# PAROCHIAL EMPLOYEES' RETIREMENT SYSTEM

ACTUARIAL VALUATION AS OF DECEMBER 31, 2008

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

Actuarial Services

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June 16, 2009

Board of Trustees Parochial Employees' Retirement System P.O. Box 14619 Baton Rouge, LA 70898-4619

Ladies and Gentlemen:

We are pleased to present our report on the actuarial valuation of the Parochial Employees' Retirement System for the fiscal year ending December 31, 2008. Our report is based on the actuarial assumptions specified and relies on the data supplied by the system's administrators and accountants. This report was prepared at the request of and exclusively for the Parochial Employees' Retirement System of the State of Louisiana and its auditors in connection with our actuarial valuation of the retirement system. It is not suitable for other purposes or intended for any third party. The primary purpose of the report is to determine the actuarially required contribution for Plan A and Plan B for the fiscal year ending December 31, 2009. In addition, this report recommends minimum employer contribution rates for fiscal 2010, and provides information required for the system's financial statements.

The determination of the Unfunded Accrued Liability and certain account balances was based on the assumption that House Bill 561 of the 2009 regular legislative session will become law. As of the date of this report, the bill passed both houses of the legislature and awaits the governor's signature. Should the bill be vetoed, certain revisions to the report will be required.

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 meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein. If we can be of further assistance in amplifying any of the information contained herein, please let us know.

Sincerely,

G. S. CURRAN & COMPANY a By: F.C.A., M.A.A.A., A.S.A. By: Curran, F.C.A. M.A.A.A., A.S.A.

# TABLE OF CONTENTS

<u>Subject</u>	<u>Page</u>
Plan A - Summary of Valuation Results	1
Plan B - Summary of Valuation Results	2
Comments on Data	3
Comments on Actuarial Methods and Assumptions	4
Changes in Plan Provisions	4
Asset Experience	5
Plan A – Demographics and Liability Experience	6
Plan B – Demographics and Liability Experience	7
Funding Analysis and Recommendations	7
Cost of Living Increases	9
Graphs	11
Exhibit I - Plan A: Analysis of Actuarially Required Contributions	21
Exhibit II - Plan A: Present Value of Future Benefits	22
Exhibit III - Schedule A - Plan A: Market Value of Assets	23
Exhibit III - Schedule B - Plan A: Actuarial Value of Assets	24
Exhibit IV - Plan A: Present Value of Future Contributions	25
Exhibit V - Plan A: Change in Frozen Unfunded Actuarial Accrued Liability	25
Exhibit VI - Plan A: Analysis of Increase in Assets	26
Exhibit VII - Plan A: Fund Balances	27
Exhibit VIII - Plan A: Pension Benefit Obligation	27
Exhibit IX - Plan A: Cost Of Living Adjustments - Target Ratio	28
Exhibit X - Plan A: Census Data	29
Exhibit XI - Plan A: Year to Year Comparison	37
Exhibit XII - Plan B: Analysis of Actuarially Required Contributions	39
Exhibit XIII - Plan B: Present Value of Future Benefits	40
Exhibit XIV - Schedule A - Plan B: Market Value of Assets	41
Exhibit XIV – Schedule B - Plan B: Actuarial Value of Assets	42
Exhibit XV - Plan B: Present Value of Future Contributions	43
Exhibit XVI - Plan B: Reconciliation of Contributions	43
Exhibit XVII - Plan B: Analysis of Increase in Assets	44
Exhibit XVIII - Plan B: Fund Balances	45
Exhibit XIX - Plan B: Pension Benefit Obligation/Entry Age Normal Accrued Liabilities	45
Exhibit XX - Plan B: Cost Of Living Adjustments - Target Ratio	46
Exhibit XXI - Plan B: Census Data	47
Exhibit XXII - Plan B: Year to Year Comparison	55
Summary of Principal Plan Provisions	57
Actuarial Assumptions	60
Glossary	66

#### SUMMARY OF VALUATION RESULTS PAROCHIAL EMPLOYEES' RETIREMENT SYSTEM - PLAN A

Valuation Date:		Dec	ember 31, 2008	Decen	mber 31, 2007
Census Summary:	Active Members Retired Members and Survivors Terminated Due a Deferred Benefit Terminated Due a Refund		14,373 5,235 545 6,464		13,650 5,083 497 6,122
Payroll:		\$	511,891,487	\$	454,741,830
Benefits in Payment:		\$	84,492,940	\$	77,403,146
Market Value of Assets (	excluding the expense fund):	\$	1,565,934,957	\$ 2	,087,385,378
Frozen Unfunded Actuari	al Accrued Liability:	\$	60,381,793	\$	66,328,358
Actuarial Asset Value (A	VA):	\$	1,943,569,363	\$ 2	,027,214,660
	ASB-25 Accrued Liability: ************************************	****	96.99% ***********************************	*****	96.83% ************** 2008
Employers' Normal Cost	(January 1):	\$	72,812,898	\$	34,231,900
Amortization Cost (Janua	ry 1):	\$	10,565,618	\$	10,457,506
Interest Adjusted Actuari Including Estimated Adm	ally Required Contributions inistrative Costs:	\$	87,481,795	\$	47,317,981
******************	Direct Employer entage Of Projected Payroll: ***********************************				

Minimum Net Direct Employer Contribution Rate: For Fiscal 2010: 15.75% For Fiscal 2009 9.00%

Employee Contribution Rate: 9.50% of Payroll

Actuarial Cost Method: Frozen Attained Age Normal Actuarial Cost Method

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

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

Basis of Actuarial Asset Value: The actuarial value of assets is based on the market value of investment securities adjusted to average in asset earnings above or below the assumed rate of return over a five-year period subject to a corridor limit of 85% to 115% of the market value of assets. If the smoothed value lies outside of the corridor limit the preliminary value is determined by averaging the smoothed value with the corridor limit. A pro-rata share of expense fund assets based on current salaries is added to the preliminary values to produce the final value.

Changes in Valuation Methods, Assumptions, and Amortization Periods: The absolute corridor limit for the actuarial value of assets of 90% to 110% of the market value of assets was changed to 85% to 115% with averaging as described above.

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 PAROCHIAL EMPLOYEES' RETIREMENT SYSTEM - PLAN B

Valuation Date:		Dec	ember 31, 200	8 Dec	cember 31, 2007
Census Summary:	Active Members Retired Members Terminated Due a Deferred Benefit Terminated Due a Refund	2,194 548 108 1,410			2,030 530 97 1,353
Payroll:		\$	74,891,671	\$	62,859,807
Benefits In Payment:		\$	4,744,664	\$	4,400,123
Market Value of Assets (6	excluding the expense fund):	\$	109,749,342	\$	144,163,791
Unfunded Actuarial Accru	ued Liability:		NONE		NONE
Actuarial Asset Value:		\$	136,139,102	\$	141,756,387
Funded Ratio (GASB 50)	****	****	83.97% ************************************	*****	97.82 ************************************
Employers' Normal Cost	(January 1):	\$	7,915,424	\$	4,419,292
Interest Adjusted Actuaria Including Estimated Adm	ally Required Contributions inistrative Costs:	\$	8,358,033	\$	4,717,904
	Direct Employer ntage Of Projected Payroll: **********************************	****	9.56% ********	*****	6.13% ******
Minimum Net Direct Em	ployer Contribution Rate: For Fisca	al 201	0: 10.00%	For Fiscal 200	9 6.25%

Employee Contribution Rate: 3.00% of salary

Actuarial Cost Method: Aggregate Actuarial Cost Method

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

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

Basis of Actuarial Asset Value: The actuarial value of assets is based on the market value of investment securities adjusted to average in asset earnings above or below the assumed rate of return over a five-year period subject to a corridor limit of 85% to 115% of the market value of assets. If the smoothed value lies outside of the corridor limit the preliminary value is determined by averaging the smoothed value with the corridor limit. A pro-rata share of expense fund assets based on current salaries is added to the preliminary values to produce the final value.

Changes in Valuation Methods, Assumptions, and Amortization Periods: The absolute corridor limit for the actuarial value of assets of 90% to 110% of the market value of assets was changed to 85% to 115% with averaging as described above.

Method of Recognizing Gains and Losses: Under the Aggregate Actuarial Cost 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 magnetic diskette 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 14,373 active members in Plan A, of whom, 7,177 members, including 397 participants in the Deferred Retirement Option Plan (DROP), have vested retirement benefits; 5,235 former members of Plan A or their beneficiaries are receiving retirement benefits. An additional 7,009 former members of Plan A have contributions remaining on deposit with the system. This includes 545 who have vested rights or have filed reciprocal agreements for future retirement benefits. Census data on members of Plan B may be found in Exhibit XXI. There are 2,194 active members in Plan B, of whom, 969 members, including 32 DROP participants, have vested retirement benefits; 548 former members of Plan B or their beneficiaries are receiving retirement benefits. An additional, 1,518 former members of Plan B have contributions remaining on deposit with the system. Of this number, 108 have vested rights or have filed reciprocal agreements 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 administrator 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 \$1,565,934,957 as of December 31, 2008. For Plan A, the net investment income for fiscal 2008 measured on a market value basis amounted to a loss of \$537,740,395. Contributions to Plan A for the fiscal year totaled \$118,593,883; benefits and expenses amounted to \$102,303,909.

The net market value of Plan B's assets was \$109,749,342 as of December 31, 2008. For Plan B, the net investment income for fiscal 2008 measured on a market value basis amounted to a loss of \$36,201,704. Contributions to Plan B for the fiscal year totaled \$7,401,246; benefits and expenses amounted to \$5,613,991. In addition to the trust funds for Plan A and Plan B the system also maintains an expense fund which had a balance of \$917,792 as of the end of the year.

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 of Plan A is based on the Frozen Attained Age Normal actuarial cost method with the unfunded accrued liability frozen as of December 31, 1989. Under the provisions of Louisiana R.S. 11:103 the unfunded accrued liability for Plan A, which was determined to be \$110,022,497 as of December 31, 1989, was amortized over forty years with payments increasing at 4% per year. In Plan A, payroll growth in excess of 4% per year will reduce future amortization payments as a percentage of payroll; payroll growth below 4% per year will increase amortization payments as a percentage of payroll. Plan B is funded utilizing the Aggregate Actuarial Funding Method. This method does not develop an unfunded actuarial liability. Under the Frozen Attained Age Normal Cost Method and the Aggregate Cost Method, actuarial gains and losses are spread over future normal costs. Thus, favorable plan experience will lower future normal costs; unfavorable experience will cause future normal costs to increase. In both plans, benefit and assumption changes are spread over future normal costs. Under the provisions of R.S. 11:105, the Board of Trustees froze the employer contribution rate in Plan A for fiscal 2008 and several other fiscal years prior to that. As prescribed in R.S. 11:105, excess funds if any, generated by these freezes of the employer contribution rate (prior to fiscal 2008) were allocated to reduce the frozen unfunded accrued liability. As a result, the current frozen unfunded accrued liability will be fully amortized by December 31, 2015.

The actuarial assumptions utilized for the report are outlined on pages 60 - 65. All calculations, recommendations, and conclusions are based on the assumptions specified. To the extent that prospective experience differs from that assumed, adjustments will be required to future contribution levels. For the fiscal 2008 valuation the actuarial asset valuation method was changed such that the minimum and maximum corridor limits around the five-year smoothed value were changed from 90% & 110% to 85% & 115% of the market value of assets. In addition, the method was changed such that if the initial smoothed value was outside the limits, rather than being set back to the limit, it was set equal to the average of the smoothed value and the nearest limit. The adjustment to the final value by adding the allocation of the expense fund was maintained. The net effect of this change in assumptions was to reduce the normal cost accrual rate by 5.4940% in Plan A and 2.7836% in Plan B.

## CHANGES IN PLAN PROVISIONS

The following changes in plan provisions were enacted during the 2008 Regular Session (except as noted) of the Louisiana Legislature:

Act 108 provided that court reporters employed by Caddo Parish who are paid separately for transcriptions will only have employee contributions deducted from the transcriptions payments and that employee and employer contributions for such transcription payments shall be remitted from the fund on a monthly basis.

Act 397 provides that, except as provided in R.S. 11:143, employer contributions will not be returned, refunded, transferred, or rolled over to any employee or employer or to any retirement system, plan, or fund.

Act 425 allows certain elected justices of the peace to elect to become system members, to allow purchase of service credit for past service, and to provide for the calculation of payment for such purchases.

**HB 561** of the **2009 legislative session** provides for the establishment of a Funding Deposit Account. As of the issue date of this report, the bill passed both houses of the legislature and was awaiting the Governor's signature. The bill provides that all excess contributions made pursuant to R. S. 11:105 and R.S. 11:107 will be placed in a Funding Deposit Account. The account earns interest at the valuation interest rate. The Board of Trustees may subsequently use such funds to reduce the system's unfunded accrued liability, reduce future normal costs, or as an offset to future employer contributions.

#### 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.

<b>D1</b>		
<u>Plan A</u>	Market Value	Actuarial Value
1999	3.8%	11.6%
2000	7.2%	8.5%
2001	-0.8%	4.5%
2002	-2.7%	-1.2%
2003	15.6%	3.4%
2004	10.2%	6.9%
2005	6.3%	11.1%
2006	12.8%	11.3%
2007	7.9%	* 17.1%
2008	-25.7%	** -4.9%
<u>Plan B</u>	Market Value	Actuarial Value
1999	4.0%	11.9%
2000	5.4%	8.2%
2001	2.7%	5.9%
2002	0.0%	0.5%
2003	15.9%	5.9%
2004	9.6%	8.5%
2005	5.1%	10.6%
2006	11.6%	9.8%
2007	7.7%	* 13.4%
2008	-25.0%	** -5.2%
	-5-	

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- \* Includes effect of change in asset valuation method. Effective with the 2007 valuation the method was changed from smoothing capital gains and losses over 3 years to smoothing investment earnings above or below the assumed rate of return over a five year period with a +/- 10% of market value corridor limit.
- \*\* Includes effects of change in asset valuation method. Effective with the 2008 valuation the corridor limits on the smoothed value were changed from +/- 10% of market value to +/- 15% with smoothed values averaged with corridor limits.

The market rate of return gives a measure of investment return on a total return basis and includes realized and unrealized capital gains and losses as well as interest income. This rate of return gives an indication of performance for an actively managed portfolio where securities are bought and sold with the objective of producing the highest total rate of return. During 2008, Plan A earned \$31,842,394 and Plan B earned \$1,925,137 of dividends, interest and other recurring income. In addition, Plan A had net realized and unrealized capital losses on investments of \$564,106,712 while Plan B had \$37,755,120. Investment expenses were \$5,476,077 for Plan A and \$371,721 for Plan B; this does not include \$318,765 of investment expenses paid for the Expense Fund. The geometric mean of the market value rates of return measured over the last ten years was 2.8% for Plan A and 3.1% for Plan B.

The actuarial rate of return is presented for comparison to the assumed long-term rate of return of 7.5% used for the valuation. This rate is calculated based on the smoothed value of assets subject to constraints as given in Exhibit VI for Plan A and Exhibit XVII for Plan B. Investment income used to calculate this yield is based upon a smoothing of investment income above or below the valuation interest rate. The difference between rates of return on an actuarial and market value basis results from the smoothing utilized. Yields in excess of the 7.5% assumption will reduce future costs; yields below 7.5% will increase future costs. Net actuarial investment earnings were less than the actuarial assumed earnings rate of 7.5%, used for fiscal 2008, by \$473,301,231 for Plan A and \$33,527,138 for Plan B. This deficiency in earnings produced an actuarial loss, which increased the normal cost accrual rate by 11.8068% for Plan A and 6.0544% for Plan B. Neither of these values includes the effect of the change in asset valuation method.

# PLAN A – DEMOGRAPHICS AND LIABILITY EXPERIENCE

A reconciliation of the census for the plan is given in Exhibit X. The plan's active membership, inclusive of DROP participants, increased by 723 members during the fiscal year. The plan has experienced an increase in the active plan population of 439 members over the last five years. A review of the active census by age indicates that over the last ten years the population in the thirty-one to forty age group has decreased while the proportion of active members age fifty-one to seventy increased. Over the same ten-year period the plan showed a fairly stable distribution among the various service groups. The number of retirees and beneficiaries receiving benefits from the system increased by 152 during the fiscal year; over the last five years the number of retirees has increased by 633.

Plan liability experience for fiscal 2008 was unfavorable. Retirements, disabilities, and DROP entries were below projected levels; retiree deaths and withdrawals above those projected. All of these factors tend to reduce costs. However, these factors were offset by salary increases well above projected levels. Plan liability losses increased the normal cost accrual rate by 0.7979%.

## PLAN B – DEMOGRAPHICS AND LIABILITY EXPERIENCE

A reconciliation of the census for the plan is given in Exhibit XXI. The plan's active membership, inclusive of DROP participants, increased by 164 members during the fiscal year. The plan has experienced an increase in the active plan population of 5 members over the last five years. A review of the active census by age indicates that over the last ten years the population in the thirty-one to forty age group has decreased while the proportion of active members age fifty-one to seventy increased. Over the same ten-year period the plan showed a fairly stable distribution of the various service groups. The number of retirees and beneficiaries receiving benefits from the system increased by 18 during the fiscal year; over the last five years the number of retirees has increased by 131.

Plan liability experience for fiscal 2008 was unfavorable. Salary increases well above projected levels and withdrawals below projected levels increased costs. These were offset in part by retirements, disabilities, and DROP entries below projected levels, and actual retiree deaths over projected levels. Overall, plan liability losses increased the normal cost accrual rate by 0.7231%.

## FUNDING ANALYSIS AND RECOMMENDATIONS

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

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

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

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

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

Employer's Normal Cost Accrual Rate – Fiscal 2008	8.0399%
Factors Increasing the Normal Cost Accrual Rate:	
Plan Liability Experience	0.7979%
Cost of Living Increase	0.2855%
Asset Experience	11.8068%
Factors Decreasing the Normal Cost Accrual Rate:	
New Members	0.1285%
Change in Methods & Assumptions	5.4940%
Employer's Normal Cost Accrual Rate – Fiscal 2009	15.3076%

In addition to the above changes in the plan normal cost rate, payroll growth affects plan costs to the extent that payments on the system's unfunded liability are on a schedule that varies from actual trends in payroll growth or decline. If payroll changes at rates not consistent with the amortization schedule the result will be costs that change as a percentage of payroll. For fiscal 2009, the net effect of the change in payroll on amortization costs was to decrease such costs by 0.18% of payroll for Plan A. Required net direct employer contributions are also affected by the available ad valorem taxes and revenue sharing funds which the system receives each year. When these funds change as a percentage of payroll, net direct employer contributions are adjusted accordingly. We estimate that for Plan A these funds collected in fiscal 2009 will increase by 0.04% of payroll.

For Plan A, the derivation of the actuarially required contribution for the current fiscal year is given in Exhibit I. The normal cost for fiscal 2009 as of January 1, 2009 is \$72,812,898. The amortization payment on the plan's frozen unfunded actuarial accrued liability is \$10,565,618 as of January 1, 2009. 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 2009 is \$87,481,793. When this amount is reduced by projected tax contributions and revenue sharing funds, the resulting employers' net direct actuarially required contribution for fiscal 2009 is \$81,425,829. This is 15.40% of the projected Plan A payroll for fiscal 2009. The actual contribution rate for fiscal 2009, we recommend a minimum net direct employer contribution rate of 15.75% of payroll for fiscal 2010 for Plan A.

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

Employer's Normal Cost Accrual Rate – Fiscal 2008	7.6068%
Factors Increasing the Normal Cost Accrual Rate:	
Asset Experience	6.0544%
Cost of Living Adjustment	0.1290%
Liability Experience	0.7231%
Factors Decreasing the Normal Cost Accrual Rate:	
Change in Methods	2.7836%
New Members	0.1750%
Employer's Normal Cost Accrual Rate – Fiscal 2009	11.5547%

In Plan B we estimate that the projected tax contribution as a percentage of payroll will increase by 0.02%. Since Plan B is funded under the Aggregate Actuarial Cost Method, the plan has no unfunded accrued liability. The interest adjusted actuarial and administrative cost for fiscal 2009 is given on line 12 of Exhibit XII as \$8,358,033. When this amount is reduced by projected tax contributions and revenue sharing funds, the resulting employers' minimum net direct actuarially required contribution rate for fiscal 2009 is 6.25% of payroll. After giving consideration to the expected contribution shortfall in fiscal 2009, as outlined in Exhibit XII, in accordance with the funding methods and assumptions described in the report we recommend a minimum net direct employer contribution rate of 10.00% of payroll for fiscal 2010 for Plan B.

Although both Plan A and Plan B experienced significant increases in recommended contributions for fiscal 2010, the previous action by the Board of Trustees to contribute more than the required contribution rate in fiscal 2008 produced surplus contributions which according to the provisions of HB 561 of the 2009 legislative session (should it become law) will produce credit balances in the respective Funding Deposit Accounts of \$23,564,580 in Plan A and \$289,589 in Plan B. The funds in these accounts can be used to reduce the unfunded accrued liability (for Plan A), reduce future normal costs, or offset future direct employer contribution increases. In formulating policy to disburse funds from the accounts, the Board should consider that given the large market losses incurred in fiscal 2008 and the actuarial smoothing used to produce the valuation there is a high probability of future contribution increases over the course of the next several years.

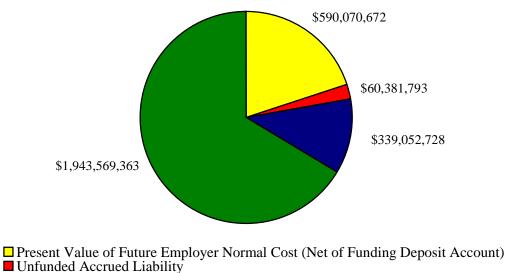
#### **COST OF LIVING INCREASES**

During calendar 2008 the actual cost of living (as measured by the US Department of Labor CPI-U) increased by .09%. Cost of living provisions for the system are detailed in R.S. 11:1937 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 2.50% of the current benefit to retirees aged 62 or over, who have been retired at least one year. R.S. 11:246 provides cost of living increases to retirees and beneficiaries over the age of 65 equal to 2% of the benefit in payment on October 1, 1977, or the date the benefit was originally received if retirement commenced after that date. R.S. 11:241

provides that cost of living benefits shall be in the form (unless the board otherwise specifies) of  $X \times (A+B)$  where X is at most \$1 and "A" represents the number of years of credited service accrued at retirement or at death of the member or retiree and "B" is equal to the number of years since retirement or since death of the member or retiree to December 31<sup>st</sup> of the initial year of such increase. The provisions of this subpart do not repeal provisions relative to cost of living adjustments contained within the individual laws governing systems; however, they are to be controlling in cases of conflict.

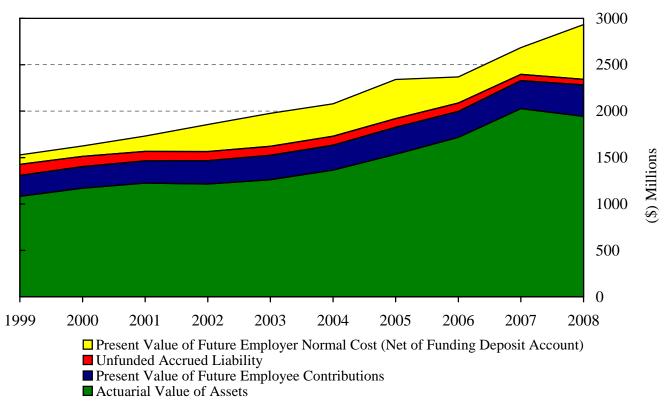
All of the above provisions require that the system earn sufficient excess interest earnings to fund the increases. In addition, the ratio of the plan's assets to benefit obligations must meet the criteria established in R.S. 11:242. This section sets forth a minimum "target ratio" of the actuarial value of assets to the Pension Benefit Obligation. We have determined that for fiscal 2008 both Plan A and Plan B have not met the necessary target ratio and both Plan A and Plan B have actuarial rates of return below the 7.5% assumed rate of return. Hence, the board may not grant a COLA for this fiscal year.

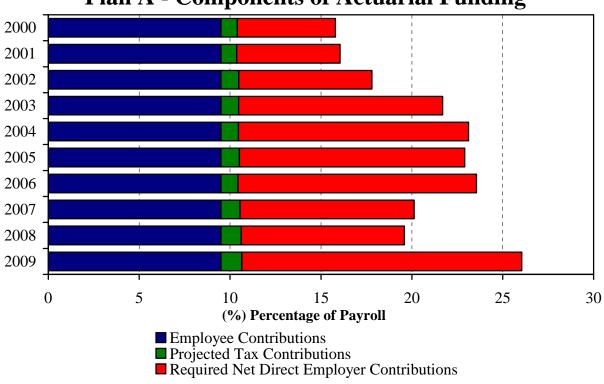
# Plan A - Components of Present Value of Future Benefits December 31, 2008



- Present Value of Future Employee Contributions
- Actuarial Value of Assets

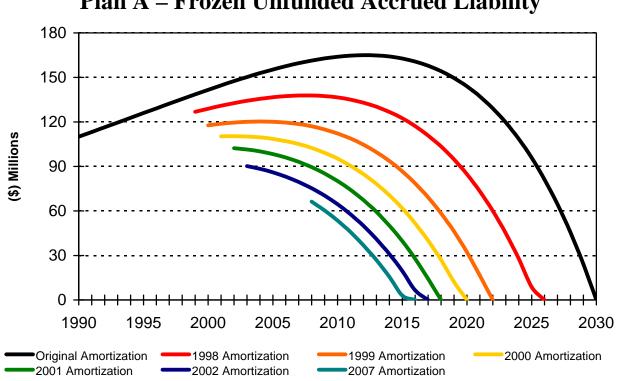
# **Plan A - Components of Present Value of Future Benefits**





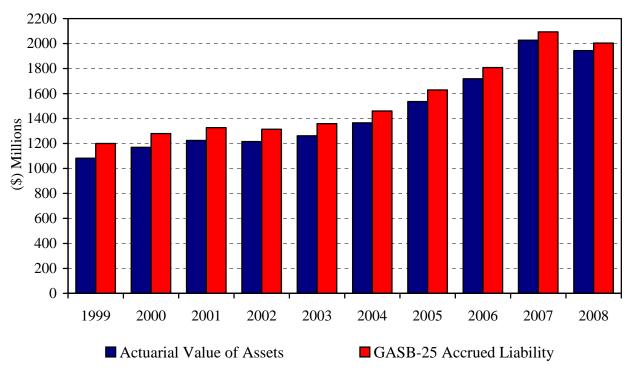
**Plan A - Components of Actuarial Funding** 

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



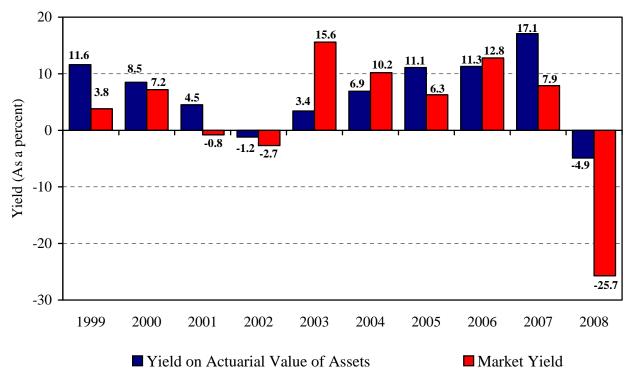
**Plan A – Frozen Unfunded Accrued Liability** 

-12-G. S. Curran & Company, Ltd.

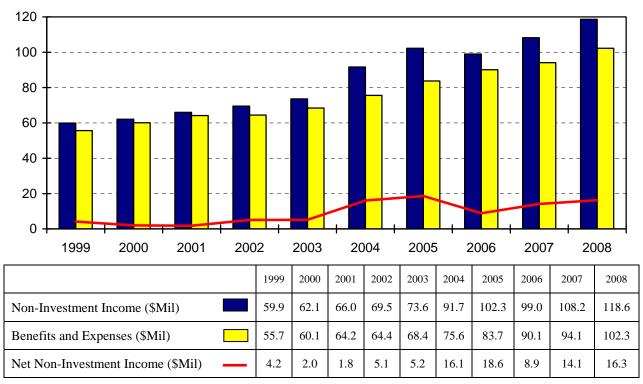


# Actuarial Value of Assets vs. GASB-25 Accrued Liability Plan A

# **Plan A – Historical Asset Yield**

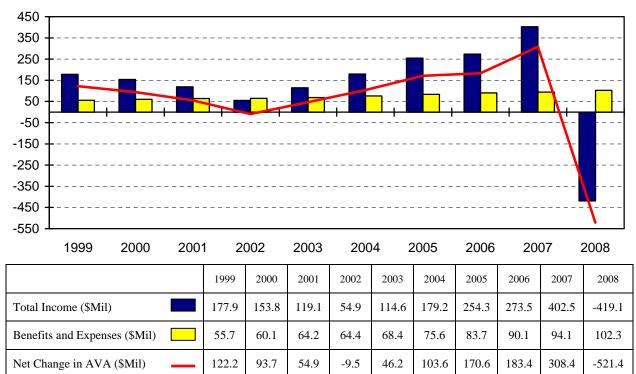


-13-G. S. Curran & Company, Ltd.

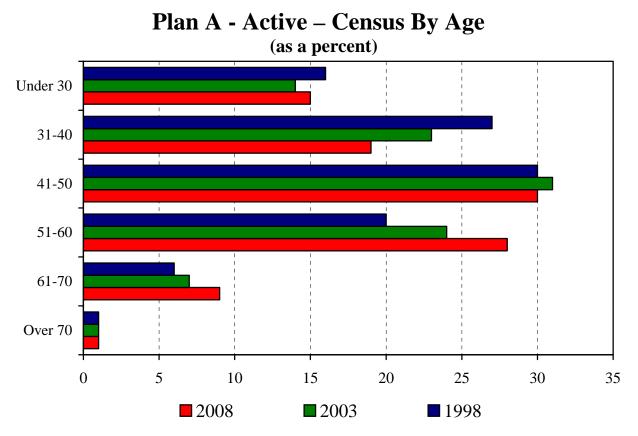


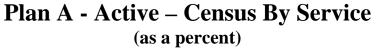
Plan A - Net Non-Investment Income

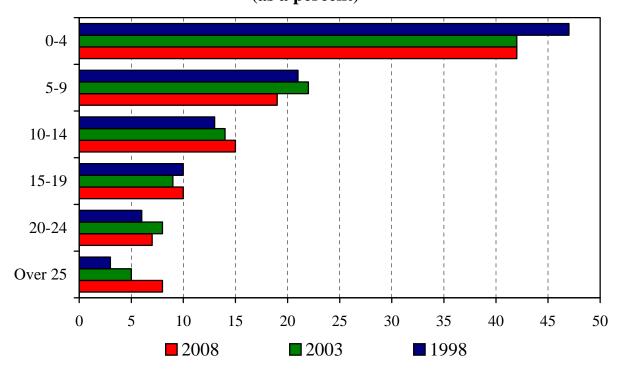
Plan A - Total Income vs. Expenses (Based on Actuarial Value of Assets)



-14-G. S. Curran & Company, Ltd.

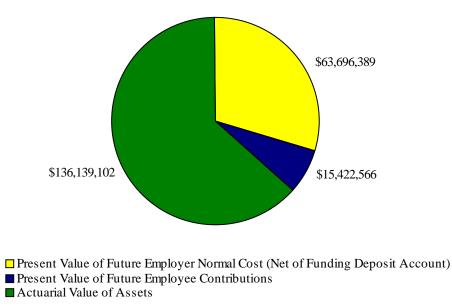




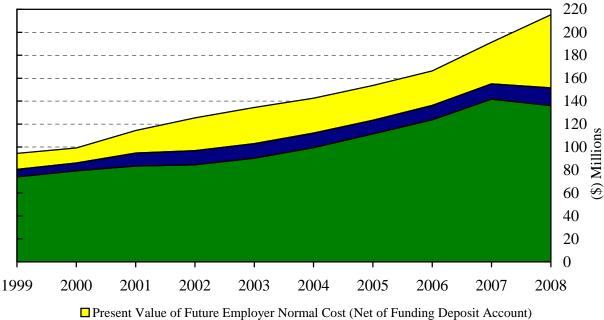


-15-G. S. Curran & Company, Ltd.

# Plan B - Components of Present Value of Future Benefits December 31, 2008

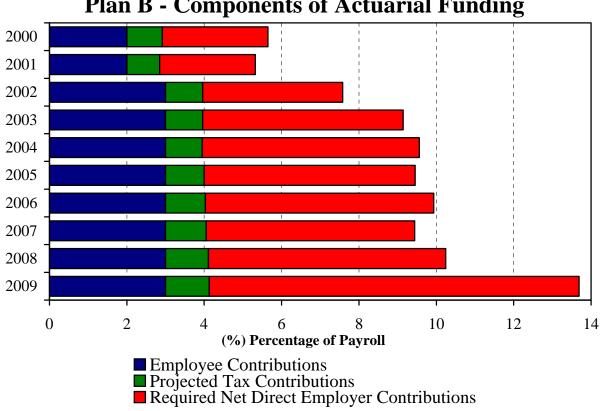


Plan B - Components of Present Value of Future Benefits

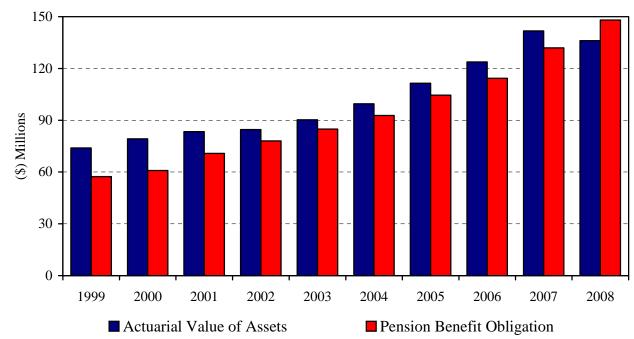


Present Value of Future Employee Contributions

Actuarial Value of Assets



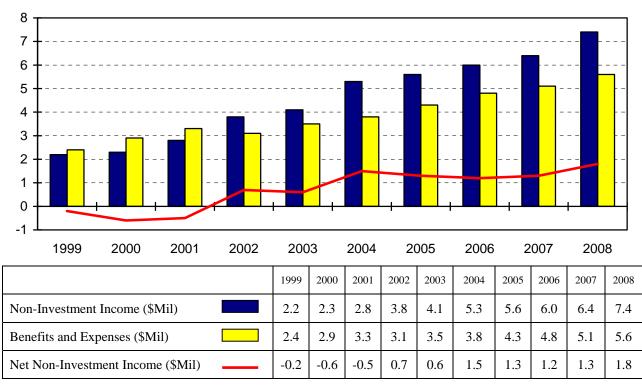
**Plan B - Components of Actuarial Funding** 



# Plan B-Actuarial Value of Assets vs. Pension Benefit Obligation

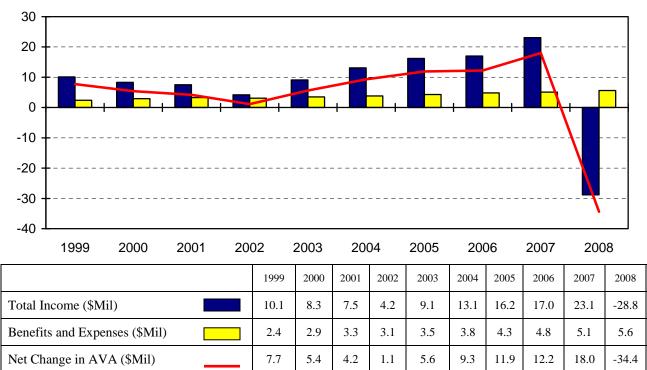
-17-G. S. Curran & Company, Ltd.

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

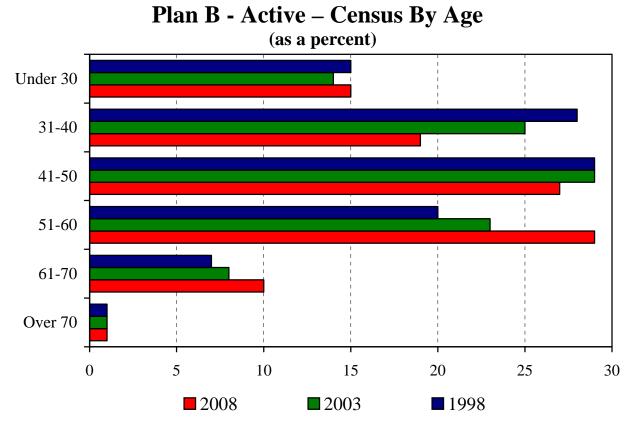


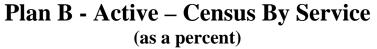
**Plan B - Net Non-Investment Income** 

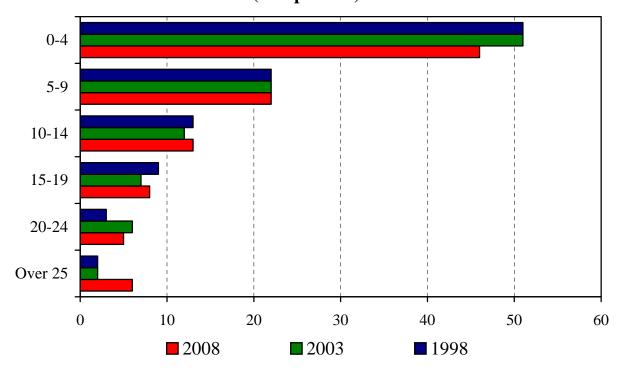
Plan B - Total Income vs. Expenses (Based on Actuarial Value of Assets)



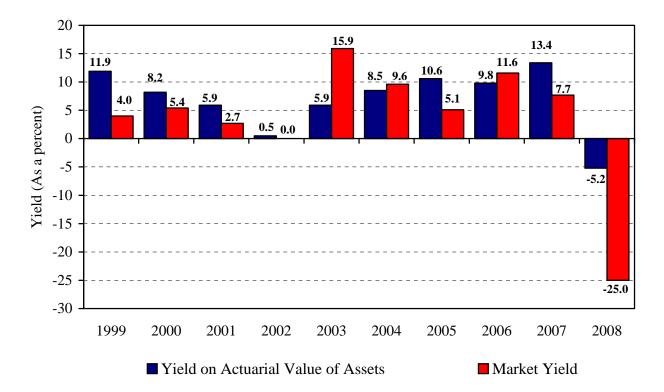
<sup>-18-</sup>G. S. Curran & Company, Ltd.







-19-G. S. Curran & Company, Ltd.



**Plan B – Historical Asset Yield** 

# **Exhibits**

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

1. 2. 3. 4. 5. 6.	Present Value of Future Benefits Funding Deposit Account Credit Balance Unfunded Actuarial Accrued Liability Actuarial Value of Assets Present Value of Future Employee Contributions Present Value of Future Employer Normal Costs (1+2-3-4-5)	\$ \$ \$ \$ \$ \$	2,933,074,556 23,564,580 60,381,793 1,943,569,363 339,052,728 613,635,252
7.	Present Value of Future Salaries	\$	4,008,708,112
8.	Employer Normal Cost Accrual Rate (6÷7)		15.307556%
9.	Projected Fiscal 2009 Salary for Current Membership	\$	475,666,383
10.	Employer Normal Cost as of January 1, 2009 (8 x 9)	\$	72,812,898
11.	Amortization Payment on remaining frozen Unfunded Accrued Liability of \$60,381,793 with Payments increasing at 4% per year	\$	10,565,618
12.	TOTAL Employer Normal Cost and Amortization Payment (10 + 11)	\$	83,378,516
13.	Employer Normal Cost and Amortization Payment Interest Adjusted for Midyear Payment	\$	86,448,686
14.	Estimated Administrative Cost for Fiscal 2009	\$	1,033,107
15.	TOTAL Administrative and Interest Adjusted Actuarial Costs (13 + 14)	\$	87,481,793
16.	Projected Ad Valorem Tax Contributions for Fiscal 2009	\$	5,912,177
17.	Projected Revenue Sharing Funds for Fiscal 2009	\$	143,787
18.	Employers' Minimum Net Direct Actuarially Required Contribution for Fiscal 2009 (15 – 16 – 17)	\$	81,425,829
19.	Projected Payroll for Fiscal 2009	\$	528,596,163
20.	Employers' Minimum Net Direct Actuarially Required Contribution as a % of Projected Payroll for Fiscal 2009 (18 ÷ 19)		15.40%
21.	Actual Employer Contribution Rate for Fiscal 2009		12.25%
22.	Contribution Shortfall (Excess) as a Percentage of Payroll (20 – 21)		3.15%
23.	Increase (Reduction) to Following Year Payment for Contribution Shortfall (Ex	ces	ss) 0.37%
24.	Minimum Recommended Net Direct Employer Contribution Rate for Fiscal 2010 (20 + 23 Rounded to nearest .25%)		15.75%

-21-G. S. Curran & Company, Ltd.

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

#### PRESENT VALUE OF FUTURE BENEFITS FOR ACTIVE MEMBERS:

Retirement Benefits\$ 1,895,574,18Survivor Benefits52,171,69Disability Benefits56,539,52Vested Termination Benefits68,093,36Refunds of Contributions51,761,69	5 5 8	
TOTAL Present Value of Future Benefits for Active Members	\$	2,124,140,469
PRESENT VALUE OF FUTURE BENEFITS FOR TERMINATED MEMBERS:		
Terminated Vested Members Due Benefits at Retirement \$ 43,435,014	4	
Terminated Members with Reciprocals		
Due Benefits at Retirement		
Terminated Members Due a Refund5,645,70	1	
TOTAL Present Value of Future Benefits for Terminated Members	\$	49,362,307

#### PRESENT VALUE OF FUTURE BENEFITS FOR RETIREES:

Regular Retirees		
Maximum \$ 357,628,073		
Option 1 2,289,716		
Option 2 160,884,593		
Option 3 84,380,728		
Option 4 40,549,709		
TOTAL Regular Retirees    \$ 645,732	2,819	
Disability Retirees	1,860	
Survivors & Widows	,221	
Reserve for Accrued Retiree DROP Account Balances	2,880	
TOTAL Present Value of Future Benefits for Retirees & Survivors		\$ 759,571,780
TOTAL Present Value of Future Benefits		\$ 2,933,074,556

-22-G. S. Curran & Company, Ltd.

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

#### CURRENT ASSETS:

Cash in Banks	\$	16,837,912	
Contributions Receivable		19,230,202	
Ad Valorem Taxes Receivable		5,313,137	
Accrued Interest and Dividends		2,624,237	
Investments Receivable		461,656	
		¢	
TOTAL CURRENT ASSETS	•••••	\$	44,467,144

#### **INVESTMENTS:**

Common Trust Funds	\$ 788,066,077	
Government Securities	359,294,618	
Common Stock	258,434,599	
Foreign Equities	43,220,473	
Mortgage Backed Securities	31,839,054	
Cash Equivalents	20,929,873	
Corporate Bonds	15,407,635	
Foreign Equities Fund	11,014,685	
Preferred Stock	1,883,008	
TOTAL INVESTMENTS	 \$	1,530,090,022
TOTAL ASSETS	 \$	1,574,557,166

#### CURRENT LIABILITIES:

Retirements Payable	\$ 7,019,156
Accounts Payable	656,515
Refunds Payable	491,426
Due to Other Funds	291,159
Investments Payable	163,953
-	

TOTAL CURRENT LIABILITIES\$	8,6	622,209
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MARKET VALUE OF ASSETS ...... \$ 1,565,934,957

-23-G. S. Curran & Company, Ltd.

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

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

Fiscal year 2008 Fiscal year 2007 Fiscal year 2006 Fiscal year 2005 Fiscal year 2004	\$ (694,894,129) 8,260,561 89,887,743 (18,866,959) <u>38,933,911</u>
Total for five years	\$ (576,678,873)
Deferral of excess (shortfall) of invested income:	
Fiscal year 2008 (80%) Fiscal year 2007 (60%) Fiscal year 2006 (40%) Fiscal year 2005 (20%) Fiscal year 2004 (0%)	4,956,337 35,955,097 (3,773,392)
Total deferred for year	\$ (518,777,261)
Market value of plan net assets, end of year	\$1,565,934,957
Preliminary actuarial value of plan assets, end of year	\$2,084,712,218
Actuarial value of assets corridor	
85% of market value, end of year 115% of market value, end of year	
Modified actuarial value of plan net assets, end of year	\$1,942,768,710
Allocated share of the expense fund	\$ 800,653
Final actuarial value of plan net assets, end of year	\$1,943,569,363

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

Employee Contributions to the Annuity Savings Fund	\$ 339,052,728
Employer Normal Contributions to the Pension Accumulation Fund	613,635,252
Funding Deposit Account Credit Balance	(23,564,580)
Employer Amortization Payments to the Pension Accumulation Fund	60,381,793
TOTAL PRESENT VALUE OF FUTURE CONTRIBUTIONS	\$ 989,505,193

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

Prior Year Frozen Unfunded Accrued Liability	\$ 66,328,358
Interest on Frozen Unfunded Accrued Liability \$ 4,974,628	
Employer Normal Cost for Prior Year.34,231,900	
Interest on the Normal Cost	
Administrative Expenses and Expense Fund Adjustment	
Interest on Expenses	
Credit to the Funding Deposit Account	
TOTAL Increases to Frozen Unfunded Accrued Liability	\$ 66,328,016
Direct Employer Contributions \$ 64,083,121	
Interest on Employer Contributions	
Ad Valorem Taxes and Revenue Sharing	
Interest on Ad Valorem Taxes and Revenue Sharing Funds	
TOTAL Decreases to Frozen Unfunded Accrued Liability	\$ 72,274,581
CURRENT YEAR FROZEN UNFUNDED ACCRUED LIABILITY	\$ 60,381,793

-25-G. S. Curran & Company, Ltd.

EXHIBIT VI
PLAN A: ANALYSIS OF INCREASE IN ASSETS

Actuarial Value of Assets (December 31, 2007)		\$	2,027,214,660
INCOME: Employer Contributions	<pre>\$ 64,083,121 45,706,053 5,471,766 152,907 2,717,802 462,234</pre>	\$	118,593,883
Net Appreciation in Fair Value of Investments Interest & Dividends Securities Lending (Net) Investment Expense Net Investment Income TOTAL Income		\$ \$	(537,740,395) (419,146,512)
EXPENSES: Retirement Benefits	\$ 80,908,040 9,519,524 7,814,822 2,506,379 1,421,929 133,215		
TOTAL Expenses		\$	102,303,909
Net Market Value Income for Fiscal 2008 (Income - Expenses)		\$	(521,450,421)
Unadjusted Fund Balance as of December 31, 2008 (Fund Balance Previous Year + Net Income)		\$	1,505,764,239
Net Additional Credit (Charge) for Allocated Expenses		\$	200,147
Adjustments for Change in Allocated Share of Expense Fund Balance		\$	(9,869)
Adjustment for Actuarial Smoothing		\$	437,614,846
Actuarial Value of Assets: (December 31, 2008)		\$	1,943,569,363

-26-

G. S. Curran & Company, Ltd.

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

## PRESENT ASSETS OF THE SYSTEM CREDITABLE TO:

Annuity Savings Fund	\$ 337,647,344
Annuity Reserve Fund	758,948,900
Pension Accumulation Fund	415,262,832
Deferred Retirement Option Plan Account	30,511,301
Funding Deposit Account	23,564,580
NET MARKET VALUE OF ASSETS	\$ 1,565,934,957
ALLOCATED SHARE OF THE EXPENSE FUND	800,653
ADJUSTMENT FOR ACTUARIAL SMOOTHING	\$ 376,833,753
ACTUARIAL VALUE OF ASSETS	\$ 1,943,569,363

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

Present Value of Credited Projected Benefits Payable to Current Employees\$	1,367,699,845
Present Value of Benefits Payable to Terminated Employees	49,362,307
Present Value of Benefits Payable to Current Retirees and Beneficiaries	759,571,780
TOTAL PENSION BENEFIT OBLIGATION \$	2,176,633,932

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

Actuarial Value of Assets Divided by PBO as of Fiscal 1986:	59.75%
Amortization of Unfunded Balance over 30 years:	29.52%

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

Changes for Fiscal 1987 Changes for Fiscal 1988 Changes for Fiscal 1989 Changes for Fiscal 1990 Mergers in Fiscal 1994 Changes for Fiscal 1995 Changes for Fiscal 1997 Changes for Fiscal 1998 Changes for Fiscal 1998 Changes for Fiscal 2001. Changes for Fiscal 2001. Changes for Fiscal 2003 Changes for Fiscal 2005 Changes for Fiscal 2006 Changes for Fiscal 2007. Changes for Fiscal 2008 TOTAL Adjustments		0.77%
Amortization of Adjustments in Funded Ratio over 30 years:		
· · ·	-5.73%	
Changes for Fiscal 1987	-5.73% 0.50%	
· · ·		
Changes for Fiscal 1987 Changes for Fiscal 1988	0.50%	
Changes for Fiscal 1987 Changes for Fiscal 1988 Changes for Fiscal 1989	0.50% -0.04%	
Changes for Fiscal 1987 Changes for Fiscal 1988 Changes for Fiscal 1989 Changes for Fiscal 1990 Mergers in Fiscal 1994 Changes for Fiscal 1995	0.50% -0.04% 1.15%	
Changes for Fiscal 1987 Changes for Fiscal 1988 Changes for Fiscal 1989 Changes for Fiscal 1990 Mergers in Fiscal 1994	0.50% -0.04% 1.15% -0.38%	
Changes for Fiscal 1987 Changes for Fiscal 1988 Changes for Fiscal 1989 Changes for Fiscal 1990 Mergers in Fiscal 1994 Changes for Fiscal 1995 Changes for Fiscal 1997 Changes for Fiscal 1998	0.50% -0.04% 1.15% -0.38% 2.55%	
Changes for Fiscal 1987 Changes for Fiscal 1988 Changes for Fiscal 1989 Changes for Fiscal 1990 Mergers in Fiscal 1994 Changes for Fiscal 1995 Changes for Fiscal 1997	0.50% -0.04% 1.15% -0.38% 2.55% 0.89%	
Changes for Fiscal 1987 Changes for Fiscal 1988 Changes for Fiscal 1989 Changes for Fiscal 1990 Mergers in Fiscal 1994 Changes for Fiscal 1995 Changes for Fiscal 1997 Changes for Fiscal 1998 Changes for Fiscal 1998 Changes for Fiscal 1999 Changes for Fiscal 1999	0.50% -0.04% 1.15% -0.38% 2.55% 0.89% 1.26%	
Changes for Fiscal 1987 Changes for Fiscal 1988 Changes for Fiscal 1989 Changes for Fiscal 1990 Mergers in Fiscal 1994 Changes for Fiscal 1995 Changes for Fiscal 1997 Changes for Fiscal 1998 Changes for Fiscal 1998 Changes for Fiscal 1999	0.50% -0.04% 1.15% -0.38% 2.55% 0.89% 1.26% 1.12%	

-28-G. S. Curran & Company, Ltd.

-0.00%

-0.06%

-0.00%

1.43%

91.47%

89.29%

Changes for Fiscal 2006.....

Changes for Fiscal 2007.....

Changes for Fiscal 2008.....

TOTAL Amortization of Adjustments .....

Target Ratio for Current Fiscal Year

Actuarial Value of Assets Divided by PBO as of Fiscal 2008 .....

## EXHIBIT X CENSUS DATA - PLAN A

		Terminated			
	Active	with Funds on Deposit	DROP	Retired	Total
Number of members as of					
December 31, 2007	13,245	6,619	405	5,083	25,352
Additions to Census					
Initial membership	2,373	86			2,459
Omitted in error last year				9	9
Change in Status during Year					
Actives terminating service	(547)	547			
Actives who retired	(216)			216	
Actives entering DROP	(148)		148		
Term. members rehired	45	(45)			
Term. members who retire		(34)		34	
Retirees who are rehired	3	1		(4)	
Refunded who are rehired	44	16			60
DROP participants retiring			(86)	86	
DROP returned to work	69		(69)		
Death of another member	(8)	(1)		9	
Omitted in error last year					
Eliminated from Census					
Refund of contributions	(855)	(178)			(1,033)
Deaths	(29)	(2)	(1)	(197)	(229)
Included in error last year				(1)	(1)
Adjustment for multiple records					
Number of members as of					
December 31, 2008	13,976	7,009	397	5,235	26,617

PLAN A - ACS	TIVES CENS	US BY AGE:
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Number	Number	Total	Average	Total
Male	<i>Female</i>	Number	Salary	Salary
95	43	138	20,605	2,843,469
374	355	729	25,101	18,298,915
548	675	1,223	29,451	36,018,657
524	669	1,193	33,487	39,949,999
667	832	1,499	36,141	54,175,417
934	995	1,929	35,969	69,384,367
1,088	1,137	2,225	38,320	85,261,673
1,083	1,168	2,251	38,748	87,222,697
922	854	1,776	37,789	67,112,640
502	411	913	38,262	34,933,066
184	134	318	36,003	11,449,102
82	51	133	29,853	3,970,400
25	10	35	29,140	1,019,892
9	1	10	21,275	212,747
1	0	1	38,446	38,446
7,038	7,335	14,373	35,615	511,891,487
	Male 95 374 548 524 667 934 1,088 1,083 922 502 184 82 25 9 1	Male         Female           95         43           374         355           548         675           524         669           667         832           934         995           1,088         1,137           1,083         1,168           922         854           502         411           184         134           82         51           25         10           9         1           1         0	MaleFemaleNumber95431383743557295486751,2235246691,1936678321,4999349951,9291,0881,1372,2251,0831,1682,2519228541,77650241191318413431882511332510359110101	MaleFemaleNumberSalary954313820,60537435572925,1015486751,22329,4515246691,19333,4876678321,49936,1419349951,92935,9691,0881,1372,22538,3201,0831,1682,25138,7489228541,77637,78950241191338,26218413431836,003825113329,85325103529,140911021,27510138,446

THE ACTIVE CENSUS INCLUDES 7,177 ACTIVES WITH VESTED BENEFITS, INCLUDING 397 DROP PARTICIPANTS AND 198 ACTIVE FORMER DROP PARTICIPANTS.

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	Number	Number	Total	Average	Total
Age	Male	<i>Female</i>	Number	Benefit	Benefit
26 - 30	1	1	2	5,760	11,520
31 - 35	3	10	13	6,554	85,199
36 - 40	14	19	33	10,987	362,558
41 - 45	41	38	79	12,556	991,935
46 - 50	38	51	· 89	14,923	1,328,169
51 - 55	72	69	141	16,553	2,333,919
56 - 60	74	54	128	12,684	1,623,513
61 - 65	31	14	45	9,019	405,850
66 - 70	4	3	7	4,411	30,874
71 - 75	2	2	4	5,037	20,149
76 - 80	1	1	2	567	1,134
86 - 90	0	1	1	666	666
91 - 99	0	1	1	374	374
TOTAL	281	264	545	13,203	7,195,860

PLAN A - TERMINATED MEMBERS DUE & DEFERRED RETIREMENT BENEFIT:

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PLAN A - TERMINATED MEMBERS DUE A REFUND OF CONTRIBUTIONS:

Contribu	tio	ns Ranging	201	Total
From		То	Number	Contributions
`o	-	<i>99</i>	4,302	113,354
100	-	499	943	221,820
500	-	999	306	217,474
1000	-	1999	235	329,737
2000	-	4999	307	1,002,709
5000	-	9999	209	1,479,374
10000	-	19999	129	1,779,879
20000	-	99999	33	984,198
	2	TOTAL	6,464	6,128,545

<sup>-30-</sup>

G. S. Curran & Company, Ltd.

#### PLAN A - REGULAR RETIREES:

	Number	Number	Tota1	Average	Total
Age	Male	Female	Number	Benefit	Benefit
46 - 50	2	5	. 7	43,135	301,948
51 - 55	48	42	90	38,915	3,502,376
56 - 60	147	114	261	37,227	9,716,131
61 - 65	323	263	586	24,079	14,110,116
66 - 70	521	376	897	18,097	16,232,911
71 - 75	461	301	762	15,055	11,471,963
76 - 80	383	305	688	13,249	9,115,497
81 - 85	244	196	440	11,917	5,243,488
86 - 90	89	89	178	9,607	1,710,059
91 - 99	38	39	. 77	5,748	442,579
TOTAL	2,256	1,730	3,986	18,025	71,847,068

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#### PLAN A - DISABILITY RETIREES:

.

	Number	Number	Total	Average	Total
Age	Male	Female	Number	Benefit	Benefit
31 - 35	1	0	1	9,444	9,444
36 - 40	5	6	11	13,325	146,577
41 - 45	10	. 8	18	11,169	201,049
46 - 50	36	15	51	14,630	746,150
51 - 55	75	30	105	14,641	1,537,346
56 - 60	90	49	139	12,886	1,791,126
61 - 65	70	33	103	12,156	1,252,093
66 - 70	28	.14	42	8,251	346,550
71 - 75	10	3	13	5,700	74,105
76 - 80	11	2	13	4,624	60,109
81 - 85	7	3	10	4,842	48,420
86 - 90	. 2	0	2	6,041	12,081
91 - 99	· 1	0	1	550	550
TOTAL	346	163	509	12,231	6,225,600

#### PLAN A - SURVIVORS:

PLAN A - SURVI	vors:			r	· *
	Number	Number	Total	Average	Total
Age	Male	Female.	Number	Benefit	Benefit
0 - 25	8	2	10	7,173	71,730
26 - 30	1	0	1	8,689	8,689
31 - 35	1	1	2	8,583	17,165
36 - 40	1	1	2	11,203	22,405
41 - 45	2 .	11	13	15,876	206,389
46 - 50	3	11	14	13,474	188,638
51 - 55	6	16	22	12,606	277,333
56 - 60	2	36	38	12,179	462,789
61 - 65	8	60	68	9,601	652,856
66 - 70	7	104	111	11,173	1,240,230
71 - 75	10	91	101	8,891	897,999
76 - 80	8	120	128	8,335	1,066,843
81 - 85	3	108	111	6,790	753,720
86 - 90	2	80	82	5,328	436,895
91 - 9 <b>9</b>	1	36	37	3,151	116,591
TOTAL	63	677	740	8,676	6,420,272

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644	677	T.	UAL SALARY OF ACTIVE MEMBERS:
4	NEMBERS		
Completed Years of Service			
4	ŝ	3	
28.290		22.666	17.966 22.666
31,311		29,491	25,987 29,491
30,921		32,714	29,542 32,714
34,041		33,802	32,358 33,802
33, 437		37,726	37,726
31,520		31,809	31,441 31,809
31,626		30,651 32,441	30,651 32,441
31,008		29,841 30,384	29,841 30,384
34,669	80,225	31,395 30,225	
32,519	15,182		
29,336	17,921		25,853
24,776	4,508	27,725 24,508	

35, 615

52,692

52,067

40,374 46,657

37,301

35, 732

30,768 32,745 32,192

27,888

Average 27,138

-32-G. S. Curran & Company, Ltd.

Total	9 10 10 10 10 10 10 10 10 10 10 10 10 10	545	Average Benefit 5,760 6,554 10,987 12,556 14,923 12,684 9,019 9,019 5,037 5,037 5,037 5,037 5,037 5,037 5,037 5,037 5,037 5,037 5,037 5,037 5,037 5,037 5,037 5,037 5,0000 5,0000 5,0000 5,00000 5,00000000
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15-19	19 17 17	75 REMENT BENEF : Eligibility	15-19 14,196 10,282
10-14	4 K	126 89' A DEFERRED RETIF Until Retirement	10-14 15,771 7,195
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4	0 10	25 MEMBERS DU) Years	4 12,972 8,561
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н	0) (7 44	40 Ual Benef	1 39,773 13,636 6,901
0	<b>150</b> 100 100 100 100 100 100 100 100 100 1	61 40 32 31 25 126 89 75 4 AVERAGE ANNUAL BENEFITS OF TERMINATED MEMBERS DUE A DEFERRED RETIREMENT BENEFIT: Years Until Retirement Eligibility	35,625 10,725 4,411 5,037 5,037 5,037 5,037 5,037
Attained Ages	0 - 25 31 - 25 31 - 25 31 - 25 31 - 25 41 - 45 46 - 40 46 - 45 46 - 45 46 - 45 51 - 45 55 - 40 45 71 - 75 56 - 70 55 - 20 88 - 80 76 - 70 76 - 20 76 - 20 76 - 20 76 - 20 76 - 20 76 - 20 76 - 20 70 70 70 70 70 70 70 70 70 70 70 70 70	Totals PLAN A - AVI	Attained Ages Ages 26 - 25 26 - 30 26 - 40 26 - 40 61 - 45 61 - 45 61 - 60 61 - 65 71 - 75 71 - 75 71 - 75 71 - 75 71 - 85 71 - 85 71 - 85 71 - 85 71 - 85 71 - 85

PLAN A - TERMINATED MEMBERS DUE A DEFERRED RETIREMENT BENEFIT:

-33-G. S. Curran & Company, Ltd.

	30£0ver Total	2	96	261	586	897	2 762	5 688	6 440	6 178		47 3986				Average	30&Over Benefit	43,135	. 38,915	37,227	24,079				Ч	769 9,	,123 5,748	5,632 18,025
	25-29 30£(		10				9	24	33	. 47	36	146		×			25-29 30%										6,206 4,	10,718 5.
	20-24			ч		Ð	36	68	193	83	6	420			ų		20-24			8,748		15,788	23,247	19,710	11,715	8,545	7,508	13,761
	15-19				7	42	86	241	137	19	~	534			Completed Years Since Retirement		15-19				37,999	27,565	20,501	11,690	11,559	11,566	8,493	14, 652
	10-14			4	31	66	278	211	40	-11		674		•	urs Since		10-14			31,365	31,309	23,134	14,204	13, 314	12,947	9,851		15,980
	5- 2		ø	47	117	390	235	76	20	Q	н	898		CREES :	pleted Yea		5-9		31,586	36,330	29,853	16,909	13,547	10,921	13,332	14,331	7,690	18,216
	4			30	58	001	38	13	ε	7	T.	248		 TO SERVICE RETIREES:	Com		4		41,697	41,596	26, 779	19,857	14,161	9,192	14,463	5,624	11,490	22,724
	m		24	37	61	84	24	Q	г	н		228					ε		42,548	40,662	22,353	17,434	16,838	10,755	9,184	27,517		23, 831
	η.	2	17	42	98	61	74	7	4	н		246		FITS PAYABLE			17	60,366	28,476	38,885	22,565	15,136	14,423	16,718	11,597	44,105		23,504
	H	~	. 20	39	117	47	19	e/	7	~	27	257		- AVERAGE ANNUAL BENEFIT			1	22,051	43,387	36,017	20,985	15,544	10,724	10,710	14,559	8,844		22,760
	0	ŝ	30	19	97	65	24	7	1			288		VERAGE AN			0	45,705	41,343	34,168	18,532	14,525	13, 703	6,764	4,836			22,862
Attained	Âges	0 - 50	I	۲	ı	I	I	76 - 80	81 - 85	86 - <b>9</b> 0	1840 3 16	Totals	a	PLAN A - A		Attained	Ages	1	I.	J,	ŧ	I	I	ı	,I	86 - 90	91 & Over	Average

-34-G. S. Curran & Company, Ltd.

PLAN A - D	- DISABILITY RETIREES:	RETIREES:										8
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Attained Ages	0	1	n	ო	4	5 - 0	10-14	15-19	20-24	25-29	30£0ver	Total
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81 - 85								9	4			10
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Totals	29	30	32	36	36	138	104	66	32	4	C)	503
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PLAN A - A	- AVERAGE ANNUAL BENEFITS PAYABLE TO DISABILITY RETIREES:	NUAL BENEI	TTS PAYAI	SIE TO DIS	ABILITY I	LETIREES:						
÷			S		Com	Completed Yea	Years Since Retirement	Retiremen	H			
Attained												Average
Ages	0	н	0	m	4	5-9	10-14	15-19	20-24	25-29	30&0ver	Benefit
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0 - 30												0
31 - 35				9,444								9,444
1	16,331	13,363	19,103		9,810	8,798						13, 325
I.		18,169	11,340	5,857		10,330	6,341			ŝ		11,169
I.	21,208	14,194	20,450	20,339	9,631	16,406	8,413	6,198				14,630
I.	24,152	19,618	20,079	13,936	14,270	15,054	11,226	8,287	6,538			14,641
I.	10,069	12,878	18,955	14,391	11,916	15,239	11,603	10,028	9, 692	7,661	<ul> <li>Charles are experience.</li> </ul>	12,886
1	8,318	5,774	16,268	11,580	14,052	11,193	13,569	11,107	17,731		3, 483	12,156
I.	5,402		3,132	6,565	6,746	6,289	8,439	9,328	11,169	7,778		8,251
L						4,229	5,223	6,010	7,097			5,700
I.						3,210	3,890	574 4	2010	T76'8		4,0/4
I.								T78/C	51225			4, 642
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Average	16,968	15,147	17,648	13,377	12,775	13,162	10,204	8,919	8,456	8,005	2,017	12,231

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11	22	27	22	17	106	136	125	744	74	56	740
AVERAGE ANNUAL		FITS PAYA	BLE TO SU	RVIVORS OI	BENEFITS PAYABLE TO SURVIVORS OF FORMER MEMBERS:	: SYBERS					
				Com	Completed Years Since		Retirement	41			
0	1	61	εŋ	4	5-9	71-01	15-19	20-24	25-29	30£0ver	Average Benefit
	8,509	7,177				5,367	4,316				7,197
					6,958						6,958
							8,689				8,689
		8,583									8,583
			9,892			12,513					11,203
22,955				20, 282	13,720	12,531					15,876
13,836	14,016		5,626	26, 829	15,275	12,572	14,196		1,303		13,474
	7,707		6,091		20,458	11,727	7,677				12,606
0,328	2,699	9,727	18,824	13,073	16,250	10,009	5,847				12,179
	7,433	3	12,239	5,394	11, 737	9,454	7, 054	1,270	0,871		9,601
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4						9.841	9.221	5.947	4.367	2.751	5.328
							4,739	3,543	4,641	2,420	3,151
000			300 07						010		
10,009	7,564	11, 144	13, 325	11,842	11,579	9,503	9,236	7,600	5, 878	2,586	8,676

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

		Fiscal 2008		Fiscal 2007		Fiscal 2006		Fiscal 2005
Number of Active Members Number of Retirees & Survivors Number of Terminated Due Deferred Benefits Number Terminated Due Refunds		14,373 5,235 545 6,464		13,650 5,083 497 6,122		13,244 4,978 522 6,140		13,470 4,845 448 5,723
Active Lives Payroll	\$	511,891,487	\$	454,741,830	\$	420,104,038	\$	429,459,653
Retiree Benefits in Payment	\$	84,492,940	\$	77,403,146	\$	73,102,892	\$	66,724,243
Market Value of Assets	\$	1,565,934,957	\$	2,087,385,378	\$	1,921,293,624	\$	1,695,523,143
Ratio of AVA to GASB-25 Accrued Liability		96.99%		96.83%		95.04%		94.29%
Actuarial Value of Assets	\$	1,943,569,363	\$	2,027,214,660	\$	1,718,754,962	\$	1,535,416,950
Frozen Unfunded Actuarial Accrued Liability	\$	60,381,793	\$	66,328,358	\$	89,762,521	\$	92,910,853
Present Value of Future Employer Normal Cost	\$	613,635,252	\$	288,883,382	\$	280,817,883	\$	422,308,841
Present Value of Future Employee Contrib.	\$	339,052,728	\$	302,732,846	\$	279,197,353	\$	291,917,848
Funding Deposit Account Credit Balance	\$	23,564,580	\$	0	\$	0	\$	0
Present Value of Future Benefits	\$	2,933,074,556	\$	2,685,159,246	\$	2,368,532,719	\$	2,342,554,492
************	****	*********	****	******	***	******	***	*****
		Fiscal 2009		Fiscal 2008		Fiscal 2007		Fiscal 2006
Employee Contribution Rate		9.50%		9.50%		9.50%		9.50%
Projected Tax Contribution as % of Payroll		1.15%		1.11%		1.05%		0.94%
Actuarially Required Net Direct Employer Contribution Rate		15.40%		8.98%		9.58%		13.12%
Actual Employer Contribution Rate		12.25%		12.75%		13.25%		12.75%

	Fiscal 2004		Fiscal 2003		Fiscal 2002		Fiscal 2001		Fiscal 2000		Fiscal 1999
	13,868 4,739 374 5,641		13,934 4,602 320 5,439		13,570 4,507 323 5,528		13,497 4,412 289 5,272		13,570 4,325 263 5,187		13,429 4,193 273 4,977
\$	407,022,806	\$	396,330,869	\$	372,814,126	\$	352,458,011	\$	337,142,274	\$	323,096,742
\$	62,543,026	\$	57,594,474	\$	54,500,856	\$	51,579,364	\$	48,515,498	\$	44,919,015
\$	1,577,051,547	\$	1,415,543,422	\$	1,218,826,920	\$	1,247,510,633	\$	1,255,743,424	\$	1,175,817,245
	93.46%		92.83%		92.47%		92.29%		91.39%		90.19%
\$	1,364,795,086	\$	1,261,191,242	\$	1,214,971,041	\$	1,224,465,306	\$	1,169,592,667	\$	1,082,379,053
\$	95,449,152	\$	97,437,098	\$	98,929,395	\$	102,275,043	\$	110,257,598	\$	117,704,612
\$	351,288,808	\$	354,769,127	\$	291,266,682	\$	165,256,537	\$	112,077,577	\$	102,088,430
\$	269,026,244	\$	263,620,074	\$	250,687,770	\$	239,981,493	\$	233,305,082	\$	225,850,884
\$	0	\$	0	\$	0	\$	0	\$	0	\$	0
\$	2,080,559,290	\$	1,977,017,541	\$	1,855,854,888	\$	1,731,978,389	\$	1,625,232,924	\$	1,528,022,979
**:	*****	**	*****	***	********	****	*****	***:	******	***	******
	Fiscal 2005		Fiscal 2004		Fiscal 2003		Fiscal 2002		Fiscal 2001		Fiscal 2000
	9.50%		9.50%		9.50%		9.50%		9.50%		9.50%
	1.02%		0.96%		0.97%		0.98%		0.87%		0.90%
	12.39%		12.66%		11.22%		7.32%		5.68%		5.40%
	12.75%		11.75%		7.75%		7.75%		7.75%		7.75%

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

1. 2. 3. 4. 5.	Present Value of Future Benefits Funding Deposit Account Credit Balance Actuarial Value of Assets Present Value of Future Employee Contributions Present Value of Future Employer Normal Costs (1+2-3-4)	\$ \$ \$ \$	215,258,057 289,589 136,139,102 15,422,566 63,985,978
6.	Present Value of Future Salaries	\$	553,767,543
7.	Employer Normal Cost Accrual Rate (5 ÷ 6)		11.554664%
8.	Projected Fiscal 2009 Salary for Current Membership	\$	68,504,149
9.	Employer Normal Cost as of January 1, 2009 (7 x 8)	\$	7,915,424
10.	Normal Cost Interest Adjusted for Midyear Payment	\$	8,206,887
11.	Estimated Administrative Cost for Fiscal 2009	\$	151,146
12.	TOTAL Administrative and Interest Adjusted Actuarial Costs (10 + 11)	\$	8,358,033
13.	Projected Ad Valorem Tax Contributions for Fiscal 2009	\$	864,967
14.	Projected Revenue Sharing Funds for Fiscal 2009	\$	21,036
15.	Employers' Net Direct Actuarially Required Contribution for Fiscal 2009 (12 – 13 – 14)	\$	7,472,030
16.	Projected Payroll for Fiscal 2009	\$	78,156,869
17.	Employers' Net Direct Actuarially Required Contribution as a % of Projected Payroll for 2009 (15÷16)		9.56%
18.	Actual Employer Contribution Rate for Fiscal 2009		6.25%
19.	Contribution Shortfall (Excess) as a Percentage of Payroll (17 - 18)		3.31%
20.	Increase (Reduction) to Following Year Payment for Contribution Shortfall (Excess)		0.41%
21.	Minimum Recommended Net Direct Employer Contribution Rate for Fiscal 2010 (17 + 20 Rounded to Nearest .25%)		10.00%

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

### PRESENT VALUE OF FUTURE BENEFITS FOR ACTIVE MEMBERS:

Retirement Benefits	
Survivor Benefits	
Disability Benefits6,076,593Vested Termination Benefits10,077,061	
Refunds of Contributions	
TOTAL Present Value of Future Benefits for Active Members       \$	167,750,427
PRESENT VALUE OF FUTURE BENEFITS FOR TERMINATED MEMBERS:	
Terminated Vested Members Due Benefits at Retirement \$ 4,096,964 Terminated Members with Reciprocals	
Due Benefits at Retirement	
Terminated Members Due a Refund	
TOTAL Present Value of Future Benefits for Terminated Members\$	4,564,924
PRESENT VALUE OF FUTURE BENEFITS FOR PENSIONERS:	
Regular Retirees by Option Selected:	
Maximum	
Option 1 193,367	
Option 1 193,367 Option 2	
1	
Option 2 14,928,201	
Option 2         14,928,201           Option 3         2,215,443	
Option 214,928,201Option 32,215,443Option 4567,577	
Option 2       14,928,201         Option 3       2,215,443         Option 4       567,577         TOTAL Regular Retirees       \$ 35,023,526	
Option 2       14,928,201         Option 3       2,215,443         Option 4       567,577         TOTAL Regular Retirees       \$ 35,023,526         TOTAL Disability Retirees       \$ 3,977,466	
Option 2       14,928,201         Option 3       2,215,443         Option 4       567,577         TOTAL Regular Retirees       \$ 35,023,526         TOTAL Disability Retirees       \$ 3,977,466         TOTAL Survivors & Widows       \$ 3,923,842	42,942,706

# EXHIBIT XIV – SCHEDULE A PLAN B - MARKET VALUE OF ASSETS

# CURRENT ASSETS:

Cash in Banks	\$ 1,053,988	
Contributions Receivable	1,237,903	
Ad Valorem Taxes Receivable & Revenue Sharing	571,832	
Accrued Interest and Dividends	252,654	
Due from Other Funds	291,159	
Investments Receivable	32,041	
Other Current Assets	1,028	
TOTAL CURRENT ASSETS	 	\$ 3,440,605

### **INVESTMENTS:**

Common Trust Funds Government Securities Common Stocks Foreign Equities Cash Equivalents	\$ 54,046,637 26,314,538 17,483,847 3,079,748 2,687,547	
Corporate Bonds	1,518,780	
Mortgage Backed Securities	782,225	
Foreign Equity Fund	761,925	
Preferred Stock	133,467	
TOTAL INVESTMENTS	 \$	106,808,714
TOTAL ASSETS	 \$	110,249,319
CURRENT LIABILITIES:		
Retirements Payable	\$ 420,713	
Refunds Payable	22,136	
Investments Payable	11,162	
Accounts Payable	45,966	
5	,	
TOTAL CURRENT LIABILITIES	 \$	499,977
MARKET VALUE OF ASSETS	 \$	109,749,342
-41-		

-41-G. S. Curran & Company, Ltd.

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

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

Fiscal year 2008 Fiscal year 2007 Fiscal year 2006 Fiscal year 2005 Fiscal year 2004	(47,079,799) 277,886 4,871,547 (2,671,761) 2,076,221
Total for five years	\$ (42,525,906)
Deferral of excess (shortfall) of invested income:	
Fiscal year 2008 (80%) Fiscal year 2007 (60%) Fiscal year 2006 (40%) Fiscal year 2005 (20%) Fiscal year 2004 ( 0%)	(37,663,839) 166,732 1,948,619 (534,352) <u>0</u>
Total deferred for year	\$ (36,082,840)
Market value of plan net assets, end of year	\$ 109,749,342
Preliminary actuarial value of plan assets, end of year	\$ 145,832,182
Actuarial value of assets corridor	
85% of market value, end of year 115% of market value, end of year	93,286,941 126,211,743
Modified actuarial value of plan net assets, end of year	\$ 136,021,963
Allocated share of the expense fund	\$ 117,139
Final actuarial value of plan net assets, end of year	\$ 136,139,102

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

Employee Contributions to the Annuity Savings Fund	\$ 15,422,566
Employer Normal Contributions to the Pension Accumulation Fund	63,985,978
Funding Deposit Account Credit Balance	(289,589)
TOTAL PRESENT VALUE OF FUTURE CONTRIBUTIONS	\$ 79,118,955

# **EXHIBIT XVI** PLAN B: RECONCILIATION OF CONTRIBUTIONS

Employer Normal Cost for Prior Year	\$4,419,292	
Interest on Normal Cost	331,447	
Administrative Expenses and Expense Fund Adjustment	128,315	
Interest on Expenses	4,725	
TOTAL Interest Adjusted Actuarially Required Contributions		\$ 4,883,779
Direct Employer Contributions	\$ 4,368,991	
Interest on Employer Contributions	160,875	
Ad Valorem Taxes and Revenue Sharing Funds	620,648	
Interest on Taxes and Revenue Sharing Funds	22,854	
TOTAL Interest Adjusted Employer Contributions		\$ 5,173,368
CREDIT TO FUNDING DEPOSIT ACCOUNT		\$ 289,589

-43-G. S. Curran & Company, Ltd.

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

Actuarial Value of Assets (December 31, 2007)	\$	141,756,387
INCOME:		
Employer Contributions\$ 4,368,991Member Contributions2,130,967Ad Valorem Taxes599,104Transfer From Plan A133,215		
Purchases and Transfers of Service Credit		
Revenue Sharing		
Other Income	•	
Total Contributions	\$	7,401,246
Net Appreciation in Fair Value of Investments\$(37,755,120)Interest & Dividends1,898,564Securities Lending (Net)26,573Investment Expense(371,721)	)	
Net Investment Income	\$	(36,201,704)
TOTAL Income	\$	(28,800,458)
EXPENSES:		
Retirement Benefits\$ 4,539,881Refunds of Contributions533,109DROP Disbursements302,624Transfer to Expense Fund201,648Funds Transferred to another System36,729	-	
TOTAL Expenses	\$	5,613,991
Net Market Value Income for Fiscal 2008 (Income - Expenses)	\$	(34,414,449)
Unadjusted Fund Balance as of December 31, 2008 (Fund Balance Previous Year + Net Income)	\$	107,341,938
Net Additional Credit (Charge) for Allocated Expenses	\$	22,897
Adjustments for Change in Allocated Share of Expense Fund	\$	9,869
Adjustment for Actuarial Smoothing	\$	28,764,398
Actuarial Value of Assets (December 31, 2008)	\$	136,139,102

-44-G. S. Curran & Company, Ltd.

# EXHIBIT XVIII PLAN B: FUND BALANCES

### PRESENT ASSETS OF THE SYSTEM CREDITABLE TO:

Annuity Savings Fund	\$ 13,564,227
Annuity Reserve Fund	42,924,834
Pension Accumulation Account	51,480,046
Deferred Retirement Option Plan Account	1,490,646
Funding Deposit Account	289,589
NET MARKET VALUE OF ASSETS	\$ 109,749,342
ALLOCATED SHARE OF THE EXPENSE FUND	117,139
ADJUSTMENT FOR ACTUARIAL SMOOTHING	26,272,621
ACTUARIAL VALUE OF ASSETS	\$ 136,139,102
EXHIBIT XIX – Schedule A Plan B: PENSION BENEFIT OBLIGATION	
Present Value of Credited Projected Benefits Payable to Current Employees	\$ 100,584,027
Present Value of Benefits Payable to Terminated Employees	4,564,924
Present Value of Benefits Payable to Current Retirees and Beneficiaries	42,942,706
TOTAL PENSION BENEFIT OBLIGATION	\$ 148,091,657
NET ACTUARIAL VALUE OF ASSETS	\$ 136,139,102
Ratio of Net Actuarial Value of Assets to Pension Benefit Obligation	91.93%

# EXHIBIT XIX – Schedule B ENTRY AGE NORMAL ACCRUED LIABILITIES

Accrued Liability for Active Employees	\$ 114,620,299
Accrued Liability for Terminated Employees	4,564,924
Accrued Liability for Current Retirees and Beneficiaries	42,942,706
TOTAL ENTRY AGE NORMAL ACCRUED LIABILITY	\$ 162,127,929
NET ACTUARIAL VALUE OF ASSETS	\$ 136,139,102
Ratio of Net Actuarial Value of Assets to Entry Age Normal Accrued Liability	83.97%
-45-	

G. S. Curran & Company, Ltd.

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

Actuarial Value of Assets Divided by PBO as of 1986:	100.23%
Amortization of Unfunded Balance over 30 years:	-0.17%

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

Changes for Fiscal 1987       13.61%         Changes for Fiscal 1988       -3.15%         Changes for Fiscal 1989       0.13%         Changes for Fiscal 1990       -3.81%         Changes for Fiscal 1995       -3.33%         Changes for Fiscal 1997       4.20%	
Changes for Fiscal 1997	
Changes for Fiscal 19993.95%	
Changes for Fiscal 2001	
Changes for Fiscal 2003	
Changes for Fiscal 20053.19%	
Changes for Fiscal 2006	
Changes for Fiscal 20070.58%	
Changes for Fiscal 2008 10.41%	
TOTAL Adjustments	5.92%
Amortization of Adjustments in Funded Ratio over 30 years:	
Changes for Fiscal 1987	
Changes for Fiscal 1988 2.10%	
Changes for Fiscal 19890.08%	
Changes for Fiscal 1990 2.29%	
Changes for Fiscal 1995 1.44%	
Changes for Fiscal 19971.54%	
Changes for Fiscal 1998 1.14%	
Changes for Fiscal 1999 1.19%	
Changes for Fiscal 2001	
Changes for Fiscal 2003	
Changes for Fiscal 2005	
Changes for Fiscal 2006	
Changes for Fiscal 2007	
Changes for Fiscal 2008	
TOTAL Amortization of Adjustments	-2.54%
Target Ratio for Current Fiscal Year (Not more than 100%)	100.00%
Actuarial Value of Assets Divided by PBO as of 2008	

-46-G. S. Curran & Company, Ltd.

# EXHIBIT XXI CENSUS DATA - PLAN B

		Terminated with Funds			
	Active	on Deposit	DROP	Retired	Total
Number of members as of					
December 31, 2007	1,993	1,450	37	530	4,010
Additions to Census					
Initial membership	400	16			416
Omitted in error last year				1	1
Change in Status during Year					
Actives terminating service	(88)	88			
Actives who retired	(24)			24	
Actives entering DROP	(12)		12		
Term. members rehired	7	(7)			
Term. members who retire		(4)		4	
Retirees who are rehired	1			(1)	
Refunded who are rehired	8	5			13
DROP participants retiring			(10)	10	
DROP returned to work	6		(6)		
Death of another member	(1)			1	
Omitted in error last year					
Eliminated from Census					
Refund of contributions	(127)	(28)			(155)
Deaths	(1)	(2)	(1)	(21)	(25)
Included in error last year					
Adjustment for multiple records					
Number of members as of					
December 31, 2008	2,162	1,518	32	548	4,260

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

	Number	Number	Total	Average	Total
Age	Male	Female	Number	Salary	Salary
16 - 20	11	5	16	19,445	311,121
21 - 25	54	46	100	25,219	2,521,874
26 - 30	88	120	208	27,593	5,739,340
31 - 35	77	99	176	34,102	6,001,932
36 - 40	100	144	244	33,259	8,115,315
41 - 45	122	154	276	36,921	10,190,244
46 - 50	165	143	308	35,502	10,934,619
51 - 55	169	168	337	35,950	12,115,185
56 - 60	167	126	293	36,567	10,714,263
61 - 65	92	60	152	36,439	5,538,664
66 - 70	38	22	60	34,580	2,074,824
71 - 75	14	5	19	27,915	530,385
76 - 80	1	1	2	19,468	38,935
81 - 85	1	1	2	26,485	52,970
86 - 90	1	0	1	12,000	12,000
TOTAL	1,100	1,094	2,194	34,135	74,891,671

THE ACTIVE CENSUS INCLUDES 969 ACTIVES WITH VESTED BENEFITS, INCLUDING 32 DROP PARTICIPANTS AND 19 ACTIVE FORMER DROP PARTICIPANTS.

	Number	Number	Total	Average	Total
Age	Male	Female	Number	Benefit	Benefit
31 - 35	1	0	1	5,186	5,186
36 - 40	6	б	12	6,937	83,246
41 - 45	6	13	19	8,678	164,879
46 - 50	15	11	26	9,028	234,733
51 - 55	6	14	20	9,478	189,567
56 - 60	6	12	18	7,617	137,104
61 - 65	7	1	8	5,452	43,615
66 - 70	0	1	1	499	499
71 - 75	2	0	2	2,957	5,914
81 - 85	1	0	1	42	42
TOTAL	50	58	108	8,007	864,785

PLAN B - TERMINATED MEMBERS DUE A DEFERRED RETIREMENT BENEFIT:

PLAN B - TERMINATED MEMBERS DUE A REFUND OF CONTRIBUTIONS:

.

Contributions		s Ranging	Ranging		
From		То	Number	Contributions	
0	-	<i>99</i>	1,026	24,434	
100	-	499	220	51,106	
500	-	999	61	45,030	
1000	-	1999	44	66,890	
2000	-	4999	38	118,994	
5000		9999	18	117,684	
10000	-	19999	3	43,799	
	Т	OTAL	1,410	467,937	

<sup>-48-</sup>

G. S. Curran & Company, Ltd.

#### PLAN B - REGULAR RETIREES:

,	lge	9		Number Male	Number Female	Total Number	Average Benefit	Total Benefit
56	-	60		10	4	14	25,480	356,719
61	-	65	÷.	30	29	5 <i>9</i>	10,919	644,227
66	-	70		74	42	116	9,253	1,073,403
71	-	75		62	42	104	8,430	876,730
76	-	80		31	28	5 <b>9</b>	7,056	416,315
81	-	85		12	32	44	7,817	343,951
86	-	90		8	22	30	7,235	217,058
91	-	99		0	7	7	3,930	27,511
2	<i>'0</i> :	TAL '		227	206	433	9,136	3,955,914

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#### PLAN B - DISABILITY RETIREES:

Age	Number Male	Number Female	Total Number	Average Benefit	Total Benefit
31 - 35	1	. 0	1	5,293	5,293
41 - 45	2	0	2	6,153	12,306
46 - 50	2	0	2	4,804	9,607
51 - 55	10	3	13	7,789	101,254
56 - 60	13	3	16	6,402	102,426
61 - 65	13	5	18	6,873	123,722
66 - 70	3	0	3	8,902	26,705
TOTAL	44	11	55	6,933	381,313

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### PLAN B - SURVIVORS:

Age	Number Male	Number Female	Total Number	Average Benefit	Total Benefit
0 - 25	0	1	1	5,808	5,808
26 - 30	0	1	1	3,490	3,490
31 - 35	0	1	1	12,078	12,078
46 - 50	2	0	2	4,478	8,956
<b>51 - 55</b>	1	· 9	10	9,212	92,119
56 - 60	1	3	4	8,725	34,900
61 - 65	0	8	8	10,132	81,054
66 - 70	0	9	9	6,554	58,985
71 - 75	I	8	9	4,964	44,674
76 - 80	0	6	6	4,210	25,260
81 - 85	1	4	5	6,001	30,006
86 - 90	0	2	2	3,435	6,869
91 - 99	0	2	2	1,619	3,238
TOTAL	6	54	60	6,791	407,437

-49-G. S. Curran & Company, Ltd.

PLAN B - AC	ACTIVE MEMBERS:	ERS:										
					Com	Completed Years of Service	rs of Sei	vice			ł	• )
Attained Àges	0	F	~	m	4	5-9	70-14	15-19	20-24	25-29	30£07er	Total
						ł						
0 - 20	13	ŝ			3				•			16
1	42	33	12	OT	н	7						001
I	19	49	30	. 16	~	41	4					208
31 - 35	47	32	24	Ø	4	48	12	÷				176
I	48	27	26	DI	12	. 63	37	18	ς. Γ			244
41 - 45	28	22	22	14	16	65	55	25	19	DI		276
ι	37	32	18	12	15	66	47	30	26	24	T	308
I	39	29	18	15	14	78	43	37	24	31	Ð	337
I	31	21	16	17	8	69	41	41	22	91	00	293
1	11	7	م	10	7	37	24	17	12	Q)	٥	152
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Totals	363	258	177	115	87	483	286	184	011	100	31	2194
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1 4	WW 20402				-							
					Com	Completed Years of Service	urs of Sei	rice	·			
Attained												Average
Ages	0	1	n	ŋ	4	5-9	10-14	15-19	20-24	25-29	30£0ver	Salary
					]							
0 - 20	18,336	24,250										19,445
21 - 25	25,170	24,878	25,567	25,023	30,100	28,321						25,219
26 - 30	26,986	26,852	26,092	28,380	33,845	28,227	36, 595					27,593
31 - 35	35,916	30,031	33,227	35, 792	32,216	34,529	37,256					34,102
36 - 40	29,570	30,028	38,030	28,670	32,596	32,670	34,936	41,042	42,995			33,259
41 - 45	31,328	35,566	37,283	41,340	35,495	33, 142	39,000	39,819	43,461	44,325		36,921
1	26,283	36,109	33,712	27,631	32,361	33, 649	35,448	39,773	45,429	45,140	38,303	35,502
I	33,506	29,803	32,184	32,664	39,173	32,551	35, 651	38,740	40,948	44,794	49,977	35,950
وب ۱	38,981	30,268	35,540	39,080	37,693	35,169	37,142	34,442	33, 898	40,098	58,302	36,567
I.	35,183	23, 626	28,417	39,114	38,137	32,374	36,479	37,543	37,446	49,382	51,898	36,439
1	39,538	27,401	15,813	20,949	45,367	36, 549	35, 196	38,071	28,749	28,946		34,580
71 & OVEL	32,967			24,930		16,367	23,660	24,548	22,309	43,988	27,507	26,429
Average	30,354	29,716	32,419	33,172	35,556	32,959	36,295	37,786	40,203	43,542	49,407	34,135

-50-G. S. Curran & Company, Ltd.

BENEFIT:
DEFERRED RETIREMENT
DEFERRED
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MEMBERS
TERMINATED
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	25-29	m,	μ	25-29 4, 868	4,868
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zligibi.	15-19	н Гн н	22 IREMENT BI C Eligibi	15-19 5,275	8,446
Years Until Retirement Eligibility	10-14	N A H	s 9 4 5 2 6 21 25 22 1 - AVERAGE ANNUAL BENEFITS OF TERMINATED MEMBERS DUE A DEFERRED RETIREMENT BENEFIT: Years Until Retirement Eligibility	10-14 9,711 6,361 20,407	9,871
rs Until.	ری ۲۵ ۲۵	φ m H	21 DUE A DEF rs Datil	10 10 10 10 10 10 10 10 10 10 10 10 10 1	9,055
Yea	7	, A ()	6 MEMBERS Yea	10,967	8,653
	<i>ω</i>	N	2 BRMINATED	ν	5,924
	9	. <b>भ</b> म	5 FITS OF T	3,673	5,336
	F	9.01	4 NUAL BENE	4,836	6,161
	0	<b>39113</b>	. 9 Verage an	x 15 17 2	4,264
	Attained Ages	0 - 30 31 - 30 36 - 40 41 - 45 41 - 45 51 - 55 51 - 55 56 - 50 56 - 50 51 - 75 71 - 75 81 - 85 81 - 85 85 86 - 70	Totals FLAN B - AV	Attained Ages Ages 31 - 30 41 - 45 51 - 45 51 - 45 51 - 55 51 - 55 51 - 55 51 - 70 81 - 85 81 - 85 81 - 85 81 - 85 81 - 85	Average

RETIRES:
SERVICE
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Completed Years Since Retirement	3 4 5-9 10-14 15-19 20-24 25-29 30&Over Total	2 6 6 6 16 11 11 12 12 12 12 13 11 14 16 12 14 16 14 16 14 16 14 16 14 16 16 14 10 10 16 16 16 16 16 10 10 10 10 10 10 10 10 10 10 10 10 10	30 27 48 97 61 52 40 13 3 433 PAYABLE TO SERVICE RETIRERS: Completed Years Since Retirement	3 4 5-9 10-14 15-19 20-24 25-29 30£0ver Benefit	13,290 16,690 11,804 14,227 7,741 11,541 7,150 5,765 9,416 7,634 9,220 6,108 7,000 5,799 6,108 8,110
Retirem	15-19	1 4 10 10 1 4 10 10	52 Retirem	15-19	882 9,162 8,7430 8,723
rs Since	10-14	С 9 17 ¥ H .	61 rs Since	70-14	7,150 7,634 8,110
leted Yea		う 60 万 44 ア ろ 7 44 ア	97 REES: leted Yea		16,690 14,227 11,541 9,416 6,108
Comp.	7	100 ¥ 11 11 10 11 10	48 /ICE RETI Comp	•	13,290 11,804 7,741 5,765 9,220 5,799
	m	и со со т н	27 27 27 27	m	23,082 6,197 7,522
	7	40141		~	36,085 12,083 9,349 7,988 11,522
	F .	H 49 01 02 H 4	26 Tal Benef	н	72,152 8,293 11,916 7,916
	0	ማ <sup>ነ</sup> ር ማ <sup>ነ</sup> ር ቫ ቫ ቫ . ·	s 36 26 - Average Annual Benefits	0	10,234 12,689 6,450 10,178
	Attained . Ages	0 - 55 56 - 60 61 - 65 66 - 70 71 - 75 76 - 80 81 - 85 81 - 85 91 & 90	Totals FLAN B - AVE	Attained Ages	651 651 716 716 716 716 716 716 716 716 716 71

9,136

3,309

8,093

7,808

7,422

10,510

7,990

8,737

13,716

11,976

9,882

Average

4,291 4,291

-52-G. S. Curran & Company, Ltd.

RETIRES:
DISABILITY
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Retirement
Since
Years
Completed

Attained Ages												
	0	н	n	m	*	5-9	71-0T	15-19	20-24	25-29	30£0ver	Total
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- 60		ß	m	2	m	m	~					16
- 65		1	m	e	ĥ	9	1	1				18
- 70						7	н					ŝ
E OVEL							4		•	•		0
Totals	0	80	OT	2	00	16	4	N	0	0	0	55
PLAN B - AVE	RAGE ANN	AVERAGE ANNUAL BENEFITS	ITS PAYAE	PAYABLE TO DISABILITY RETIREES:	I ABILITY	LETIRES:			(a)			
					Com	Completed Years Since Retirement	rs Since	Retiremen	LL LL			
Attained												Average
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- 30												0
- 35			9		5,293							5,293
- 40												0
	×		6,153									6,153
		101 01			6 603	4,004 10		046 3				# 00 #
202	17	4 568	5 775	A 215	CUE 0	3010 10	6.179	01710				6.402
		4.359	3.023	5.433	11.956	6.720	6.942	10.866				6,873
						10,862	4,980					8,902
								н				5

-53-G. S. Curran & Company, Ltd.

0         1         2         3         4         5-9         10-14         15-19         20-24         25-29         3020nm         1           1 <th>PLAN B - SUR</th> <th>SURVIVING BENE</th> <th>BNEFICIAL</th> <th>IES OF FC</th> <th>FICIARIES OF FORMER MEMBERS:</th> <th></th> <th>Completed Years Since Retirement</th> <th>rs Since .</th> <th>Retiremen</th> <th></th> <th></th> <th></th> <th></th>	PLAN B - SUR	SURVIVING BENE	BNEFICIAL	IES OF FC	FICIARIES OF FORMER MEMBERS:		Completed Years Since Retirement	rs Since .	Retiremen				
1     1     1       1     2     2     4     1       1     2     2     2     1       1     1     2     2     1     1       1     1     2     2     1     1       1     1     2     2     1     1       1     1     3     2     1     1       1     1     3     5     5     0       1     3     5     1     2     2       1     3     5     1     2     2       1     3     5     1     3     5     0       1     1     3     5     1     1       1     3     4     5-9     10-14     15-19       10,078     11,078     11,490     1,490     1       10,087     19,066     11,490     1,490     1       10,088     4,914     5,808     3,669     3,669       10,088     4,914     5,808     3,669     3,669       10,078     11,078     11,490     15-19     20-24       10,088     4,914     5,383     4,924     27-29       10,078     5,383     3,690	a sed	0	F	~		*	22	10-14	15-19	20-24	25-29	30£0ver	Total
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1     2     2     4     1       1     2     1     2     2     1       1     1     2     3     1     1     1       1     1     2     3     1     1     3     5     5       1     1     3     1     1     3     5     5     0       AVERAGE ANNUAL EXCERTIG FATALLE TO SURVIVORS OF FORMER REMERRENS     11     3     5     5     0       AVERAGE ANNUAL EXCERTIG FATALLE TO SURVIVORS OF FORMER REMERRENS     11     3     5     5     0       AVERAGE ANNUAL EXCERTIG FATALLE TO SURVIVORS OF FORMER REMERRENS     11     3     5     5     0       AVERAGE ANNUAL EXCERTIG FATALLE TO SURVIVORS OF FORMER REMERRENS     11     3     5     5     0       AVERAGE ANNUAL EXCERTIG FATALLE TO SURVIVORS OF FATAL SILICE RELIFEMENT     20-14     15-19     20-24     25-29     30600mer       0     1     2     3     4     5-9     10-14     15-19     20-24     25-29     30600mer       10, 867     13, 698     3, 490     15, 618     5, 628     3, 4500     13, 450     1       10, 867     13, 698     11, 653     3, 450     7, 738     1, 965     1, 751       10	40						1			K.			00
1     1     2     1     1       1     1     2     2     1     1       1     1     2     2     1     1       1     1     3     5     5     0       1     1     3     5     5     0       1     1     3     5     5     0       1     3     5     5     0       1     3     5     5     0       1     3     4     5     9       1     3     4     5     9       1     1     3     4     5     9       1     1     3     4     5     9       1     1     3     4     5     9       1     1     3     4     5     9       1     1     3     4     5     9       1     1     3     4     5     9       1     1     1     1     1     1       1     1     1     1     1     1       1     1     1     1     1     1       1     1     1     1     1       1     1 <td>50 55</td> <td>н</td> <td>~</td> <td>14</td> <td></td> <td></td> <td>(<b>4 1</b>)</td> <td>н</td> <td></td> <td></td> <td>я.</td> <td></td> <td>10</td>	50 55	н	~	14			( <b>4 1</b> )	н			я.		10
1     2     1     1     3     2     1     1       1     1     3     2     2     2     2     2       AVERACE ANNUAL BEARFITS PATABLE TO SUNTYVORS OF FORMER MEMBERS:     11     3     5     5     0       AVERACE ANNUAL BEARFITS PATABLE TO SUNTYVORS OF FORMER MEMBERS:     11     3     5     5     0       AVERACE ANNUAL BEARFITS PATABLE TO SUNTYVORS OF FORMER MEMBERS:     0     3     18     11     3     5     5     0       AVERACE ANNUAL BEARFITS PATABLE TO SUNTYVORS OF FORMER MEMBERS:     0     3     18     11     3     5     5     0       AVERACE ANNUAL BEARFITS PATABLE TO SUNTYVORS OF FORMER MEMBERS:     0     3     18     11     3     5     5     0       AVERACE AND	60	н <del>г</del>				,	(4 n	нŦ					40
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10,887       19,506       4,914       4,403       5,209       7,556       11,635       3,669       15,669       16,526       11,635       3,669       13,556       11,635       3,669       13,556       13,556       13,556       11,635       3,669       13,556       13,556       13,556       13,556       13,556       14,333       10,178       10,178       10,178       10,178       10,178       10,178       3,704       9,711       2,782       1,865       1,6555       1,655       1,655	45												
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# **EXHIBIT XXII** PLAN B: YEAR-TO-YEAR COMPARISON

	Fiscal 2008	Fiscal 2007	Fiscal 2006	Fiscal 2005
Number of Active Members	2,194	2,030	1,990	1,970
Number of Retirees & Survivors	548	530	508	486
Number of Terminated Due Deferred Benefits	108	97	98	91
Number Terminated Due Refunds	1,410	1,353	1,369	1,298
Active Lives Payroll	\$ 74,891,671	\$ 62,859,807	\$ 59,155,664	\$ 54,810,437
Retiree Benefits in Payment	\$ 4,744,664	\$ 4,400,123	\$ 4,029,570	\$ 3,588,698
Market Value of Assets	\$ 109,749,342	\$ 144,163,791	\$ 132,695,110	\$ 117,661,283
Actuarial Value of Assets	\$ 136,139,102	\$ 141,756,387	\$ 123,781,772	\$ 111,443,610
Present Value of Future Employer Normal Cost	\$ 63,985,978	\$ 36,302,827	\$ 30,194,074	\$ 30,452,448
Present Value of Future Employee Contrib.	\$ 15,422,566	\$ 13,275,174	\$ 12,440,078	\$ 11,815,922
Funding Deposit Account Credit Balance	\$ 289,589	\$ 0	\$ 0	\$ 0
Present Value of Future Benefits	\$ 215,258,057	\$ 191,334,388	\$ 166,415,924	\$ 153,711,980
*****	**********	*******	<*************************************	*****
	Fiscal 2009	Fiscal 2008	Fiscal 2007	Fiscal 2006
Employee Contribution Rate	3.00%	3.00%	3.00%	3.00%
Projected Tax Contribution as % of Payroll	1.13%	1.11%	1.05%	1.03%
Actuarially Required Net Direct Employer Contribution Rate	9.56%	6.13%	5.39%	5.90%
Actual Employer Contribution Rate	6.25%	6.00%	6.00%	5.75%

Fiscal 2004	Fi	iscal 2003		Fiscal 2002		Fiscal 2001	I	Fiscal 2000	I	Fiscal 1999
2,062 461 69 1,243		2,189 417 64 1,182		2,122 404 64 1,199		2,046 401 44 1,099		1,922 395 42 1,062		1,896 371 43 1,000
\$ 54,325,541	\$	54,823,785	\$	52,863,764	\$	48,507,063	\$	43,079,182	\$	41,609,920
\$ 3,313,829	\$	2,898,810	\$	2,704,346	\$	2,542,212	\$	2,373,678	\$	2,109,116
\$ 110,700,198	\$	99,612,361	\$	85,214,085	\$	84,474,861	\$	82,785,072	\$	79,220,309
\$ 99,526,756	\$	90,234,749	\$	84,572,863	\$	83,407,668	\$	79,249,113	\$	73,932,718
\$ 30,454,650	\$	31,528,445	\$	28,501,122	\$	19,615,292	\$	13,032,125	\$	13,815,875
\$ 12,600,693	\$	12,689,583	\$	12,282,205	\$	11,353,565	\$	6,859,540	\$	6,660,945
\$ 0	\$	0	\$	0	\$	0	\$	0	\$	0
\$ 142,582,099	\$ 1	34,452,777	\$	125,356,190	\$	114,376,525	\$	99,140,778	\$	94,409,538
***************************************								*****		
Fiscal 2005	Fi	iscal 2004		Fiscal 2003		Fiscal 2002	I	Fiscal 2001	I	Fiscal 2000
3.00%		3.00%		3.00%		3.00%	2%	6 over \$1200	2%	6 over \$1200
1.00%		0.95%		0.96%		0.96%		0.85%		0.89%
5.45%		5.61%		5.18%		3.62%		2.47%		2.73%
5.75%		5.25%		3.75%		2.75%		2.75%		2.50%

# SUMMARY OF PRINCIPAL PLAN PROVISIONS

-56-G. S. Curran & Company, Ltd. All members of the Parochial Employees' Retirement System are participants in either Plan A or Plan B according to the provisions of the agreement entered into by their employer. All employees of a participating employer must participate in the same plan. The principal provisions of each plan are given below. The following summary of plan provisions is for general informational purposes only and does not constitute a guarantee of benefits.

### PLAN A:

CONTRIBUTION RATES - The Plan A fund is financed by employee contributions of 9.50% of member's earnings and employer contributions as determined by the Public Retirement Systems' Actuarial Committee. 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 East Baton Rouge Parish, and remits the money to the system on an annual basis. The system also receives revenue sharing funds each year as appropriated by the legislature. In any fiscal year in which employer contribution rate as actuarially determined is scheduled to decrease, the Board of Trustees may elect to maintain the existing rate or any rate between the existing and minimum rates.

RETIREMENT BENEFITS – Members hired on or before December 31, 2007, with seven years of creditable service may retire at age sixty-five; ten years of creditable service may retire at age sixty; members with twenty-five years of service may retire at age fifty-five; members with thirty years of service may retire at age sixty-seven; ten years of creditable service may retire at age sixty-two; members with thirty years of service may retire at age fifty-five. The retirement allowance is equal to three percent of the member's final compensation multiplied by his years of creditable service; however, any employee who was a member of the supplemental plan only prior to the revision date has the benefit earned for service credited prior to the revision date on the basis of one percent of final compensation for each year of service credited after the revision date. All accumulated annual leave for which payment cannot be made in accordance with law and all unused sick leave accumulated at the time of retirement is included in the member's creditable service for retirement computation purposes. The retirement allowance may not exceed the greater of one hundred percent of member's final salary or final compensation.

DISABILITY BENEFITS - Five years of creditable service are required in order to be eligible for disability benefits for members hired on or before December 31, 2007. Seven years of creditable service are required in order to be eligible for disability benefits for members hired on or after January 1, 2007. Disabled members receive a normal retirement allowance if eligible. Otherwise, the member receives the lesser of three percent of compensation multiplied by his years of service, not to be less than fifteen years, or the accrual percentage as defined for retirement benefits multiplied by final compensation multiplied by years of service assuming continued service to age sixty for members hired on or after January 1, 2007.

SURVIVOR BENEFITS - Five years of creditable service is required in order to be eligible for survivor benefits. If a member is eligible for normal retirement at the time of death, the surviving spouse receives an automatic option 2 benefit. If the member was not eligible for a normal retirement, the surviving unmarried spouse with minor children receives sixty percent of final compensation. If

the member was not eligible for a normal retirement, the surviving unmarried spouse with no minor children receives forty percent of final compensation payable upon the attainment of age sixty by the spouse, or upon becoming disabled. Minor children with no unmarried spouse receive thirty percent of final compensation each, not to exceed a total of sixty percent of final compensation.

CONTRIBUTION REFUNDS - Upon withdrawal from service, members not entitled to a retirement allowance are paid a refund of accumulated contributions upon request. Receipt of such a refund cancels all accrued rights in the system. If a member receives a refund of contributions and is subsequently rehired on or after January 1, 2007, the provisions applicable to members initially hired on or after January 1, 2007 will apply.

### PLAN B:

CONTRIBUTION RATES - The Plan B fund is financed by employee contributions of 3% of member's annual earnings and employer contributions as determined by the Public Retirement Systems' Actuarial Committee. 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 East Baton Rouge Parish, and remits the money to the system on an annual basis. The system also receives revenue sharing funds each year as appropriated by the legislature. In any fiscal year in which the employer contribution rate as actuarially determined is scheduled to decrease, the Board of Trustees may elect to maintain the existing rate or any rate between the existing and minimum rates.

RETIREMENT BENEFITS: - Members hired on or before December 31, 2007, with seven years of creditable service my retire at age sixty-five; ten years of creditable service may retire at age sixty; members with thirty years of service may retire at age fifty-five. Members hired on or after January 1, 2007, with seven years of creditable service my retire at age sixty-seven; ten years of creditable service may retire at age sixty-seven; ten years of creditable service may retire at age fifty-five. The retirement allowance is equal to two percent of the member's final compensation multiplied by the years of creditable service. All accumulated annual leave for which payment cannot be made in accordance with law and all unused sick leave accumulated at the time of retirement is included in the member's creditable service for retirement computation purposes.

DISABILITY BENEFITS - Five years of creditable service is required in order to be eligible for disability benefits for members hired on or before December 31, 2007. Seven years of creditable service is required in order to be eligible for disability benefits for members hired on or after January 1, 2007. Disabled members receive a normal retirement allowance, if eligible. Otherwise, the member receives the lesser of two percent of compensation multiplied by the years of service assuming continued service to age sixty for members hired on or before December 31, 2007 or age sixty-two for members hired on or after January 1, 2007.

SURVIVOR BENEFITS - The surviving spouse of a member who was eligible for normal retirement at the time of death receives an automatic option 2 benefit. The surviving spouse of a member with ten or more years of creditable service and not eligible for normal retirement at the time of death receives an option 2 benefit payable at attainment of age fifty by the spouse.

### -58-G. S. Curran & Company, Ltd.

CONTRIBUTION REFUNDS - Upon withdrawal from service, members not entitled to a retirement allowance are paid a refund of accumulated contributions upon request. Receipt of such a refund cancels all accrued rights in the system. If a member receives a refund of contributions and is subsequently rehired on or after January 1, 2007, the provisions applicable to members initially hired on or after January 1, 2007 will apply.

### DEFERRED RETIREMENT OPTION PLAN:

In lieu of terminating employment and accepting a service retirement allowance, any member of Plan A or Plan 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. In terms of DROP eligibility, any member whose service, when combined with service in any other state or statewide public retirement system exceeds thirty years will be eligible to include reciprocally recognized service credit. Upon commencement of 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 fund. This fund does earn interest once the member terminates participation in DROP but continues their employment. The interest rate is based upon the rate of return of a short-term U.S. Treasury security, a group of short-term U.S. Treasury Securities, or an index of short-term U.S. Treasury securities to be selected by the board of trustees. This interest is to be credited to the individual's account balance on an annual basis. Additionally, no cost-of-living increases are payable to the 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 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 Deferred Retirement Option Plan fund 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. 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 those individuals hired on or before December 31, 2007; or at least sixty months for those individuals hired on or after January 1, 2007.

# **ACTUARIAL ASSUMPTIONS**

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

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

The following assumptions apply to both Plan A and Plan B unless stated otherwise.

ACTUARIAL COST METHOD: Plan A: Frozen Attained Age Normal Actuarial Method with allocation based on earnings. The normal cost is interest adjusted for midyear payment. The normal costs are calculated by aggregating present values of benefits and salaries for active members. The frozen actuarial accrued liability was calculated on the Projected Unit Credit Cost Method.

Plan B: The Aggregate Actuarial Cost Method with allocation based on earnings. The normal cost is interest adjusted for midyear payment.

**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 preliminary actuarial value is set equal to the average of the corridor limit and the smoothed value. The final value is determined by adding a pro-rata share of the expense fund assets to each plan in proportion to current salaries.

#### VALUATION INTEREST RATE: 7.50%

ANNUAL SALARY INCREASE RATE: 5.75% (2.50% Merit /3.25% Inflation)

ANNUITANT AND ACTIVE For males 1983 Group Annuity Male Mortality Table with no margins. Females are based on a six-year set back of the male table.

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

> RATES OF RETIREMENT: The table of these rates is included later in the report. All eligible persons age 80 and over in both plans are assumed to retire immediately. These rates apply only to those individuals eligible to retire. Rates are multiplied by a constant of 2 in the first year in which members become eligible for retirement.

# RATES OF WITHDRAWAL: The rates of withdrawal are applied based upon completed years of service:

PLAN A:	Service	Factor	Service	Factor
	<1	0.25	11	0.04
	1	0.21	12	0.03
	2	0.15	13	0.03
	3	0.12	14	0.02
	4	0.10	15	0.02
	5	0.09	16	0.02
	6	0.08	17	0.02
	7	0.07	18	0.02
	8	0.06	19	0.02
	9	0.05	>19	0.01
	10	0.04		
PLAN B:	Service	Factor	Service	Factor
	<1	0.23	10	0.06
	1	0.20	11	0.06
	2	0.16	12	0.06
	3	0.15	13	0.06
	4	0.11	14	0.06
	5	0.10	15	0.03
	6	0.08	16	0.03

-61-G. S. Curran & Company, Ltd.

7	0.08	17	0.03
8	0.08	>17	0.01
9	0.06		

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

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

FAMILY STATISTICS: Assumptions used in determining the cost of various survivor benefits are listed below:

Age at	% with	# of	Average
Death	Children	Children	Age
25	62%	1.7	6
35	82%	2.1	10
45	66%	1.8	13
55	19%	1.4	15
65	2%	1.4	15

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

VESTING ELECTING PERCENTAGE: The percent of those vested who elect deferred benefits in lieu of contribution refunds are as follows:

Plan A:	Under Age 30:	35%
	Age 30 – 39:	40%
	Age 40 – 49:	45%
	Above Age 49:	65%
Plan B:	Under Age 40:	55%
	Age 40 – 49:	60%
	Above Age 49:	75%

- SICK AND ANNUAL LEAVE: Retirees were assumed to convert one month of sick and annual leave to retirement credit for each ten years of service credit.
  - RATES OF DROP ENTRY: The table of these rates is included later in the report. These rates apply only to those individuals eligible to enter the DROP plan. Rates are multiplied by a constant in the first year in which a member becomes eligible to enter DROP. For members of Plan A who were first employed before January 1, 2007 and for members of Plan B this constant is 2. For members of

	Plan A who were first employed on or after January 1, 2007 the constant is 4.
DROP PARTICIPATION PERIOD:	All DROP participants are assumed to participate for 3 years and to retire at the end of their DROP participation period.
RETIREMENT RATES FOR ACTIVE FORMER DROP PARTICIPANTS:	Retirement rates for active former DROP participants are 25% for Plan A and 25% for Plan B provided the member is below age 80. For members age 80 or over, the retirement rate is set at 100%.

# ACTUARIAL TABLES AND RATES

(For Participants Who Were First Hired Before January 1, 2007)

	Male Mortality	Female Mortality	Disability	Plan A Retirement	Plan B Retirement	Plan A DROP Entry	Plan B DROP Entry	Remarriage
Age	Rates	Rates	Rates	Rates	Rates	Rates	Rates	Rates
18	0.00039	0.00034	0.00053	0.00000	0.00000	0.00000	0.00000	0.05665
19	0.00040	0.00034	0.00053	0.00000	0.00000	0.00000	0.00000	0.05665
20	0.00042	0.00035	0.00053	0.00000	0.00000	0.00000	0.00000	0.05665
21	0.00043	0.00036	0.00053	0.00000	0.00000	0.00000	0.00000	0.05213
22	0.00045	0.00037	0.00053	0.00000	0.00000	0.00000	0.00000	0.04834
23	0.00047	0.00038	0.00053	0.00000	0.00000	0.00000	0.00000	0.04522
24	0.00049	0.00039	0.00053	0.00000	0.00000	0.00000	0.00000	0.04270
25	0.00052	0.00040	0.00053	0.00000	0.00000	0.00000	0.00000	0.04070
26	0.00054	0.00042	0.00053	0.00000	0.00000	0.00000	0.00000	0.03915
27	0.00057	0.00043	0.00053	0.00000	0.00000	0.00000	0.00000	0.03799
28	0.00060	0.00045	0.00053	0.00000	0.00000	0.00000	0.00000	0.03714
29	0.00064	0.00047	0.00053	0.00000	0.00000	0.00000	0.00000	0.03654
30	0.00067	0.00049	0.00053	0.00000	0.00000	0.00000	0.00000	0.03611
31	0.00072	0.00052	0.00053	0.00000	0.00000	0.00000	0.00000	0.03578
32	0.00076	0.00054	0.00053	0.00000	0.00000	0.00000	0.00000	0.03549
33	0.00081	0.00057	0.00053	0.00000	0.00000	0.00000	0.00000	0.03515
34	0.00087	0.00060	0.00053	0.00000	0.00000	0.00000	0.00000	0.03471
35	0.00095	0.00064	0.00059	0.00000	0.00000	0.00000	0.00000	0.03409
36	0.00101	0.00067	0.00067	0.00000	0.00000	0.00000	0.00000	0.03286
37	0.00107	0.00072	0.00073	0.00000	0.00000	0.00000	0.00000	0.03139
38	0.00115	0.00076	0.00084	0.00000	0.00000	0.00000	0.00000	0.02973
39	0.00125	0.00081	0.00095	0.00000	0.00000	0.00000	0.00000	0.02787
40	0.00138	0.00087	0.00108	0.00000	0.00000	0.00000	0.00000	0.02585
41	0.00152	0.00095	0.00123	0.00000	0.00000	0.00000	0.00000	0.02352
42	0.00170	0.00101	0.00137	0.00000	0.00000	0.00000	0.00000	0.02111
43	0.00191	0.00107	0.00154	0.00000	0.00000	0.00000	0.00000	0.01868
44	0.00215	0.00115	0.00175	0.00000	0.00000	0.00000	0.00000	0.01629
45	0.00243	0.00125	0.00199	0.00000	0.00000	0.00000	0.00000	0.01400
46 47	0.00275 0.00310	0.00138 0.00152	0.00227 0.00256	$0.22000 \\ 0.22000$	0.00000 0.00000	$0.35000 \\ 0.35000$	0.00000 0.00000	0.01208 0.01034
47 48	0.00310	0.00132	0.00238	0.22000	0.00000	0.35000	0.00000	0.01034 0.00879
40 49	0.00349	0.00170	0.00291	0.22000	0.00000	0.35000	0.00000	0.00879
50	0.00330	0.00191	0.00329	0.22000	0.00000	0.35000	0.00000	0.00629
51	0.00434	0.00213	0.00374	0.22000	0.00000	0.35000	0.00000	0.00551
52	0.00528	0.00245	0.00427	0.22000	0.00000	0.35000	0.00000	0.00493
53	0.00528	0.00275	0.00409	0.13000	0.00000	0.35000	0.00000	0.00451
54	0.00629	0.00349	0.00623	0.13000	0.00000	0.35000	0.00000	0.00423
55	0.00681	0.00390	0.00707	0.13000	0.22000	0.35000	0.19000	0.00000
56	0.00735	0.00434	0.00805	0.13000	0.22000	0.22000	0.19000	0.00000
57	0.00793	0.00480	0.00914	0.13000	0.22000	0.22000	0.19000	0.00000
58	0.00858	0.00528	0.01036	0.13000	0.22000	0.22000	0.19000	0.00000
59	0.00932	0.00578	0.01180	0.13000	0.17000	0.22000	0.15000	0.00000
60	0.01018	0.00629	0.01708	0.13000	0.17000	0.22000	0.15000	0.00000
61	0.01118	0.00681	0.01708	0.13000	0.17000	0.10000	0.15000	0.00000
62	0.01237	0.00735	0.01708	0.13000	0.17000	0.10000	0.15000	0.00000
63	0.01377	0.00793	0.01708	0.13000	0.17000	0.10000	0.15000	0.00000
64	0.01541	0.00858	0.01708	0.13000	0.17000	0.10000	0.15000	0.00000
65	0.01732	0.00932	0.01708	0.13000	0.17000	0.10000	0.15000	0.00000

# **ACTUARIAL TABLES AND RATES**

(For Participants Who Were First Hired On or After January 1, 2007)

	Male Mortality	Female Mortality	Disability	Plan A Retirement	Plan B Retirement	Plan A DROP Entry	Plan B DROP Entry	Remarriage
Age	Rates	Rates	Rates	Rates	Rates	Rates	Rates	Rates
18	0.00039	0.00034	0.00038	0.00000	0.00000	0.00000	0.00000	0.05665
19	0.00040	0.00034	0.00038	0.00000	0.00000	0.00000	0.00000	0.05665
20	0.00042	0.00035	0.00038	0.00000	0.00000	0.00000	0.00000	0.05665
21	0.00043	0.00036	0.00038	0.00000	0.00000	0.00000	0.00000	0.05213
22	0.00045	0.00037	0.00038	0.00000	0.00000	0.00000	0.00000	0.04834
23	0.00047	0.00038	0.00038	0.00000	0.00000	0.00000	0.00000	0.04522
24	0.00049	0.00039	0.00038	0.00000	0.00000	0.00000	0.00000	0.04270
25	0.00052	0.00040	0.00038	0.00000	0.00000	0.00000	0.00000	0.04070
26	0.00054	0.00042	0.00038	0.00000	0.00000	0.00000	0.00000	0.03915
27	0.00057	0.00043	0.00038	0.00000	0.00000	0.00000	0.00000	0.03799
28	0.00060	0.00045	0.00038	0.00000	0.00000	0.00000	0.00000	0.03714
29	0.00064	0.00047	0.00038	0.00000	0.00000	0.00000	0.00000	0.03654
30	0.00067	0.00049	0.00038	0.00000	0.00000	0.00000	0.00000	0.03611
31	0.00072	0.00052	0.00038	0.00000	0.00000	0.00000	0.00000	0.03578
32	0.00076	0.00054	0.00038	0.00000	0.00000	0.00000	0.00000	0.03549
33	0.00081	0.00057	0.00038	0.00000	0.00000	0.00000	0.00000	0.03515
34	0.00087	0.00060	0.00038	0.00000	0.00000	0.00000	0.00000	0.03471
35	0.00095	0.00064	0.00043	0.00000	0.00000	0.00000	0.00000	0.03409
36	0.00101	0.00067	0.00048	0.00000	0.00000	0.00000	0.00000	0.03286
37	0.00107	0.00072	0.00053	0.00000	0.00000	0.00000	0.00000	0.03139
38	0.00115	0.00076	0.00060	0.00000	0.00000	0.00000	0.00000	0.02973
39	0.00125	0.00081	0.00068	0.00000	0.00000	0.00000	0.00000	0.02787
40	0.00138	0.00087	0.00078	0.00000	0.00000	0.00000	0.00000	0.02585
41	0.00152	0.00095	0.00088	0.00000	0.00000	0.00000	0.00000	0.02352
42	0.00170	0.00101	0.00098	0.00000	0.00000	0.00000	0.00000	0.02111
43	0.00191	0.00107	0.00110	0.00000	0.00000	0.00000	0.00000	0.01868
44	0.00215	0.00115	0.00125	0.00000	0.00000	0.00000	0.00000	0.01629
45 46	0.00243 0.00275	0.00125 0.00138	0.00143 0.00163	0.00000 0.00000	0.00000 0.00000	0.00000 0.00000	0.00000 0.00000	0.01400 0.01208
40 47	0.00273	0.00138	0.00183	0.00000	0.00000	0.00000	0.00000	0.01208
47 48	0.00310	0.00132	0.00183	0.00000	0.00000	0.00000	0.00000	0.01034 0.00879
40 49	0.00349	0.00170	0.00208	0.00000	0.00000	0.00000	0.00000	0.00879
50	0.00330	0.00191	0.00255	0.00000	0.00000	0.00000	0.00000	0.00629
51	0.00434	0.00213	0.00208	0.00000	0.00000	0.00000	0.00000	0.00551
52	0.00528	0.00243	0.00345	0.00000	0.00000	0.00000	0.00000	0.00493
53	0.00528	0.00275	0.00392	0.00000	0.00000	0.00000	0.00000	0.00455
54	0.00629	0.00349	0.00372	0.00000	0.00000	0.00000	0.00000	0.00423
55	0.00681	0.00390	0.00505	0.22800	0.22000	0.09600	0.19000	0.00000
56	0.00735	0.00434	0.00575	0.22800	0.22000	0.09600	0.19000	0.00000
57	0.00793	0.00480	0.00653	0.22800	0.22000	0.09600	0.19000	0.00000
58	0.00858	0.00528	0.00740	0.22800	0.22000	0.09600	0.19000	0.00000
59	0.00932	0.00578	0.00843	0.22800	0.22000	0.09600	0.19000	0.00000
60	0.01018	0.00629	0.01220	0.22800	0.22000	0.09600	0.19000	0.00000
61	0.01118	0.00681	0.01220	0.22800	0.22000	0.09600	0.19000	0.00000
62	0.01237	0.00735	0.01220	0.19000	0.17000	0.08000	0.15000	0.00000
63	0.01377	0.00793	0.01220	0.19000	0.17000	0.08000	0.15000	0.00000
64	0.01541	0.00858	0.01220	0.19000	0.17000	0.08000	0.15000	0.00000
65	0.01732	0.00932	0.01220	0.19000	0.17000	0.08000	0.15000	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.

NOTES