corresponding increase in the percentage of members with service under five years and over twenty years.

The average regular retiree is 73 years old with a monthly benefit of \$863. The number of retirees and beneficiaries receiving benefits from the system increased by twenty-nine. Over the last five years this group increased by 102; during this same period, annual benefits in payment increased by \$2,081,465.

Plan liability experience for fiscal 2011 was favorable. The primary factor contributing to the liability experience gain for the year was salary increases below projected levels. In addition, retiree mortality and withdrawals exceeded projections. All of these factors tend to reduce costs. Partially offsetting these factors were retirements and DROP entries above 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 0.7917%.

### 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 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 2012 as of July 1, 2011, is \$26,605,047. The amortization payment on the plan's frozen unfunded actuarial accrued liability as of July 1, 2011, is \$5,556,240. 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 2012 is \$34,122,855. When this amount is reduced by projected tax contributions and revenue sharing funds the resulting employers' net direct actuarially required contribution for fiscal 2012 is \$28,894,493. This is 17.08% of the projected Plan A payroll for fiscal 2012.

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 2011	16.6336%
Factors Increasing the Normal Cost Accrual Rate:	
Asset Experience Loss	2.2895%
Contribution Loss	0.3759%
Factors Decreasing the Normal Cost Accrual Rate:	
Liability Experience	-1.2098%
New Members	-0.7784%
Normal Cost Accrual Rate – Fiscal 2012	17.3108%

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 2012 as of July 1, 2011, is \$6,247,028. The amortization

payment on the plan's frozen unfunded actuarial accrued liability as of July 1, 2011, is \$597,212. 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 2012 is \$7,391,507. When this amount is reduced by projected tax contributions and revenue sharing funds the resulting employers' net direct actuarially required contribution for fiscal 2012 is \$5,308,997. This is 7.89% of the projected Plan B payroll for fiscal 2012.

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

Normal Cost Accrual Rate – Fiscal 2011	10.1393%
Factors Increasing the Normal Cost Accrual Rate:	
Asset Experience Loss	1.1497%
Contribution Loss	0.1920%
Factors Decreasing the Normal Cost Accrual Rate:	
Liability Experience	-0.7917%
New Members	-0.4039%
Normal Cost Accrual Rate – Fiscal 2012	10.2853%

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 2012, the net effect of the change in payroll on amortization costs was an increase of 0.10% of payroll for Plan A; and a reduction of 0.02% 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 2012 will increase by 0.27% as a percent of payroll in Plan A and will increase by 0.03% of payroll in Plan B. Although the actuarially required net direct employer contribution rate for Plan A for fiscal 2012 is 17.08%, the actual employer contribution rate for fiscal 2012 is 16.75% of payroll. After accounting for the anticipated contribution shortfall in fiscal 2012 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 17.00% for fiscal 2013 for Plan A. Although the actuarially required net direct employer contribution rate for Plan B for fiscal 2012 is 7.89%, the actual employer contribution rate for fiscal 2012 is 8.00% of payroll. After accounting for the anticipated contribution excess in fiscal 2012 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 8.00% for fiscal 2013 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 2011, 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.

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 0.62% 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 9.07% in Plan A and 4.94% in Plan B.

Notwithstanding recent contribution increases, a significant portion of investment losses incurred in fiscal 2009 have not yet been released into the actuarial value of assets due to the current asset smoothing methodology. These losses will be released over the next two years and, even when the investment returns for the fiscal 2011 are factored in, this will put upward pressure on costs as they are released into income unless they are offset by substantial asset or liability gains.

### COST OF LIVING INCREASES

During fiscal 2011 the actual cost of living (as measured by the US Department of Labor CPI-U) increased by 3.56%. Cost of living provisions for the system are detailed in R.S. 11:1761 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×(A+B) where X is at most \$1 and "A" represents the number of years of credited service accrued at retirement or at death of the member or retiree and "B" is equal to the number of years since retirement or since death of the member or retiree to June 30<sup>th</sup> of the initial year of such increase. The provisions of this subpart do not repeal provisions relative to cost of living adjustments contained within the individual laws governing systems; however, they are to be controlling in cases of conflict. All of the above provisions require that the system earn sufficient excess interest earnings to fund the increases. In addition, the ratio of the plan's assets to benefit obligations must meet the criteria established in R.S. 11:242. This section sets forth a minimum "target ratio" of the actuarial value of assets to the Pension Benefit Obligation. We have determined that for fiscal 2010, 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, 2011



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



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



**Plan A - Components of Actuarial Funding** 

**Plan A – Frozen Unfunded Accrued Liability** 



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

Actuarial Value of Assets vs. GASB-25 Accrued Liability (\$) Millions Actuarial Value of Assets GASB-25 Accrued Liability



## Plan A – Historical Asset Yield



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



**Plan A - Net Non-Investment Income** 





<sup>- 14 -</sup>G. S. CURRAN & COMPANY, LTD.



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



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

## Plan B - Components of Present Value of Future Benefits June 30, 2011



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



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



# **Plan B - Components of Actuarial Funding**

**Plan B – Frozen Unfunded Accrued Liability** 



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

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



# **Plan B – Historical Asset Yield**



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



**Plan B - Net Non-Investment Income** 

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



<sup>- 19 -</sup>G. S. CURRAN & COMPANY, LTD.



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



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

**EXHIBITS** 

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

1. 2. 3. 4. 5. 6.	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)	\$1 \$ \$ \$ \$ \$	,085,673,090 75,313,546 723,942,801 92,535,571 7,121,966 201,003,138
7.	Present Value of Future Salaries	\$1	,161,145,792
8.	Employer Normal Cost Accrual Rate (6 ÷ 7)		17.310758%
9.	Projected Fiscal 2012 Salary for Current Membership	\$	153,690,826
10.	Employer Normal Cost as of July 1, 2011 (8 x 9)	\$	26,605,047
11.	Amortization Payment on Frozen Unfunded Accrued Liability of \$75,313,546 with Payments increasing at 4.25% per year	\$	5,556,240
12.	Total Employer Normal Cost & Amortization Payment (10 + 11)	\$	32,161,287
13.	Employer Normal Cost and Amortization Payment Interest Adjusted for Midyear Payment	\$	33,422,990
14.	Estimated Administrative Cost for Fiscal 2012	\$	699,865
15.	Gross Employer Actuarially Required Contribution for Fiscal 2012 (13 + 14)	\$	34,122,855
16.	Projected Tax Contributions for Fiscal 2012	\$	5,113,129
17.	Projected Revenue Sharing Funds for Fiscal 2012	\$	115,233
18.	Net Direct Employer Actuarially Required Contribution for Fiscal 2012 (15 - 16 - 17)	\$	28,894,493
19.	Projected Payroll (July 1, 2011 through June 30, 2012)	\$	169,170,402
20.	Employers Minimum Net Direct Actuarially Required Contribution as a % of Projected Payroll for Fiscal 2012 (18 ÷19)		17.08%
21.	Actual Employer Contribution Rate for Fiscal 2012		16.75%
22.	Contribution Shortfall (Excess) as a % of Payroll (20 - 21)		0.33%
23.	Increase (Reduction) to Following Year Payment for Contribution Shortfall (Excess)		0.04%
24.	Minimum Recommended Net Direct Employer Contribution Rate for Fiscal 201 (20 + 23, Rounded to nearest 0.25%)	3	17.00%

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

Retirement Benefits	\$ 620,223,897	7
Survivor Benefits	10,675,448	3
Disability Benefits	7,674,629	)
Vested Deferred Termination Benefits	12,630,888	3
Contribution Refunds	18,340,491	l
TOTAL Present Value of Future Benefits for Active Members		\$ 669,545,353
Present Value of Future Benefits for Terminated Members:		
Terminated Vested Members Due Benefits at Retirement	\$ 13,661,617	7
Terminated Members with Reciprocals		
Due Benefits at Retirement	871,782	2
Terminated Members Due a Refund	1,902,011	1
TOTAL Present Value of Future Benefits for Terminated Member	ers	\$ 16,435,410
Present Value of Future Benefits for Retirees:		
Regular Retirees	\$ 333,651,115	5
Disability Retirees	17,382,745	5
Survivors & Widows	44,816,713	3
Reserve for Accrued Retiree DROP Account Balances	3,841,754	1
TOTAL Present Value of Future Benefits for Retirees & Survivo	ors	\$ 399,692,327
TOTAL Present Value of Future Benefits		\$1,085,673,090

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

Current Assets:			
Cash \$	8,759,609		
Accrued Alternative Investments	3,693,457		
Accrued Interest and Dividends on Investments	370,868		
Investment Receivable	41,323,408		
Contributions Receivable from Employers	1,683,869		
Contributions Receivable from Members	1,022,921		
Other Receivables	269,087		
Due From Plan B	50,324		
TOTAL CURRENT ASSETS		\$	57,173,543
Property Plant & Equipment		\$	670,892
Mitigation Bank Capitalized Project Costs		\$	822,540
Prepaid Expense		\$	57,784
Other Assets		\$	33,456
Investments:			
Co-Mingled Funds \$	167,584,278		
Limited Partnerships	106,361,447		
Mutual Fund – Equities	83,218,093		
Cash Equivalents	25,407,912		
Common Stock	96,544,457		
Mitigation Credits	43,510,937		
Mutual Fund – Fixed Income	27,079,612		
Real Estate-Mitigation Banks and LLC	18,048,419		
Bonds	18,739,835		
Notes Receivable	11,686,365		
Line of Credit	8,365,368		
Limited Liability Companies	27,378,658		
Convertible Notes	1,708,054		
TOTAL INVESTMENTS		\$	635,633,435
TOTAL ASSETS		\$	694,391,650
Current Liabilities:			
Other Payables \$	369,226		
Investment Payable	502,371		
Mitigation Bank Unearned Revenue	466,749		
Refunds Payable	224,001		
Accounts Payable	193,614		
Long-Term Mitigation Liability	132,574		
Due To Plan B (accrued)	17,193		
TOTAL CURRENT LIABILITIES		\$	1,905,728
OTHER CONTROLLING INTEREST		\$	(13 200 561)
MARKET VALUE OF ASSETS	••••••	\$	679.285.361
		Ψ	,_00,001

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

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

Fiscal year 2011 Fiscal year 2010 Fiscal year 2009 Fiscal year 2008 Fiscal year 2007	\$ 15,459,113 16,842,738 (144,474,440) (45,633,930) 56,997,359
Total for five years\$	(100,809,160)
Deferral of excess (shortfall) of invested income:	
Fiscal year 2011 (80%) Fiscal year 2010 (60%) Fiscal year 2009 (40%) Fiscal year 2008 (20%)	\$ 12,367,291 10,105,643 (57,789,776) (9,126,786)
Fiscal year 2007 (0%)	0

Total deferred for year ...... \$ (44,443,628)

Actuarial value of assets corridor

85% of market value, end of year 115% of market value, end of year	\$ \$	577,392,557 781,178,165
Allocated Share of the Expense Fund	\$	213,812
Final actuarial value of plan net assets, end of year (average of preliminary actuarial value of plan assets and 115% of market value plus allocated share of the expense fund)	\$	723,942,801

Market value of plan net assets, end of year ..... \$ 679,285,361

Preliminary actuarial value of plan assets, end of year ..... \$ 723,728,989

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

Employee Contributions to the Annuity Savings Fund	\$ 92,535,571
Employer Normal Contributions to the Pension Accumulation Fund	201,003,138
Employer Amortization Payments to the Pension Accumulation Fund	75,313,546
Funding Deposit Account Credit Balance	(7,121,966)

### 

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

Prior Year Frozen Unfunded Accrued Liability	\$ 75,064,491
Interest on Frozen Unfunded Accrued Liability \$ 6,005,160	
Employer Normal Cost for Prior Year	
Interest on the Normal Cost	
Administrative Expenses	
Interest on Expenses	
Credit to Funding Deposit Account	
TOTAL Increases to Frozen Unfunded Accrued Liability	\$ 34,179,959
Gross Regular Employer Contributions \$ 28,445,893	
Interest on Employer Contributions	
Contribution Shortfall (Excess)	
Interest on Contribution Shortfall (Excess)164,930	
TOTAL Decreases to Frozen Unfunded Accrued Liability	\$ 33,930,904
CURRENT YEAR FROZEN UNFUNDED ACCRUED LIABILITY	\$ 75,313,546

Actuarial Value of Assets (June 30, 2010)	\$	5 704,735,602
Income:		
Member Contributions \$ 14,376	,333	
Employer Contributions	,242	
Ad Valorem Taxes	,913	
Revenue Sharing Funds	.738	
Irregular Contributions	,601	
Total Contribution Income	\$	6 43,949,827
Net Appreciation in Fair Value of Investments	.764	
Interest and Dividend Income	.981	
Income from Alternative Investments	.631	
Securities Lending	.002	
Investment Income Allocated from Expense Fund	,88 <u>2</u> 586	
Investment Expense	.289)	
Net appreciation attributable to non controllable interest 2.207	,20),	
Net Investment Income	\$	65,015,436
TOTAL Income	\$	6 108,965,263
Expenses:		
Retirement Benefits \$ 42,759	,833	
Funds Transferred to Another System929	,448	
Refunds of Contributions	,239	
DROP Disbursements	,229	
Allocated Share of Administrative Expenses	,980	
Transfer of Funds from Plan B	,165)	
Depreciation	,044	
Transfer to Plan B (accrued) 17	,193	
TOTAL Expanses	đ	54 141 901
IOTAL Expenses	3	5 54,141,801
Net Market Income for Fiscal 2011 (Income - Expenses)	\$	54,823,462
Adjustment for Change in Allocated Expense Fund Balance	\$	64,682
Adjustment for Actuarial Smoothing	\$	6 (35,620,945)
Actuarial Value of Assets (June 30, 2011)	\$	5 723,942,801

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

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

Present Assets of the System Creditable to:	
Annuity Savings Fund	\$ 108,135,422
Annuity Reserve Fund	395,850,573
Pension Accumulation Fund	144,269,516
Deferred Retirement Option Plan Account	23,907,884
Funding Deposit Account	7,121,966
NET MARKET VALUE OF ASSETS	\$ 679,285,361
ADJUSTMENT FOR ACTUARIAL SMOOTHING	44,443,628
ALLOCATED SHARE OF THE EXPENSE FUND	213,812
ACTUARIAL VALUE OF ASSETS	\$ 723,942,801

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

Present Value of Credited Projected Benefits Payable to Current Employees	\$ 468,459,438
Present Value of Benefits Payable to Terminated Employees	16,435,410
Present Value of Benefits Payable to Current Retirees and Beneficiaries	399,692,327
TOTAL PENSION BENEFIT OBLIGATION	884,587,175
TOTAL ACTUARIAL VALUE OF ASSETS	723,942,801
Ratio of Net Actuarial Value of Assets to Pension Benefit Obligation	81.84%

### **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:	29.13%

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

Changes for Fiscal 1988	4.97%
Changes for Fiscal 1989	(1.98%)
Changes for Fiscal 1995	(1.38%)
Changes for Fiscal 1997	(3.44%)
Changes for Fiscal 1998	(3.63%)
Changes for Fiscal 2000	(1.35%)
Changes for Fiscal 2003	0.89%
Changes for Fiscal 2005	0.02%
Changes for Fiscal 2006	2.66%
Changes for Fiscal 2009	5.73%
Changes for Fiscal 2010	(2.81%)
	(0, 200)

3. TOTAL Adjustments ...... (0.32%)

Amortization of Adjustments in Funded Ratio over 30 years:

Changes for Fiscal 1988	(3.81%)
Changes for Fiscal 1989	1.45%
Changes for Fiscal 1995	0.74%
Changes for Fiscal 1997	1.61%
Changes for Fiscal 1998	1.57%
Changes for Fiscal 2000	0.50%
Changes for Fiscal 2003	(0.24%)
Changes for Fiscal 2005	(0.00%)
Changes for Fiscal 2006	(0.44%)
Changes for Fiscal 2009	(0.38%)
Changes for Fiscal 2010	0.09%

4.	TOTAL Amortization of Adjustments	1.09%
5.	Target Ratio for Current Fiscal Year (Lesser of 1+2+3+4 or 100%)	94.95%

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### EXHIBIT X PLAN A: CENSUS DATA

		Terminated			
	Active	with Funds on Deposit	DROP	Retired	Total
Number of members as of	lictive		DIGI	Retificu	Total
June 30, 2010	4,839	2,773	229	2,907	10,748
Additions to Census					
Initial membership	598	23			621
Death of another member				33	33
Omitted in error last year				(1)	(1)
Adjustment for multiple records	1				1
Change in Status during Year					
Actives terminating service	(110)	110			
Actives who retired	(143)			143	
Actives entering DROP	(89)		89		
Term. members rehired	19	(19)			
Term. members who retire		(15)		15	
Retirees who are rehired					
Refunded who are rehired	11	2			13
DROP participants retiring			(39)	39	
DROP returned to work	35		(35)		
Eliminated from Census					
Refund of contributions	(368)	(104)			(472)
Deaths	(8)	(2)		(132)	(142)
Included in error last year					
Suspended Benefits					
Adjustment for multiple records				(3)	(3)
Number of members as of					
June 30, 2011	4,785	2,768	244	3,001	10,798

	Number	Number	Total	Average	Total
Age	Male	Female	Number	Salary	Salary
16 - 20	21	2	23	19,863	456,850
21 - 25	155	57	212	21,918	4,646,523
26 - 30	238	107	345	25,459	8,783,361
31 - 35	238	139	377	28,377	10,697,956
36 - 40	310	161	471	29,548	13,917,208
41 - 45	395	196	591	32,341	19,113,284
46 - 50	497	266	763	34,212	26,103,379
51 - 55	566	274	840	35,549	29,861,084
56 - 60	481	229	710	35,924	25,505,801
61 - 65	285	139	424	37,231	15,785,848
66 - 70	133	48	181	36,374	6,583,639
71 - 75	46	16	62	28,930	1,793,655
76 - 80	17	7	24	34,992	839,799
81 - 85	4	2	6	29,045	174,268
TOTAL	3,386	1,643	5,029	32,663	164,262,655

THE ACTIVE CENSUS INCLUDES 2,133 ACTIVES WITH VESTED BENEFITS, INCLUDING 244 DROP PARTICIPANTS AND 178 ACTIVE FORMER DROP PARTICIPANTS.

	Number	Number	Total	Average	Total
Age	Male	Female	Number	Benefit	Benefit
31 - 35	0	1	1	13.536	13 536
36 - 40	5	1	6	9,462	56,769
41 - 45	7	16	23	15,175	349,030
46 - 50	24	16	40	12,454	498,179
51 - 55	26	21	47	12,721	597,869
56 - 60	34	12	46	19,086	877,962
61 - 65	2	1	3	10,951	32,852
66 - 70	4	2	6	3,544	21,266
71 - 75	1	0	1	32,163	32,163
86 - 90	1	0	1	2,485	2,485
TOTAL	104	70	174	14,265	2,482,111

PLAN A - TERMINATED MEMBERS DUE A DEFERRED RETIREMENT BENEFIT:

PLAN A - TERMINATED MEMBERS DUE A REFUND OF CONTRIBUTIONS:

Contribu	tio	ns Ranging		Total
From		То	Number	Contributions
0	-	99	1,844	103,670
100	-	499	327	80,713
500	-	999	115	80,165
1000	-	1999	96	135,263
2000	-	4999	95	306,328
5000	-	9999	62	439,735
10000	-	19999	41	565,028
20000	-	99999	14	415,111
	5	TOTAL	2,594	2,126,013

#### PLAN A - REGULAR RETIREES:

	Number	Number	Total	Average	Total
Age	Male	Female	Number	Benefit	Benefit
41 - 45	0	2	2	26,478	52,955
46 - 50	41	13	54	22,761	1,229,087
51 - 55	82	48	130	23,026	2,993,397
56 - 60	153	50	203	24,905	5,055,733
61 - 65	238	114	352	19,800	6,969,443
66 - 70	296	107	403	15,623	6,295,868
71 - 75	307	96	403	15,475	6,236,398
76 - 80	210	65	275	13,848	3,808,281
81 - 85	135	57	192	12,564	2,412,360
86 - 90	77	23	100	10,386	1,038,583
91 - 99	25	15	40	9,697	387,871
TOTAL	1,564	590	2,154	16,936	36,479,976

#### PLAN A - DISABILITY RETIREES:

	Number	Number	Total	Average	Total
Age	Male	Female	Number	Benefit	Benefit
31 - 35	0	1	1	11,249	11,249
36 - 40	3	0	3	12,659	37,978
41 - 45	3	2	5	11,603	58,017
46 - 50	9	0	9	11,065	99,583
51 - 55	22	7	29	12,467	361,552
56 - 60	36	16	52	11,262	585,616
61 - 65	29	5	34	10,441	354,993
66 - 70	19	7	26	9,045	235,172
71 - 75	15	2	17	7,507	127,616
76 - 80	5	1	6	8,013	48,079
81 - 85	1	2	3	4,470	13,410
TOTAL	142	43	185	10,450	1,933,265

#### PLAN A - SURVIVORS:

	Number	Number	Total	Average	Total
Age	Male	Female	Number	Benefit	Benefit
0 - 25	1	3	4	6,321	25,283
26 - 30	0	1	1	9,798	9,798
31 - 35	2	0	2	5,576	11,152
36 - 40	1	2	3	7,241	21,724
41 - 45	5	6	11	3,682	40,497
46 - 50	5	20	25	7,886	197,141
51 - 55	3	31	34	9,445	321,140
56 - 60	5	38	43	8,183	351,876
61 - 65	3	47	50	8,654	432,704
66 - 70	8	83	91	9,845	895,894
71 - 75	8	97	105	9,566	1,004,394
76 - 80	2	105	107	8,748	936,075
81 - 85	0	101	101	10,147	1,024,850
86 - 90	5	49	54	6,535	352,867
91 - 99	1	30	31	5,809	180,073
TOTAL	49	613	662	8,770	5,805,468

G. S. CURRAN & COMPANY, LTD.

MEMBERS:
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0 - 20	15	7	н									23
21 - 25	84	47	38	25	21	Q						212
26 - 30	87	67	51	47	32	58	ŝ					345
31 - 35	73	51	34	49	38	16	39	~				377
36 - 40	76	43	36	45	26	96	77	61	Q			471
41 - 45	69	50	48	44	38	85	89	106	58	4		591
46 - 50	70	40	52	48	45	120	96	102	90	88	12	763
51 - 55	65	50	45	44	17	121	113	125	95	85	56	840
56 - 60	33	31	51	36	27	2112	121	96	93	55	55	011
61 - 65	20	10	19	33	23	79	59	56	66	32	27	424
66 - 70	9	7	8	10	13	33	28	23	21	17	12	181
71 & OVEr	ς	7	ε	£	61	17	17	18	11	8	8	92
Totals	604	405	386	384	297	820	642	589	443	289	170	5029

PLAN A - AVERAGE ANNUAL SALARY OF ACTIVE MEMBERS:

Completed Years of Service

Attained Ages	0	L	2	m	4	5-9	10-14	15-19	20-24	25-29	30&0ver	Average Salary
0 - 20	18, 335	20, 625	37,454									19,863
21 - 25	21,463	21,153	22,556	22,079	25,706	21,966						21,918
26 - 30	22, 712	23,469	25,653	27,684	25,365	29,922	26,127					25,459
31 - 35	24,383	25, 505	24,714	27,415	33,269	31,321	31,806	39,366				28,377
36 - 40	21,878	23, 819	25,920	27,965	29,464	31,058	33,387	37,580	40,644			29,548
41 - 45	23,642	25, 512	25,775	26,423	30,483	29,870	33,966	42,099	42,371	41,539		32,341
46 - 50	25, 796	27, 333	26, 142	28,522	27,830	30,458	32,860	38,116	42,590	46,425	50, 637	34,212
51 - 55	25,780	24,600	24,982	31,799	28,131	31,526	32,176	38,581	42,031	49,521	50,057	35, 549
56 - 60	25, 633	32,105	27,917	26,233	31,571	34,136	31,460	38,293	42,128	44,671	50,241	35,924
61 - 65	27,602	27,172	28,484	30,983	34,013	35,055	36,096	40,228	43,951	38, 776	48,992	37,231
66 - 70	27,762	31, 715	35,585	29,354	45,511	31,938	33,660	33,018	33,247	47,611	56, 542	36,374
71 & Over	23, 694	19,229	19, 763	25,953	24,525	34,304	31,820	23,169	32,366	32,708	44,143	30, 519
Average	23, 722	25,092	25,922	27,927	30,269	31,707	32,902	38,454	41, 811	45,777	50,168	32,663
					Yea	rs Until	Retirement	t Eligibil	lity			
--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------	------------	-----------	-----------	-------------------	-----------------------	--------------------------	--------------------------	-----------------	---------	---------	-------------------------------------------------------------------------------------------------------------------------------------
Attained Ages	0	T	~	e	4	5-9	T0-14	15-19	20-24	25-29	30&Over	Total
200 201 201 201 201 201 201 201	משטא א	12	70	72	۵	<b>4</b> C	41 O 12	3	۵	н		0 H Ø M O K Ø M O H O O H O 0 H Ø M O K Ø M O H O O H O
Totals	74	12	OT	15	Q	45	42	23	ە	н	0	174
PLAN A - AI	VERAGE ANN	IUAL BENEI	FITS OF T	ERMINATED	MEMBERS . Yea.	DUE A DEF rs Until	ERRED RET' Retirement	IREMENT BE E Eligibil	ENEFIT: Lity			
Attained Ages	0	T	5	e	4	5~ 9	10-14	15-19	20-24	25-29	30&Over	Average Benefit
20 - 30 31 - 30 31 - 30 316 - 30 41 - 35 41 - 45 51 - 40 55 - 40 55 71 - 75 75 76 - 70 75 76 - 80 81 - 85 81 - 85 81 - 85 81 - 85 76 75 76 75 76 75 70 75 70 75 70 75 70 75 70 70 70 70 70 70 70 70 70 70 70 70 70	17,152 10,950 3,544 32,163 2,485	25,420	15,863	17,267	17,306	12,778	12,454 11,425	15, 175	9,462	13, 536		13,536 15,175 12,454 12,454 12,721 12,721 12,721 12,950 12,950 13,544 163 2,485 2,485 0 0

14,265

0

13, 536

9,462

15,175

12,405

12,778

17,306

17,267

15,863

25,420

10,016

Average

PLAN A - TERMINATED MEMBERS DUE A DEFERRED RETIREMENT BENEFIT:

RETIRES:
SERVICE
I.
A
PLAN

Completed Years Since Retirement

Attained Ages	0	Ч	7	m	4	5- 9	10-14	15-19	20-24	25-29	30&Over	Total
0 - 50	13	Q	7	80	4	13	~					56
51 - 55	22	16	15	20	19	35	ŝ					130
56 - 60	30	15	19	25	31	72	Ø		~			203
61 - 65	62	48	33	38	38	06	39	ŋ	Т			352
66 - 70	46	22	32	23	49	165	47	14	4		T	403
71 - 75	TT	7	15	TT	22	134	126	48	25	ŝ	1	403
76 - 80	н	Ŋ	ω	N	4	34	88	89	40	6		275
81 - 85	ŋ	Ŋ			ŝ	10	26	66	61	16	Ŋ	192
86 - 90	Т				ŝ	6	Ŋ	8	43	27	7	100
91 & Over					г	н	ε		Q	74	15	40
Totals	189	124	124	127	174	560	348	228	182	69	29	2154

PLAN A - AVERAGE ANNUAL BENEFITS PAYABLE TO SERVICE RETIRES:

Completed Years Since Retirement

		and the second se										
Attained Ages	0	н	n	ŝ	4	5-9	10-14	15-19	20-24	25-29	30£Over	Average Benefit
0 - 50	29,323	21,166	22,553	25,897	18,373	19,282	10,575					22,894
51 - 55	27,069	30, 633	24,725	21,247	22,816	18,219	13,591					23,026
56 - 60	25,484	29,654	26,649	24,113	23,511	24,879	22,680		6,488			24,905
61 - 65	17,750	19,499	19,200	17,745	18,490	21,612	23,150	22,378	7,344			19,800
66 - 70	11,892	15,210	13,474	12,463	14,031	15,501	21,541	25, 323	19,153		7,680	15,622
71 - 75	16,715	18,224	13,307	12,156	15,255	13,592	14,421	20,670	23,677	8,685	7,563	15,475
76 - 80	7,468	13,139	5,431	10,219	3,528	11,312	12,254	13,451	20,874	21,024		13,848
81 - 85	10,978	14,830			12,341	12,192	10,481	12,409	11,579	18,920	18,060	12,564
86 - 90	4,348				7,673	6,666	7,856	11,427	11,532	9,805	11,414	10,386
91 & Over					4,619	31,054	9,442		11,309	8,455	9,177	9,697
Average	19,140	21,120	18,676	18,505	17,473	17,109	15,566	15,445	15,351	13,059	11,141	16,936

					Сощ	pleted Yes	ırs Since	Retiremen	16			
Attained Ages	0	г	5	~ m	4	5-9	10-14	15-19	20-24	25-29	30&0ver	Total
0 - 30 31 - 35 36 - 40 41 - 45	н	н		н	Ø	ы	H (1)					0490
46 - 50 51 - 55 56 - 60 61 - 65 66 - 70	μW	н <i>и и</i>	ннн	<i>(</i> 11) (11) (11) (11) (11) (11) (11) (11)	41 M M H	нн н н л л л л	ы го са са м го са са са	ო <i>ო</i> თ. თ. თ	ЧСМР	н о	Ń	0 0 0 0 0 0
71 - 75 76 - 80 81 - 85 86 & Over			а	н	1	0 9 9	нн	N H M	1 11 10	1 1 1	N	0 M Q H
Totals PLAN A - A	5 VERAGE AN	7 NUAL BENE	5 FITS PAYA	II DI II	12 SABILITY . Com	41 RETIREES: pleted Yea	41 irs Since	44 Retiremen	10 10	Ŋ	4	185
Attained Ages	0	T	7	ε	7	- 1 2 0	<b>7</b> 1-01	15-19	20-24	25-29	30&Over	Average Benefit
0	16, 643	12, 839		11,503 19,746	10, 156	11,249	8,496 13,101 6,567	810-6				11,249 12,659 11,603
51 - 55 56 - 60 61 - 65 66 - 70 71 - 75 71 - 75 81 - 80 81 - 85 86 & Over	21, 282 16, 754	12,106 13,647 10,267	11,268 17,801 8,338 6,983	15,071 13,853 10,420 5,321	16,042 12,889 6,204 4,190	12,256 12,145 10,592 5,251 7,267 4,223	10,870 9,780 12,053 7,554 9,580 5,433	10, 221 8, 956 12, 902 13, 263 8, 232 5, 992 4, 470	2,753 5,010 7,021 6,516 5,431 11,087	6,242 9,206 9,154 10,257	3,154 6,004	4, 470 4, 507 4, 507 4, 507 4, 507 4, 507 4, 507 6, 507 6, 507 7, 507 7, 507 7, 507 6, 507 7, 507 7, 507 7, 507 7, 507 8, 013
Average	17,637	12,346	10,275	13,532	11,645	10,720	9,707	10,246	6.796	8,813	4.579	10.450

PLAN A - DISABILITY RETIREES:

					Comp.	leted Yea	rs Since	Retiremen	t			
Attained Ages	0	F	n	ß	4	5- 9	10-14	15-19	20-24	25-29	30£Over	Total
0 - 20		T		F		L	L					Y
21 - 25		I		l		1	1					
26 - 30						F						
31 - 35		Т				1 1						4 0
36 - 40						N		T				1 01
41 - 45		т		г		Q	~	н	г		ŝ	TT
46 - 50	г				1	г	9	Ŋ		Ч	ŝ	25
51 - 55	N	г		01	н	8	Ŋ	8	4	ŝ		34
56 - 60		N	~	T	1	14	6	9	7	Ч		43
61 - 65	н		н	14	~	10	14	9	Q	Ŋ		50
66 - 70			4	N	4	21	24	18	TT	7		16
71 - 75	г	н	N	Ŋ	н	TT	27	25	21	8	ŝ	105
76 - 80						4	19	27	29	18	10	107
81 - 85	ч					ŋ	~	15	35	34	11	TOT
86 - 90							T	2	9	19	23	54
91 & Over								н	N	Ŋ	23	31
Totals	و	7	6	14	TT	85	OTT	877	128	86	76	662
PLAN A - AVI	FRAGE ANNU	IL BENEFI	TTS PAYABI	LE TO SURV	TVORS OF	FORMER M	EMBERS:					
					Comp.	leted Yea	rs Since	Retiremen	ţ			
Attained Ages	0	r	10	, m	4	5-9	10-14	15-19	20-24	25-29	30£0ver	Average Benefit
0 - 20		8, 342		5,620		6,898	4,422					6,321
21 - 25												0
21 1 25		707 2				7 790						9, 798

			5 - 50 - 50	2.0.000 million								
lttained Ages	0	Т	Ø	m	4	5-0	70-14	15-19	20-24	25-29	30&Over	Average Benefit
	]			ľ						The second s		
0 - 20		8, 342		5,620		6,898	4,422					6,321
21 - 25												0
26 - 30						9,798						9.798
31 - 35		6,127				5,025						5,576
36 - 40						7,234		7,255				7,241
41 - 45		6,127		9,715		4,148	4,191	3, 625	1,900		817	3,682
46 - 50	13,486				10,015	8,580	10,969	5, 787		4,849	1,322	7,886
51 - 55	19,920	11,807		7,339	5,671	14,455	5,670	8,262	5,319	5,926		9,445
56 - 60		9,840	8,679	4,665	1,066	10,512	10,502	5, 728	4,017	4,925		8, 183
61 - 65	25,698		9,492	7,281	5,050	10,695	11,955	6,064	4,327	2,503		8,654
66 - 70			12,413	8,468	13,907	12,842	9,795	9,575	4,068	7,400		9,845
71 - 75	8,510	9,167	7,485	8,695	13,273	10,991	10,226	9,620	10,068	5,615	7,057	9,566
76 - 80						4,835	7,685	9,962	11,317	7,591	3,692	8,748
81 - 85	4,046					14,068	7,674	9,311	11,540	10,294	6, 334	10, 147
86 - 90							3,218	11,128	7,648	8,643	4,102	6, 535
91 & Over								11,511	5,803	6,588	5,392	5,809
Average	15,263	8,750	10,164	7,832	9,615	10,899	9,496	8,899	9,054	8,297	4,639	8,770

PLAN A - SURVIVING BENEFICIARIES OF FORMER MEMBERS:

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

		Fiscal 2011		Fiscal 2010		Fiscal 2009		Fiscal 2008
Number of Active Members		5,029		5,068		5,052		5,030
Number of Retirees and Survivors		3,001		2,907		2,861		2,794
Number Terminated Due Deferred Benefits		174		183		172		184
Number Terminated Due Refund		2,594		2,590		2,596		2,561
Active Lives Payroll	\$	164,262,655	\$	162,546,523	\$	157,082,727	\$	148,644,512
Retiree Benefits in Payment	\$	44,218,709	\$	41,527,971	\$	39,834,118	\$	37,650,335
Market Value of Assets	\$	679,285,361	\$	624,427,505	\$	568,167,813	\$	666,534,551
Ratio of Actuarial Value of Assets to Actuarial Accrued Liability		90.58%		90.37%		89.99%		90.08%
Actuarial Accrued Liability (As defined by GASB-25)	\$	799,256,347	\$	779,800,094	\$	745,526,637	\$	745,714,562
Actuarial Value of Assets	\$	723,942,801	\$	704,735,602	\$	670,910,030	\$	671,721,084
Unfunded Actuarial Accrued Liability	\$	75,313,546	\$	75,064,492	\$	74,616,607	\$	73,993,478
Present Value of Future Employer Normal Cost	\$	201,003,138	\$	192,786,430	\$	154,002,240	\$	102,751,307
Present Value of Future Employee Contributions	\$	92,535,571	\$	92,383,724	\$	88,362,181	\$	84,164,497
Funding Deposit Account Credit Balance	\$	7,121,966	\$	6,594,413	\$	6,105,938		N/A
Present Value of Future Benefits	\$1	,085,673,090	\$1	,058,375,835	\$	981,785,120	\$	932,630,366
*************************************	***	********	<**	********	**	******	**	******
		Fiscal 2012		Fiscal 2011		Fiscal 2010		Fiscal 2009
Employee Contribution Rate		9.25%		9.25%		9.25%		9.25%
Proj. Tax Contribution as % of Projected Payroll		3.09%		3.07%		3.07%		2.82%
Actuarially Req'd Net Direct Employer Cont. Rate		17.08%		16.41%		13.78%		10.25%

16.75% 14.25%

13.50%

13.50%

Actual Employer Direct Contribution Rate

	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		Fiscal 2002 5,481 2,316 193 2,158
\$	141,232,448	\$	140,773,796	\$	140,020,164	\$	135,925,550	\$	135,876,426	\$	130,191,230
\$	34,978,923	\$	32,315,373	\$	30,555,460	\$	29,043,640	\$	27,431,127	\$	26,145,224
\$	667,345,480	\$	567,015,013	\$	521,411,279	\$	485,539,046	\$	444,996,698	\$	432,669,352
	89.51%		88.67%		87.75%		86.90%		86.79%		87.26%
\$	697,658,641	\$	637,909,978	\$	581,801,281	\$	535,579,287	\$	521,766,411	\$	531,127,529
\$	624,442,059	\$	565,604,518	\$	510,523,409	\$	465,429,341	\$	452,830,104	\$	463,477,324
\$	73,216,582	\$	72,305,460	\$	71,277,872	\$	70,149,946	\$	68,936,307	\$	67,650,205
\$	106,821,650	\$	138,753,419	\$	169,264,548	\$	161,387,026	\$	146,656,618	\$	100,815,782
\$	81,084,751	\$	82,859,110	\$	84,762,421	\$	85,111,124	\$	86,226,350	\$	83,902,996
	N/A		N/A		N/A		N/A		N/A		N/A
\$	885,565,042	\$	859,522,507	\$	835,828,250	\$	782,077,437	\$	754,649,379	\$	715,846,307
**	*******	***	********	***	******	***	********	***	******	***	******
	Fiscal 2008		Fiscal 2007	]	Fiscal 2006	ł	Fiscal 2005	]	Fiscal 2004	I	Fiscal 2003
	9.25%		9.25%		9.25%		9.25%		9.25%		9.25%
	2.62%		2.56%		2.34%		2.38%		2.29%		2.28%

G. S. CURRAN & COMPANY, LTD.

15.87%

15.00%

14.61%

11.00%

16.30%

16.00%

11.17%

13.50%

13.89%

16.25%

10.78%

8.00%

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

1. 2. 3. 4. 5. 6.	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 $(1 - 2 - 3 - 4 + 5)$	\$ \$ \$ \$ \$	225,853,983 4,346,525 152,966,837 21,582,459 2,493,464 49,451,626
7.	Present Value of Future Salaries	\$	480,796,906
8.	Employer Normal Cost Accrual Rate (6 ÷ 7)		10.285346%
9.	Projected Fiscal 2012 Salary for Current Membership	\$	60,737,173
10.	Employer Normal Cost as of July 1, 2011 (8 x 9)	\$	6,247,028
11.	Amortization Payment on Frozen Unfunded Accrued Liability of \$4,346,525 with Payments decreasing at 2% per year	\$	597,212
12.	TOTAL Employer Normal Cost & Amortization Payment (10 + 11)	\$	6,844,240
13.	Employer Normal Cost and Amortization Payment Interest Adjusted for Midyear Payment	\$	7,112,743
14.	Estimated Administrative Cost for Fiscal 2012	\$	278,764
15.	TOTAL Employer Actuarially Required Contribution for Fiscal 2012 (13 + 14)	\$	7,391,507
16.	Projected Tax Contributions for Fiscal 2012	\$	2,036,611
17.	Projected Revenue Sharing Funds for Fiscal 2012	\$	45,899
18.	Net Direct Employer Actuarially Required Contribution for Fiscal 2012 (15-16-17)	\$	5,308,997
19.	Projected Payroll (July 1, 2011 through June 30, 2012)	\$	67,275,033
20.	Employers' Minimum Net Direct Actuarially Required Contribution as a % of Projected Payroll for Fiscal 2012 (18 ÷ 19)		7.89%
21.	Actual Employer Contribution Rate for Fiscal 2012		8.00%
22.	Contribution Shortfall (Excess) as a % of Payroll (20 - 21)		(0.11%)
23.	Increase (Reduction) to Following Year Payment for Contribution Shortfall (Excess)		(0.01%)
21.	Minimum Recommended Net Direct Employer Contribution Rate for Fiscal 201 $(17 + 20, Rounded to nearest 0.25\%)$	3	8.00%

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

Present Value of Future Benefits for Active Members:

Retirement Benefits \$ 1	36,435,525	
Survivor Benefits	3,023,626	
Disability Benefits	2,223,811	
Vested Deferred Termination Benefits	6.662.180	
Contribution Refunds	5.276.250	
	0,270,200	
TOTAL Present Value of Future Benefits for Active Members		\$ 153,621,392
Present Value of Future Benefits for Terminated Members.		
resent value of ruture benefits for reminiated memoers.		
Terminated Vested Members Due Benefits at Retirement \$	3,369,986	
Terminated Members with Reciprocals	- , ,	
Due Benefits at Retirement	354.932	
Terminated Members Due a Refund	518.751	
	,	
TOTAL Present Value of Future Benefits for Terminated Members		\$ 4,243,669
Present Value of Future Benefits for Betirees		
Tresent value of Future Denemis for Refirees.		
Regular Retirees\$	52,050,184	
Disability Retirees	4.911.166	
Survivors & Widows	10.285.883	
Reserve for Accrued Retiree DROP Account Balances	741.689	
	, 11,005	
TOTAL Present Value of Future Benefits for Retirees & Survivors		\$ 67,988,922
TOTAL Present Value of Future Benefits for Retirees & Survivors		\$ 67,988,922

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

Current Assets:					
Cash	\$ 3	3,232,944			
Accrued Alternative Investments		737,596			
Contributions Receivable from Employers		380,630			
Accrued Interest on Investments		64,848			
Investments Receivable	8	3,616,815			
Contributions Receivable from Members		268,005			
Dividends Receivable		7,183			
Other		70,748			
Due from Plan A		17,193			
Due To Other Funds		(50,324)	ļ		
TOTAL CURRENT ASSETS			\$	13,345,63	38
Property, Plant & Equipment			\$	224,41	11
Mitigation Bank Capitalized Project Costs			\$	172,06	57
Prepaid Expense			\$	12,08	88
Other Assets			\$	6,99	99
Investments:				,	
Co-Mingled Funds	\$ 35	5,327,089			
Limited Partnerships	22	2.367.028			
Mutual Fund – Equities	17	.487.420			
Common Stock	20	.374.005			
Cash Equivalents	5	5.105.291			
Mitigation Credits	ç	0.102.046			
Mutual Fund – Fixed Income	5	5.665.778			
Real Estate-Mitigation Banks and LLC	3	8.775.546			
Bonds	3	3.932.011			
Notes Receivable	2	2.451.091			
Line of Credit	1	.763.417			
Limited Liability Companies	5	5.739.075			
Convertible Notes	· ·	357,308			
TOTAL INVESTMENTS		201,200	\$1	33 447 10	)5
TOTAL ASSETS			\$1	47.208.30	)8
Current Liabilities:			Ψı	,200,30	
Other Payables	\$	77.238			
Investments Pavable	Ψ	103 678			
Mitigation Bank Unearned Revenue		97 639			
Refunds Pavable		74 975			
Accounts Payable		37 586			
Long-Term Mitigation Liability		27 733			
Long Torm Mitigation Encontry		21,100			
TOTAL CURRENT LIABILITIES			\$	418 84	19
OTHER CONTROL LING INTEREST	•••••	•••••	\$	(2.761.4)	25)
MARKET VALUE OF ASSETS			\$	144.028.0	34

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

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

Fiscal year 2011 Fiscal year 2010 Fiscal year 2009 Fiscal year 2008 Fiscal year 2007	\$	3,285,686 3,382,611 (29,319,546) (8,919,684) 10,509,451
Total for five years	\$	(21,061,482)
Deferral of excess (shortfall) of invested income:		
Fiscal year 2011 (80%) Fiscal year 2010 (60%) Fiscal year 2009 (40%) Fiscal year 2008 (20%) Fiscal year 2007 (0%)	\$	2,628,549 2,029,567 (11,727,819) (1,783,937) 0
Total deferred for year	\$	(8,853,640)
Market value of plan net assets, end of year	\$	144,028,034
Preliminary actuarial value of plan assets, end of year	\$	152,881,674
Actuarial value of assets corridor		
85% of market value, end of year 115% of market value, end of year	\$ \$	122,423,829 165,632,239
Allocated Share of the Expense Fund	\$	85,163
Final actuarial value of plan net assets, end of year (average of preliminary actuarial value of plan assets and 115% of market value plus allocated share of the expense fund)	\$	152,966,837

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

Employee Contributions to the Annuity Savings Fund	\$ 21,582,459
Employer Normal Contributions to the Pension Accumulation Fund	49,451,626
Employer Amortization Payments to the Pension Accumulation Fund	4,346,525
Funding Deposit Credit Account	(2,493,464)
TOTAL PRESENT VALUE OF FUTURE CONTRIBUTIONS	\$ 72,887,146

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

Prior Year Frozen Unfunded Accrued Liability	\$ 4,633,960
Interest on Frozen Unfunded Accrued Liability \$ 370,717	
Employer Normal Cost for Prior Year6,123,501	
Interest on the Normal Cost	
Administrative Expenses	
Interest on Expenses	
Credit to Funding Deposit Account	
TOTAL Increases to Frozen Unfunded Accrued Liability	\$ 7,303,167
Interest on Employer Contributions	
Contribution Shortfall (Excess)	
Interest on Contribution Shortfall (Excess)	
TOTAL Decreases to Frozen Unfunded Accrued Liability	\$ 7,590,602
CURRENT YEAR FROZEN UNFUNDED ACCRUED LIABILITY	\$ 4,346,525

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

Actuarial Value of Assets (June 30, 2010)..... \$ 147,046,143

### Income:

Member Contributions\$	3,129,115		
Employer Contributions	4,447,594		
Ad Valorem Taxes	1,926,660		
Irregular Contributions	383,009		
Revenue Sharing Funds	46,360		
Transfer from Plan A (accrued)	17,193		
Total Contribution Income		\$	9,949,931
Net Appreciation in Fair Value of Investments\$	11,837,446		
Interest and Dividend Income	748,555		
Income from Alternative Investments	1,633,069		
Securities Lending	24,452		
Investment Income Allocated from Expense Fund	234		
Investment Expense	(983,342)		
Net appreciation attributable to non controllable interest.	461,841		
Net Investment Income	- ,-	\$	13,722,255
TOTAL Income		\$	23,672,186
Expenses:			
Retirement Benefits\$	7,674,468		
Refunds of Contributions	966,321		
Funds Transferred to Another System	269,773		
DROP Disbursements	1,000,076		
Allocated Share of Administrative Expenses	297,132		
Transfer to Plan A	31.165		
Depreciation	9,892		
TOTAL Expenses		\$	10,248,827
Net Market Income for Fiscal 2011 (Income - Expenses)		\$	13,423,359
Adjustment for Change in Allocated Expense Fund Balance		\$	(4,682)
Adjustment for Actuarial Smoothing		\$	(7 497 983)
rajustment for returnar binootining		Ψ	(1,171,703)
Actuarial Value of Assets (June 30, 2011)		\$	152,966,837

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

Present Assets of the System Creditable to:

Annuity Savings Fund	\$ 22,645,070
Annuity Reserve Fund	67,247,233
Pension Accumulation Fund	46,703,509
Deferred Retirement Option Plan Account	4,938,758
Funding Deposit Account	2,493,464
NET MARKET VALUE OF ASSETS	\$ 144,028,034
ADJUSTMENT FOR ACTUARIAL SMOOTHING	8,853,640
ALLOCATION OF EXPENSE FUND	85,163
ACTUARIAL VALUE OF ASSETS	\$ 152,966,837

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

Present Value of Credited Projected Benefits Payable to Current Employees	\$ 100,804,310
Present Value of Benefits Payable to Terminated Employees	4,243,669
Present Value of Benefits Payable to Current Retirees and Beneficiaries	67,988,922
TOTAL PENSION BENEFIT OBLIGATION	\$ 173,036,901
NET ACTUARIAL VALUE OF ASSETS	\$ 152,966,837
Ratio of Net Actuarial Value of Assets to Pension Benefit Obligation	88.40%

### **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:		30.47%
	Adjustments in Funded Ratio Due to Changes in Assumption(s):		
	Changes for Fiscal 1988	2.40%	
	Changes for Fiscal 1989	(2.94%)	
	Changes for Fiscal 1995	(1.22%)	
	Changes for Fiscal 1997	(3.84%)	
	Changes for Fiscal 1998	(3.71%)	
	Changes for Fiscal 2000	(2.29%)	
	Changes for Fiscal 2001	1.21%	
	Changes for Fiscal 2003	0.53%	
	Changes for Fiscal 2005	(1.12%)	
	Changes for Fiscal 2006	5.18%	
	Changes for Fiscal 2009	6.13%	
	Changes for Fiscal 2010	(3.99%)	
3.	TOTAL Adjustments		(3.66%)
	Amortization of Adjustments in Funded Ratio over 30 years:		
	Changes for Fiscal 1988	(1.84%)	
	Changes for Fiscal 1989	2.16%	
	Changes for Fiscal 1995	0.65%	
	Changes for Fiscal 1997	1.79%	
	Changes for Fiscal 1998	1.61%	
	Changes for Fiscal 2000	0.84%	
	Changes for Fiscal 2001	(0.40%)	
	Changes for Fiscal 2003	(0.14%)	
	Changes for Fiscal 2005	0.22%	
	Changes for Fiscal 2006	(0.86%)	
	Changes for Fiscal 2009	(0.41%)	
	Changes for Fiscal 2010	0.13%	
4.	TOTAL Amortization of Adjustments		3.75%
5.	Target Ratio for Current Fiscal Year (Lesser of 1+2+3+4 or 100%)		94.00%
6.	Actuarial Value of Assets Divided by PBO as of June 30, 2011		88.40%

### EXHIBIT XXI PLAN B - CENSUS DATA

		Terminated with Funds			
	Active	on Deposit	DROP	Retired	Total
Number of members as of					
June 30, 2010	2,113	1,134	84	836	4,167
Additions to Census					
Initial membership	260	8			268
Death of another member				17	17
Omitted in error last year					
Adjustment for multiple records					
Change in Status during Year					
Actives terminating service	(68)	68			
Actives who retired	(39)			39	
Actives entering DROP	(25)		25		
Term. members rehired	12	(12)			
Term. members who retire		(6)		6	
Retirees who are rehired					
Refunded who are rehired	7	3			10
DROP participants retiring			(15)	15	
DROP returned to work	15		(15)		
Eliminated from Census					
Refund of contributions	(175)	(66)			(241)
Deaths	(4)	(5)		(48)	(57)
Included in error last year					
Adjustment for multiple records					
Moved to Plan A					
Number of members as of					
June 30, 2011	2,096	1,124	79	865	4,164

#### PLAN B - ACTIVES CENSUS BY AGE:

	Number	Number	Total	Average	Total
Age	Male	Female	Number	Salary	Salary
16 - 20	10	1	11	17,866	196,525
21 - 25	76	16	92	20,669	1,901,518
26 - 30	93	37	130	24,614	3,199,814
31 - 35	122	51	173	27,071	4,683,339
36 - 40	129	63	192	28,082	5,391,692
41 - 45	161	88	249	29,605	7,371,648
46 - 50	203	103	306	31,480	9,632,768
51 - 55	256	133	389	31,673	12,320,800
56 - 60	214	89	303	32,535	9,857,992
61 - 65	148	59	207	33,977	7,033,270
66 - 70	55	15	70	33,206	2,324,439
71 - 75	30	6	36	27,852	1,002,674
76 - 80	8	2	10	36,616	366,155
81 - 85	6	0	6	20,604	123,622
86 - 90	1	0	1	21,221	21,221
TOTAL	1,512	663	2,175	30,082	65,427,477

THE ACTIVE CENSUS INCLUDES 782 ACTIVES WITH VESTED BENEFITS, INCLUDING 79 DROP PARTICIPANTS AND 56 ACTIVE FORMER DROP PARTICIPANTS.

PLAN B - TERMINATED MEMBERS DUE A DEFERRED RETIREMENT BENEFIT:

	Number	Number	Total	Average	Total
Age	Male	Female	Number	Benefit	Benefit
41 - 45	3	2	5	7,238	36,191
46 - 50	5	3	8	8,948	71,585
51 - 55	10	8	18	9,441	169,942
56 - 60	19	9	28	9,869	276,339
61 - 65	1	1	2	4,265	8,530
66 - 70	1	0	1	494	494
TOTAL	39	23	62	9,082	563,081

PLAN B - TERMINATED MEMBERS DUE A REFUND OF CONTRIBUTIONS:

Contribu	tion	s Ranging		Total
From		То	Number	Contributions
0	-	99	726	20,957
100		499	182	40,236
500	-	999	43	29,474
1000	-	1999	35	51,002
2000	-	4999	45	146,954
5000	-	9999	22	158,282
10000	-	19999	9	127,515
	T	OTAL	1,062	574,420

#### PLAN B - REGULAR RETIREES:

Age	Number Male	Number Female	Total Number	Average Benefit	Total Benefit
46 - 50	2	1	3	21,798	65,395
51 - 55	6	3	9	17,849	160,641
56 - 60	20	3	23	17,630	405,493
61 - 65	55	29	84	12,653	1,062,884
66 - 70	92	28	120	11,180	1,341,547
71 - 75	91	36	127	10,302	1,308,401
76 - 80	87	28	115	8,601	989,127
81 - 85	40	21	61	7,579	462,335
86 - 90	25	8	33	7,440	245,513
91 - 99	10	6	16	5,031	80,498
TOTAL	428	163	591	10,358	6,121,834

### PLAN B - DISABILITY RETIREES:

	Number	Number	Total	Average	Total
Age	Male	Female	Number	Benefit	Benefit
41 - 45	1	0	1	6,872	6,872
46 - 50	3	0	3	8,036	24,108
51 - 55	9	3	12	10,286	123,431
56 - 60	16	2	18	11,032	198,577
61 - 65	9	2	11	8,587	94,461
66 - 70	2	1	3	5,747	17,241
71 - 75	3	1	4	7,221	28,882
76 - 80	1	0	1	10,484	10,484
86 - 90	0	1	1	4,033	4,033
TOTAL	44	10	54	9,409	508,089

#### PLAN B - SURVIVORS:

Aae	Number Male	Number Female	Total Number	Average Benefit	<i>Total</i> <i>Benefit</i>
3-				20110220	Demoire
36 - 40	0	1	1	4,280	4,280
41 - 45	1	1	2	2,217	4,434
46 - 50	1	5	6	4,468	26,805
51 - 55	2	7	9	8,988	80,890
56 - 60	1	17	18	6,546	117,834
61 - 65	0	19	19	6,528	124,027
66 - 70	1	30	31	6,256	193,927
71 - 75	1	33	34	6,084	206,854
76 - 80	1	35	36	6,257	225,259
81 - 85	0	27	27	6,374	172,088
86 - 90	1	24	25	5,787	144,667
91 - 99	0	12	12	1,901	22,807
TOTAL	9	211	220	6,018	1,323,872

					Comp.	leted Yea	rs of Ser	vice				
Attained Ages	0	T	2	3	4	5- 9	10-14	15-19	20-24	25-29	30&Over	Total
		]			ŀ					and the second second		
0 - 20	7	4										11
21 - 25	42	11	20	TT	Q	(1						92
26 - 30	26	20	18	27	11	27	Ч					130
31 - 35	36	13	27	22	17	34	22	~				173
36 - 40	23	17	19	16	15	55	25	18	4			192
41 - 45	29	18	23	15	27	51	43	29	13	Ч		249
46 - 50	28	29	28	24	24	63	43	25	17	18	2	306
51 - 55	36	18	25	26	30	69	45	39	50	30	21	389
56 - 60	22	19	19	24	16	51	35	36	39	20	22	303
61 - 65	9	7	18	Ŋ	17	56	21	24	28	Q	19	207
66 - 70	7	ß	1	5	Ŋ	17	12	10	8	14	ŝ	20
71 & OVEr	Т	ч	ε	1	1	4	80	10	11	Q	7	53
Totals	258	160	<b>201</b>	176	169	429	255	193	170	83	81	2175
PLAN B - AV.	ERAGE ANNU	AL SALAR	Y OF ACTIV	'E MEMBERS								

PLAN B - ACTIVE MEMBERS:

Completed Years of Service

Attained						and the particular statements of						Average
Ages	0	r	2	<b>ω</b>	4	5-9	10-14	15-19	20-24	25-29	30&OVer	Salary
0 - 20	18,416	16,903										17,866
21 - 25	19, 889	17,580	23,241	21,368	22,294	19,575						20,669
26 - 30	20,712	24,782	23, 543	24,792	24,926	28,053	40,900					24,614
31 - 35	23,496	23, 622	24,108	25,113	36,405	27,586	32,276	30,060				27,071
36 - 40	22,029	22,998	26,123	30, 329	29,045	28,962	31,225	31,012	36,258			28,082
41 - 45	22,510	22,004	28,961	26,089	31,086	28,162	33,969	32,695	41,601	40,102		29,605
46 - 50	21,075	21,955	29,609	26,530	40,068	30, 694	32,822	36, 619	39,777	43,181	37,787	31,480
51 - 55	23,090	23,857	24,987	23,420	30,315	31,776	29,041	34,108	37,964	41,888	44,409	31,673
56 - 60	23,835	27,803	23,544	26,738	33,221	30,836	30,435	34,017	40,051	40,589	43,116	32,535
61 - 65	25, 164	26,896	24,539	33,875	31,908	33,058	32,922	32,224	39, 734	41,679	45,364	33,977
66 - 70	33,943	45,632	23,588	21,459	33,434	37,628	31,967	30,496	31,334	13,811	43,013	33,206
71 & OVEL	19,576	17,660	20,027	34,243	21,235	37,928	23, 829	18,055	35, 808	28,039	39,409	28,560
Average	22,063	23,675	25,514	25,749	32,161	30,548	31,535	32,620	38,702	40,141	43,191	30,082

					Yeaı	rs Until A	Retirement	Eligibil	lity			
Attained Ages	0	1	7	m	4	5-9	10-14	15-19	20-24	25-29	30£0ver	Tota1
0 - 40 41 - 45 46 - 50 51 - 55 56 - 60 61 - 65 61 - 65 71 & OVer	ман	•	m	00	٢	18	80	Ŋ				0 H 7 8 8 8 0 0 5 8 8 8 0 0
Totals	Ø	2	σ	8	2	18	α	Ŋ	0	0	0	62
PLAN B - AV	ERAGE ANI	NUAL BENE	FITS OF T	ERMINATED	MEMBERS I Year	DUE A DEFE cs Until R	ERRED RETL (etirement	REMENT BE Eligibil	INEFIT: Lity			
Attained Ages	0	1	2	<b>6</b>	4	5-9	10-14	15-19	20-24	25-29	30£0ver	Average Benefit
0 - 40 41 - 45 46 - 50 51 - 55 56 - 60 61 - 65 61 - 65 71 & 07er	8,039 4,265	11,013	10,704	10, 190	8,786	9,441	8,948	7,238				7,238 9,441 4,265 4,265 4,238 4,238 4,238 4,265 494
Average	5, 523	11,013	10,704	10,190	8,786	6,441	8,948	7,238	0	0	0	9,082

PLAN B - TERNINATED MEMBERS DUE A DEFERRED RETIREMENT BENEFIT:

					Comp	leted Yea	rs Since	Retiremen	ų			
Attained Ages	0	1	N	m	4	5-9	10-14	15-19	20-24	25-29	30£Over	Total
0 - 50	~	F										~
51 - 55		I	н			н						) <i>0</i> 1
56 - 60	8	4	г	Ч	£	Ŋ	T					23
61 - 65	16	10	26	TT	Q	13	01					84
66 - 70	15	Ŋ	TT	10	17	51	01	T				120
71 - 75	4	ŝ	4	7	4	52	45	Ŋ	T			127
76 - 80	7	~	7	ß	4	13	50	32	9	Ч		115
81 - 85	Т		7		н	ß	4	23	25	CA.		19
86 - 90					T	г		9	10	15		33
91 & Over						н		7	7	Ŋ	Q	76
Totals	55	27	47	32	36	140	712	69	77	23	Q	165
PLAN B - AV	ERAGE ANN	IUAL BENEF	TTS PAYAB.	LE TO SERV	ICE RETI	REES:						
					Comp	leted Yea	rs Since	Retiremen	ţ			
Attained												Average
Ages	0	г	7	6	4	5 1 0	70-14	15-19	20-24	25-29	30&Over	Benefit
0 - 50	23, 680	18,036										21,798

ttained Ages	0	F	3	ε	4	5-9	10-14	15-19	20-24	25-29	30&Over	Average Benefit
						Ι	]					
0 - 50	23,680	18,036										21,798
51 - 55	19,660		13,978			9,042						17,849
56 - 60	14,022	20,120	20,695	28,820	20,797	18,400	8,931					17,630
61 - 65	15,365	11,659	10,654	8,930	11,952	18,105	9,074					12,653
66 - 70	11,031	8,365	11,093	10,258	14,783	9,999	14,353	4,850				11,180
71 - 75	12,557	11,967	9,342	7,131	9,240	10,761	9,468	17,593	457			10,302
76 - 80	1,814	8,162	2,679	12,153	8,651	11,647	7,261	9,094	12,229	13,908		8,601
81 - 85	5,824		3,071		3,141	3,003	6,095	9,658	6,649	12,738		7,579
86 - 90					4,396	4,728		5,812	9,119	7,355		7,440
91 & Over						3, 699		10,318	4,796	5,973	2,785	5,031
Average	13,966	12,337	10,267	9,875	12,903	11,249	8,787	9,586	7,747	7,807	2,785	10,358

PLAN B - SERVICE RETIREES:

PLAN B - DI	SABILITY	RETIRES			Com	pleted Yea	rs Since	Retiremen	ų			
Attained Ages	0	н	01	m	4	5-9	70-14	15-19	20-24	25-29	30&Over	Tota1
0 41 - 40 46 - 40 51 - 45 56 - 50 61 - 55 66 - 70 65	U FU	CI.	<b>α</b> η	NH M	ннамн	H 00 H H H	H M 74 H	0 11 0			T	0 H M Q 80 H M H H H
71 - 75 76 - 80 81 - 85 86 - 90 91 & Over							н	Q	н	H H		44040
Totals	Q	01	Ŋ	Ŋ	Ø	г	10	г	н	2	н	54
PLAN B - AV	ERAGE AN	IUAL BENE	FITS PAYA	BLE TO DIS	SABILITY I Comp	RETIREES: pleted Yea	rs Since	Retiremen	ų			
Attained Ages	0	H	3	m	4	5-9	70-14	15-19	20-24	25-29	30&Over	Average Benefit
0 - 40 41 - 45 51 - 45 51 - 45 51 - 55 51 - 55 51 - 55 71 - 70 71 - 70 81 - 80 81 - 80	14,477	10,598	17,089 12,845	5,160 16,857 13,382	6,872 11,731 9,212 5,132 5,132	7,217 9,211 7,678 6,074	5,821 5,370 6,278 4,056 10,507	4,919 4,605 8,997 7,380	70,484	3,616 4,033	6,183	6,872 6,872 8,036 11,0286 11,0286 5,747 5,747 7,221 10,286 11,028 6,84 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,286 10,296 10,296 10,296 10,296 10,296 10,296 10,296 10,296 10,296 10,296 10,296 10,296 10,296 10,296 10,296 10,296 10,296 10,296 10,296 10,296 10,296 10,296 10,296 10,296 10,296 10,296 10,296 10,296 10,296 10,296 10,296 10,296 10,296 10,296 10,296 10,296 10,296 10,296 10,296 10,296 10,296 10,296 10,296 10,296 10,296 10,296 10,296 10,296 10,296 10,296 10,296 10,296 10,296 10,296 10,296 10,296 10,296 10,296 10,296 10,296 10,296 10,296 10,296 10,296 10,296 10,296 10,296 10,296 10,296 10,296 10,296 10,296 10,296 10,296 10,296 10,296 10,296 10,296 10,296 10,296 10,296 10,296 10,296 10,296 10,296 10,296 10,296 10,296 10,296 10,296 1
Average	13,844	10,598	14,543	12,433	10,028	7.944	6,161	6.742	10.484	3,825	6.183	9.409

					Com	pleted Yea	urs Since	Retiremen	ų			
ttained Ages	0	F	2	~ N	4	5-9	10-14	15-19	20-24	25-29	30£0ver	Total
300 300 300 300 300 300 300 300 300 300	н н	нн	<b>NHN</b>	нн	н σ н	нн <i>ы</i> м <i>с</i> о б б б б б б б б б б б б б б б б б б б	нни ранов и Н	нн м 01 0 01 Г М Н Н Н	наа нгоаг	<u>и</u> н Ю 4 г И	4 V O	99999999999999999999999999999999999999
Totals LAN B - AV	2 ERAGE AM	2 VUAL BENE	5 FITS PAYAE	2 3LE TO SUF	5 IVIVORS O. Com	42 F FORMER A pleted Yea	43 IEMBERS: \rs Since	37 Retiremen	<b>4</b> 2	21	19	220
ttained Ages	0	T	7	ε	4	5-9	<b>70-1</b> 4	15-19	20-24	25-29	30&Over	Average Benefit
986 1 1 2 2 3 3 3 4 4 1 1 1 1 2 2 3 4 4 1 1 1 1 2 3 3 4 4 1 1 1 1 2 3 3 4 4 1 1 1 1 2 3 3 4 4 1 1 1 1 2 3 3 4 4 1 1 1 1 2 3 3 4 4 1 1 1 1 2 3 3 4 4 1 1 1 1 2 3 3 4 4 1 1 1 1 2 3 4 4 1 1 1 1 2 3 4 4 1 1 1 1 2 3 4 4 1 1 1 1 2 3 4 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	<i>22,180</i> <i>4,586</i>	1,520 1,176	4,180 12,338 5,947	3,823 8,078	17,065 5,147 966	2,757 12,353 5,253 5,253 5,253 5,253 6,384 6,384 6,384 12,358	4,280 5,324 6,781 6,781 6,286 6,288 6,229 2,273	11, 33,595 4,5544 8,985 4,833 4,833 4,950 4,357 2,725	898 3,997 4,529 6,49 5,945 7,2976 7,2976	3,933 5,307 5,878 2,742	5,907 3,437 1,622	4,228 4,2120 5,528 6,528 6,258 6,258 1274 1274 1274 1274 1274 1274 1274 1274
Average	13,383	1,348	6,518	5,951	6,694	6,209	6, 659	5,697	6,824	5,386	3,097	6,018

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

PLAN B - SURVIVING BENEFICIARIES OF FORMER MEMBERS:

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

		Fiscal 2011		Fiscal 2010		Fiscal 2009		Fiscal 2008
Number of Active Members		2,175		2,197		2,269		2,191
Number of Retirees and Survivors		865		836		833		793
Number Terminated Due Deferred Benefits		62		72		67		68
Number Terminated Due Refund		1,062		1,062		1,022		998
Active Lives Payroll	\$	65,427,477	\$	65,241,810	\$	64,816,945	\$	59,233,705
Retiree Benefits in Payment	\$	7,953,795	\$	7,339,269	\$	7,149,177	\$	6,625,934
Market Value of Assets	\$	144,028,034	\$	130,596,777	\$	117,258,410	\$	134,832,148
Ratio of Actuarial Value of Assets to Actuarial Accrued Liability		97.24%		96.94%		96.57%		96.33%
Actuarial Accrued Liability (As defined by GASB- 25)	\$	157,313,362	\$	151,680,103	\$	143,353,668	\$	141,390,296
Actuarial Value of Assets	\$	152,966,837	\$	147,046,143	\$	138,441,127	\$	136,207,119
Unfunded Actuarial Accrued Liability	\$	4,346,525	\$	4,633,960	\$	4,912,541	\$	5,183,177
Present Value of Future Employer Normal Cost	\$	49,451,626	\$	48,645,557	\$	38,895,181	\$	26,827,388
Present Value of Future Employee Contributions	\$	21,582,459	\$	21,546,957	\$	21,769,886	\$	19,992,613
Funding Deposit Account Credit Balance	\$	2,493,464	\$	2,308,763	\$	1,806,555		N/A
Present Value of Future Benefits	\$	225,853,983	\$	219,563,854	\$	202,212,180	\$	188,210,297
*****	***	******	***	******	***	******	***	******
		Fiscal 2012		Fiscal 2011		Fiscal 2010		Fiscal 2009
Employee Contribution Rate		5.00%		5.00%		5.00%		5.00%
Proj. Tax Contribution as % of Projected Payroll		3.10%		3.07%		3.06%		2.82%
Actuarially Req'd Net Direct Employer Cont. Rate		7.89%		7.78%		5.95%		4.50%
Actual Employer Direct Contribution Rate		8.00%		6.75%		6.75%		6.75%

	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		Fiscal 2002 2,066 705 60 761
\$	54 572 935	\$	51 055 201	\$	48 690 316	\$	47 676 817	\$	45 260 679	\$	43 560 002
φ	54,572,955	ψ	51,055,201	ψ	40,000,510	φ		ψ	43,200,077	ψ	
\$	6,328,157	\$	5,872,330	\$	5,649,984	\$	5,476,263	\$	5,216,962	\$	5,039,462
\$	132,326,073	\$	111,581,452	\$	101,109,899	\$	92,904,743	\$	83,836,074	\$	81,767,131
	95.81%		95.13%		94.18%		93.51%		93.04%		92.99%
\$	129,930,047	\$	117,108,583	\$	102,373,290	\$	95,618,087	\$	92,615,633	\$	95,381,233
\$	124,483,332	\$	111,404,638	\$	96,417,685	\$	89,415,704	\$	86,170,714	\$	88,697,416
\$	5,446,715	\$	5,703,945	\$	5,955,605	\$	6,202,383	\$	6,444,919	\$	6,683,817
\$	26,365,299	\$	32,959,966	\$	41,742,178	\$	42,458,765	\$	36,670,550	\$	28,532,252
\$	18,627,179	\$	17,883,419	\$	17,253,376	\$	18,040,618	\$	17,184,709	\$	16,666,322
	N/A		N/A		N/A		N/A		N/A		N/A
\$	174,922,525	\$	167,951,968	\$	161,368,844	\$	156,117,470	\$	146,470,892	\$	140,579,807
**	******	***	********	***:	*******	***	******	**:	********	***	*****
	Fiscal 2008		Fiscal 2007	ł	Fiscal 2006	F	Fiscal 2005	F	Fiscal 2004	F	Fiscal 2003

5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
2.60%	2.54%	2.36%	2.37%	2.28%	2.27%
5.06%	7.08%	9.86%	9.72%	9.22%	7.53%
6.75%	9.75%	9.75%	9.50%	7.75%	6.25%

### 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, 2011, is for general informational purposes only and does not constitute a guarantee of benefits.

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

### PLAN A PROVISIONS:

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

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

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

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

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

### PLAN B PROVISIONS:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

COST OF LIVING INCREASES - The board of trustees is authorized to grant retired members, and widows of members, who have been retired for at least one full year an annual cost of living increase of two percent of their original benefit and all retired members and widows who are sixty-five years of age and older a two percent increase in their original benefit (or their benefit as of

October 1, 1977, if they retired prior to that time). In order for the board to grant either of these increases the system must meet certain criteria detailed in the statute related to funding status and interest earnings on investments. In lieu of other cost of living increases the board may grant an increase to retirees in the form  $"X \times (A \& B)"$  where "A" is equal to the number of years of credited service accrued as retirement or death of the member or retiree and "B" is equal to the number of years since death of the member or retiree to June 30 of the initial year of increase and "X" is equal to any amount available for funding such increase up to a maximum of \$1.00.

### **ACTUARIAL ASSUMPTIONS**

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

Factor Investment Earnings Rate Annual Rate of Salary Increase Rates of Retirement Rates of Termination Rates of Disability Rates of Mortality	Increase in Factor Results in Decrease in Cost Increase in Cost Increase in Cost Decrease in Cost Increase in Cost Decrease in Cost 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:	8% (Net of Investment Expense)
ANNUAL SALARY INCREASE RATE:	6% (3.25% Inflation / 2.75% Merit)
ACTIVE MEMBER MORTALITY:	RP 2000 Employee Table for males and females
ANNUITANT, AND BENEFICIARY MORTALITY:	RP 2000 Healthy Annuitant Table for males and females

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 the report. These rates apply only to the individuals eligible to retire. Members a assumed to retire no earlier than norm retirement age. In the first year of eligibili the tabular rates are multiplied by 1.5.			
<b>RETIREMENT LIMITATIONS:</b>	Projected retirement benefits are subjected to IRS Section 415 limits.			
DROP ENTRY RATES:	The table of these rates is included later i the report. These rates apply only to thos individuals eligible to participate in DROF In the first year of eligibility the tabular rate are multiplied by 1.5.			
DROP PARTICIPATION PERIOD:	All DROP participate for this participat	participants a 3 years and read to a second	are assumed to etire at the end of	
RETIREMENT RATES FOR ACTIVE FORMER DROP PARTICIPANTS:	Retirement rat participants ar	tes for active for active for active for active for a follows:	ormer DROP	
	Age Below 90	es Ret 7 89	tirement Rates 0.19 1.00	
RATES OF WITHDRAWAL:	The rates of upon complete the following	withdrawal as ed years of ser table:	re applied based vice according to	
	Service	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	
	U	0.08	0.09	

7

8 9

10

0.09

0.06 0.05

0.05

0.08

0.06 0.06

0.06

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

vested elect deferred benefits in lieu of

contribution refunds.

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 $21^{st}$ valuation of the Railroad Retirement System for individuals with $10 - 19$ years of service.					
MARRIAGE STATISTICS:	80% of the married; he years older	80% of the members are assumed to be married; husbands are assumed to be three years older than wives.				
FAMILY STATISTICS:	Assumptio costs of v below, ar provided in	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 <u>Age</u> 25 35 45 55 65	% With <u>Children</u> 62% 82% 66% 19% 2%	Number of <u>Children</u> 1.7 2.1 1.8 1.4 1.4	Avg. <u>Age</u> 6 10 13 15 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					

# PLAN A ACTUARIAL TABLES AND RATES

Age	Retired	Retired	Active	Active		DROP		
U	Male	Female	Male	Female	Retirement	Entry	Disability	Remarriage
	Mortality	Mortality	Mortality	Mortality	Rates	Rates	Rates	Rates
10	0.00000	0.00010	0.00022	0.00010	0.00000	0.00000	0.00020	
18	0.00032	0.00019	0.00032	0.00019	0.00000	0.00000	0.00030	0.05665
19	0.00033	0.00019	0.00033	0.00019	0.00000	0.00000	0.00030	0.05665
20	0.00035	0.00019	0.00035	0.00019	0.00000	0.00000	0.00030	0.05665
21	0.00036	0.00019	0.00036	0.00019	0.00000	0.00000	0.00030	0.05213
22	0.00037	0.00019	0.00037	0.00019	0.00000	0.00000	0.00030	0.04834
23	0.00037	0.00020	0.00037	0.00020	0.00000	0.00000	0.00030	0.04522
24	0.00038	0.00020	0.00038	0.00020	0.00000	0.00000	0.00030	0.04270
25	0.00038	0.00021	0.00038	0.00021	0.00000	0.00000	0.00030	0.04070
26	0.00038	0.00021	0.00038	0.00021	0.00000	0.00000	0.00030	0.03915
27	0.00038	0.00022	0.00038	0.00022	0.00000	0.00000	0.00030	0.03799
28	0.00039	0.00024	0.00039	0.00024	0.00000	0.00000	0.00030	0.03714
29	0.00041	0.00025	0.00041	0.00025	0.00000	0.00000	0.00030	0.03654
30	0.00044	0.00026	0.00044	0.00026	0.00000	0.00000	0.00030	0.03611
31	0.00050	0.00031	0.00050	0.00031	0.00000	0.00000	0.00030	0.03578
32	0.00056	0.00035	0.00056	0.00035	0.00000	0.00000	0.00030	0.03549
33	0.00063	0.00039	0.00063	0.00039	0.00000	0.00000	0.00030	0.03515
34	0.00070	0.00044	0.00070	0.00044	0.00000	0.00000	0.00030	0.03471
35	0.00077	0.00047	0.00077	0.00047	0.00000	0.00000	0.00034	0.03409
36	0.00084	0.00051	0.00084	0.00051	0.00000	0.00000	0.00038	0.03286
37	0.00090	0.00055	0.00090	0.00055	0.00000	0.00000	0.00042	0.03139
38	0.00096	0.00060	0.00096	0.00060	0.00000	0.00000	0.00048	0.02973
39	0.00102	0.00065	0.00102	0.00065	0.00000	0.00000	0.00054	0.02787
40	0.00108	0.00071	0.00108	0.00071	0.00000	0.00000	0.00062	0.02585
41	0.00114	0.00077	0.00114	0.00077	0.06000	0.27000	0.00070	0.02352
42	0.00122	0.00085	0.00122	0.00085	0.06000	0.27000	0.00078	0.02111
43	0.00130	0.00094	0.00130	0.00094	0.06000	0.27000	0.00088	0.01868
44	0.00140	0.00103	0.00140	0.00103	0.06000	0.27000	0.00100	0.01629
45	0.00151	0.00112	0.00151	0.00112	0.06000	0.27000	0.00114	0.01400
46	0.00162	0.00122	0.00162	0.00122	0.06000	0.27000	0.00130	0.01208
47	0.00173	0.00133	0.00173	0.00133	0.06000	0.27000	0.00146	0.01034
48	0.00186	0.00143	0.00186	0.00143	0.06000	0.27000	0.00166	0.00879
49	0.00200	0.00155	0.00200	0.00155	0.06000	0.27000	0.00188	0.00744
50	0.00535	0.00234	0.00214	0.00168	0.06000	0.27000	0.00214	0.00629
51	0.00553	0.00246	0.00229	0.00181	0.06000	0.27000	0.00244	0.00551
52	0.00564	0.00265	0.00245	0.00197	0.06000	0.27000	0.00276	0.00493
53	0.00572	0.00290	0.00262	0.00213	0.06000	0.27000	0.00314	0.00451
54	0.00580	0.00319	0.00281	0.00232	0.06000	0.27000	0.00356	0.00423
55	0.00590	0.00353	0.00303	0.00253	0.06000	0.27000	0.00404	0.00406
56	0.00612	0.00393	0.00331	0.00276	0.06000	0.27000	0.00460	0.00000
57	0.00644	0.00438	0.00363	0.00301	0.06000	0.27000	0.00522	0.00000
58	0.00690	0.00492	0.00400	0.00329	0.06000	0.27000	0.00592	0.00000
59	0.00749	0.00553	0.00441	0.00360	0.06000	0.27000	0.00674	0.00000
60	0.00820	0.00620	0.00488	0.00393	0.14000	0.27000	0.00976	0.00000
61	0.00900	0.00692	0.00538	0.00429	0.14000	0.12000	0.01060	0.00000
62	0.00991	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	Retired	Active	Active		DROP		
e	Male	Female	Male	Female	Retirement	Entry	Disability	Remarriage
	Mortality	Mortality	Mortality	Mortality	Rates	Rates	Rates	Rates
18	0.00032	0.00010	0.00032	0.00010	0.0000	0.0000	0.00030	0.05665
10	0.00032	0.00019	0.00032	0.00019	0.00000	0.00000	0.00030	0.05665
20	0.00033	0.00019	0.00033	0.00019	0.00000	0.00000	0.00030	0.05665
20	0.00033	0.00019	0.00033	0.00019	0.00000	0.00000	0.00030	0.05005
21	0.00030	0.00019	0.00030	0.00019	0.00000	0.00000	0.00030	0.03213
22	0.00037	0.00019	0.00037	0.00019	0.00000	0.00000	0.00030	0.04634
25	0.00037	0.00020	0.00037	0.00020	0.00000	0.00000	0.00030	0.04322
24 25	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
20	0.00038	0.00021	0.00038	0.00021	0.00000	0.00000	0.00030	0.03913
21	0.00038	0.00022	0.00038	0.00022	0.00000	0.00000	0.00030	0.03799
20	0.00039	0.00024	0.00039	0.00024	0.00000	0.00000	0.00030	0.03/14
29	0.00041	0.00025	0.00041	0.00023	0.00000	0.00000	0.00030	0.03034
30 21	0.00044	0.00026	0.00044	0.00026	0.00000	0.00000	0.00030	0.03011
22	0.00050	0.00031	0.00050	0.00031	0.00000	0.00000	0.00030	0.03578
32 22	0.00056	0.00035	0.00056	0.00035	0.00000	0.00000	0.00030	0.03549
33 24	0.00063	0.00039	0.00063	0.00039	0.00000	0.00000	0.00030	0.03515
34 25	0.00070	0.00044	0.00070	0.00044	0.00000	0.00000	0.00030	0.034/1
35	0.00077	0.0004/	0.00077	0.0004 /	0.00000	0.00000	0.00034	0.03409
30 27	0.00084	0.00051	0.00084	0.00051	0.00000	0.00000	0.00038	0.03280
3/	0.00090	0.00055	0.00090	0.00055	0.00000	0.00000	0.00042	0.03139
38	0.00096	0.00060	0.00096	0.00060	0.00000	0.00000	0.00048	0.02973
39	0.00102	0.00065	0.00102	0.00065	0.00000	0.00000	0.00054	0.02787
40	0.00108	0.00071	0.00108	0.00071	0.00000	0.00000	0.00062	0.02585
41	0.00114	0.00077	0.00114	0.00077	0.00000	0.00000	0.00070	0.02352
42	0.00122	0.00085	0.00122	0.00085	0.00000	0.00000	0.00078	0.02111
43	0.00130	0.00094	0.00130	0.00094	0.00000	0.00000	0.00088	0.01868
44	0.00140	0.00103	0.00140	0.00103	0.00000	0.00000	0.00100	0.01629
45	0.00151	0.00112	0.00151	0.00112	0.00000	0.00000	0.00114	0.01400
46	0.00162	0.00122	0.00162	0.00122	0.06000	0.24000	0.00130	0.01208
47	0.00173	0.00133	0.00173	0.00133	0.06000	0.24000	0.00146	0.01034
48	0.00186	0.00143	0.00186	0.00143	0.06000	0.24000	0.00166	0.00879
49	0.00200	0.00155	0.00200	0.00155	0.06000	0.24000	0.00188	0.00744
50	0.00535	0.00234	0.00214	0.00168	0.06000	0.24000	0.00214	0.00629
51	0.00553	0.00246	0.00229	0.00181	0.06000	0.24000	0.00244	0.00551
52	0.00564	0.00265	0.00245	0.00197	0.06000	0.24000	0.00276	0.00493
53	0.00572	0.00290	0.00262	0.00213	0.06000	0.24000	0.00314	0.00451
54	0.00580	0.00319	0.00281	0.00232	0.06000	0.24000	0.00356	0.00423
55	0.00590	0.00353	0.00303	0.00253	0.36000	0.38000	0.00404	0.00406
56	0.00612	0.00393	0.00331	0.00276	0.22000	0.38000	0.00460	0.00000
57	0.00644	0.00438	0.00363	0.00301	0.22000	0.38000	0.00522	0.00000
58	0.00690	0.00492	0.00400	0.00329	0.22000	0.38000	0.00592	0.00000
59	0.00749	0.00553	0.00441	0.00360	0.22000	0.16000	0.00674	0.00000
60	0.00820	0.00620	0.00488	0.00393	0.12000	0.16000	0.00976	0.00000
61	0.00900	0.00692	0.00538	0.00429	0.12000	0.16000	0.01060	0.00000
62	0.00991	0.00769	0.00592	0.00466	0.12000	0.16000	0.01156	0.00000
63	0.01095	0.00851	0.00647	0.00504	0.12000	0.16000	0.01110	0.00000
64	0.01212	0.00939	0.00703	0.00543	0.12000	0.16000	0.00702	0.00000
65	0.01342	0.01036	0.00757	0.00582	0.12000	0.12000	0.00126	0.00000

### GLOSSARY

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

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

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

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

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

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

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.