## PAROCHIAL EMPLOYEES'

 RETIREMENT SYSTEMACTUARIAL VALUATION AS OF DECEMBER 31, 2007

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

Actuarial Services

10555 N. Glenstone Place • Baton Rouge, Louisiana 70810 • (225)769-4825

Gary S. Curran, FCA, MAAA, ASA, EA
Consulting Actuary

July 10, 2008

Board of Trustees<br>Parochial Employees' Retirement System<br>P.O. Box 14619<br>Baton Rouge, LA. 70898-4619<br>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, 2007. 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, 2008. In addition, this report recommends minimum employer contribution rates for fiscal 2009, and provides information required for the system's financial statements.

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 actuary is a member of the American Academy of Actuaries, and meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion 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, LTD.



## TABLE OF CONTENTS

Subject Page
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 ..... 10
Graphs ..... 11
Exhibit I - Plan A: Analysis of Actuarially Required Contributions ..... 21
Exhibit II - Plan A: Present Value of Future Benefits ..... 22
Exhibit III - Plan A: Actuarial Value of Assets ..... 23
Exhibit IV - Plan A: Present Value of Future Contributions ..... 24
Exhibit V - Plan A: Change in Frozen Unfunded Actuarial Accrued Liability ..... 24
Exhibit VI - Plan A: Analysis of Increase in Assets ..... 25
Exhibit VII - Plan A: Fund Balances ..... 26
Exhibit VIII - Plan A: Pension Benefit Obligation ..... 26
Exhibit IX - Plan A: Cost Of Living Adjustments - Target Ratio ..... 27
Exhibit X - Plan A: Census Data ..... 28
Exhibit XI - Plan A: Year to Year Comparison ..... 36
Exhibit XII - Plan B: Analysis of Actuarially Required Contributions ..... 38
Exhibit XIII - Plan B: Present Value of Future Benefits. ..... 39
Exhibit XIV - Plan B: Actuarial Value of Assets ..... 40
Exhibit XV - Plan B: Present Value of Future Contributions ..... 41
Exhibit XVI - Plan B: Reconciliation of Contributions ..... 41
Exhibit XVII - Plan B: Analysis of Increase in Assets ..... 42
Exhibit XVIII - Plan B: Fund Balances ..... 43
Exhibit XIX - Plan B: Pension Benefit Obligation/Entry Age Normal Accrued Liabilities ..... 43
Exhibit XX - Plan B: Cost Of Living Adjustments - Target Ratio ..... 44
Exhibit XXI - Plan B: Census Data ..... 45
Exhibit XXII - Plan B: Year to Year Comparison ..... 53
Summary of Principal Plan Provisions ..... 55
Actuarial Assumptions ..... 58
Glossary ..... 62

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



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 minimum of $90 \%$ of the market value of assets and a maximum of $110 \%$ of the market value of assets. A pro-rata share of expense fund assets was allocated to each plan in proportion to current salaries.

Changes in Valuation Methods, Assumptions, and Amortization Periods: The valuation interest rate was changed from $8 \%$ to $7.50 \%$. The actuarial asset valuation method was changed from 3-year smoothing of realized and unrealized capital gains for equities and amortized cost value for debt securities to 5 -year smoothing of all earnings above or below the valuation interest rate subject to a minimum of $90 \%$ of the market value of assets and a maximum of $110 \%$ of the market value of assets. The annual salary increase rate was changed from $6 \%$ to $5.75 \%$.

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

## G. S. Curran \& Company, Ltd.

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

| Valuation Date: | December 31, 2007 | December 31, 2006 |
| :---: | :---: | :---: |
| Census Summary: Active Members | 2,030 | 1,990 |
| Retired Members | 530 | 508 |
| Terminated Due a Deferred Benefit | 97 | 98 |
| Terminated Due a Refund | 1,353 | 1,369 |
| Payroll: | \$ 62,859,807 | \$ 59,155,664 |
| Benefits In Payment: | \$ 4,400,123 | \$ 4,029,570 |
| Market Value of Assets (excluding the expense fund): | \$ 144,163,791 | \$ 132,695,110 |
| Unfunded Actuarial Accrued Liability: | NONE | NONE |
| Actuarial Asset Value: | \$ 141,756,387 | \$ 123,781,772 |
| Funded Ratio (GASB 50) | 97.82\% | N/A |
| *************************************************** | ***************** | **************** |
|  | 2008 | 2007 |
| Employers' Normal Cost (January 1): | \$ 4,419,292 | \$ 3,704,226 |
| Interest Adjusted Actuarially Required Contributions |  |  |
| Including Estimated Administrative Costs: | \$ 4,717,904 | \$ 3,978,962 |
| Actuarially Required Net Direct Employer |  |  |
| Contributions As A Percentage Of Projected Payroll: | $6.13 \%$ | $5.39 \%$ |

Minimum Net Direct Employer Contribution Rate: For Fiscal 2009: 6.25\% For Fiscal 2008: 5.25\%
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 minimum of $90 \%$ of the market value of assets and a maximum of $110 \%$ of the market value of assets. A pro-rata share of expense fund assets was allocated to each plan in proportion to current salaries.

Changes in Valuation Methods, Assumptions, and Amortization Periods: The valuation interest rate was changed from 8\% to $7.50 \%$. The actuarial asset valuation method was changed from 3-year smoothing of realized and unrealized capital gains for equities and amortized cost value for debt securities to 5 -year smoothing of all earnings above or below the valuation interest rate subject to a minimum of $90 \%$ of the market value of assets and a maximum of $110 \%$ of the market value of assets. The annual salary increase rate was changed from $6 \%$ to $5.75 \%$.

Method of Recognizing Gains and Losses: Under the Aggregate Actuarial Cost Method, actuarial gains and losses are spread over future normal costs.

## G. S. Curran \& Company, Ltd.

## 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 13,650 active members in Plan A, of whom, 7,126 members, including 405 participants in the Deferred Retirement Option Plan (DROP), have vested retirement benefits; 5,083 former members of Plan A or their beneficiaries are receiving retirement benefits. An additional 6,619 former members of Plan A have contributions remaining on deposit with the system. This includes 497 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 2,030 active members in Plan B, of whom, 930 members, including 37 DROP participants, have vested retirement benefits; 530 former members of Plan B or their beneficiaries are receiving retirement benefits. An additional, 1,450 former members of Plan B have contributions remaining on deposit with the system. Of this number, 97 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 $\$ 2,087,385,378$ as of December 31, 2007. For Plan A, the net investment income for fiscal 2007 measured on a market value basis amounted to $\$ 152,845,343$. Contributions to Plan A for the fiscal year totaled $\$ 108,151,331$; benefits and expenses amounted to $\$ 94,904,920$.

## G. S. Curran \& Company, Ltd.

The net market value of Plan B’s assets was $\$ 144,163,791$ as of December 31, 2007. For Plan B, the net investment income for fiscal 2007 measured on a market value basis amounted to $\$ 10,274,010$. Contributions to Plan B for the fiscal year totaled $\$ 6,451,965$; benefits and expenses amounted to $\$ 5,257,294$. In addition to the trust funds for Plan A and Plan B the system also maintains an expense fund which had a balance of $\$ 694,748$ 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 2007 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 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, 2014.

The actuarial assumptions utilized for the report are outlined on pages 58-61. 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 2007 valuation for both Plan A and Plan B, the valuation interest rate was changed from $8 \%$ to $7.50 \%$, the actuarial asset valuation method was changed from 3-year smoothing of realized and unrealized capital gains for equities and amortized cost value for debt securities to 5year smoothing of all earnings above or below the valuation interest rate (subject to a minimum value of $90 \%$ of the market value of assets and a maximum value of $110 \%$ of the market value of assets), and the annual assumed salary increase rate was changed from $6 \%$ to $5.75 \%$. The net effect of these changes in assumptions was to increase the normal cost rate by $0.1749 \%$ in Plan A and $0.8658 \%$ in Plan B.

## CHANGES IN PLAN PROVISIONS

The following changes in plan provisions were enacted during the 2007 Regular Session of the Louisiana Legislature:

## G. S. Curran \& Company, Ltd.

Act 330 provides that in addition to the regular retirement benefits provided by R.S. 11:1942 upon regular retirement, any member who worked as a court reporter, who was employed by Caddo Parish on June 30, 2007, and who received per-page transcription payments will be paid an additional monthly regular retirement benefit provided that they made contributions to the system based upon these payments. The method of computation of this additional benefit can be found in R.S. 11:1942.1(B). The act requires that all employee and employer contributions be deducted from the transcription payments and remitted to the fund on a monthly basis. The remittance reports for these contributions are to be distinct and separate from the reports of regular salary. "Per-page transcription payments" are defined to mean the amount a court reporter earns for each page of court proceeding that is transcribed, at the rate per page established by the district court.

Act 352 states that notwithstanding the prudent-man rule, the system may but is not required to divest itself of any holding in a company having facilities or employees located in a prohibited nation as that term is defined in R.S. 11:312(B)(2). The provisions of this act apply to both direct ownership of securities and securities held in a collective fund. The system is required to adopt and implement a corporate governance strategy of constructive engagement with each company. The corporate governance strategy of constructive engagement will contain a plan of system action to cause the company to remove its facilities and/or employees from the prohibited nation. As part of the plan of system action, the system should make its best efforts to identify all such companies. The plan of system action is required to be implemented not later than one hundred twenty days after the effective date of this act.

## 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.

| $\frac{\text { Plan A }}{}$ | Actuarial Value | Market Value |
| :---: | :---: | :---: |
| 1998 | $9.4 \%{ }^{*}$ | $13.7 \%$ |
| 1999 | $11.6 \%$ | $3.8 \%$ |
| 2000 | $8.5 \%$ | $7.2 \%$ |
| 2001 | $4.5 \%$ | $-0.8 \%$ |
| 2002 | $-1.2 \%$ | $-2.7 \%$ |
| 2003 | $3.4 \%$ | $15.6 \%$ |
| 2004 | $6.9 \%$ | $10.2 \%$ |
| 2005 | $11.1 \%$ | $6.3 \%$ |
| 2006 | $11.3 \%$ | $12.8 \%$ |
| 2007 | $17.1 \%{ }^{* *}$ | $7.9 \%$ |
|  |  |  |
| Plan B | Actuarial Value | Market Value |
| 1998 | $9.7 \% \quad *$ | $12.9 \%$ |
| 1999 | $11.9 \%$ | $4.0 \%$ |
| 2000 | $8.2 \%$ | $5.4 \%$ |
| 2001 | $5.9 \%$ | $2.7 \%$ |
|  |  |  |
|  | -5- |  |


| 2002 | $0.5 \%$ | $0.0 \%$ |
| :--- | ---: | ---: |
| 2003 | $5.9 \%$ | $15.9 \%$ |
| 2004 | $8.5 \%$ | $9.6 \%$ |
| 2005 | $10.6 \%$ | $5.1 \%$ |
| 2006 | $9.8 \%$ | $11.6 \%$ |
| 2007 | $13.4 \% \quad * *$ | $7.7 \%$ |

* Includes effect of change in asset valuation method. Effective with the 1998 valuation the smoothing period for capital gains on common stock was increased to three years.
** 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.

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 2007, Plan A earned \$54,615,163 and Plan B earned $\$ 3,227,318$ of dividends, interest and other recurring income. In addition, Plan A had net realized and unrealized capital gains on investments of $\$ 104,623,447$ while Plan B had $\$ 7,464,697$. This was partially offset by $\$ 6,393,267$ of investment expense for Plan A and $\$ 418,005$ for Plan B. The geometric mean of the market value rates of return measured over the last ten years was $7.3 \%$ for Plan A and $7.4 \%$ 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 actuarial value of assets and all interest, dividends, and recognized capital gains 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. The geometric mean of this rate over the last ten years has been $8.2 \%$ for Plan A and $8.4 \%$ for Plan B. Net actuarial investment earnings exceeded the actuarial assumed earnings rate of $8.0 \%$, used for fiscal 2007, by $\$ 24,198,249$ for Plan A and $\$ 258,930$ for Plan B. This excess in earnings produced an actuarial gain, which decreased the normal cost accrual rate by $0.6821 \%$ for Plan A and $0.0550 \%$ for Plan B. Neither of these values include the effect of the change in asset valuation method or the change is actuarial valuation interest rate.

## 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 406 members during the fiscal year. The plan has experienced an increase in the active plan population of 80 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 under-thirty age group has decreased while the proportion of active members over-fifty increased. Over the same tenyear period the plan showed a significant decrease in the percentage of members with service less than

## G. S. Curran \& Company, Ltd.

five years with an increase in the percentage of members with service over twenty years. These trends are indicative of an aging population. The number of retirees and beneficiaries receiving benefits from the system increased by 105 during the fiscal year; over the last five years the number of retirees has increased by 576 .

Plan liability experience for fiscal 2007 was slightly favorable. Retirements, disabilities, and DROP entries below projected levels, as well as, retiree deaths above projected levels reduced costs. However, these were offset in part by withdrawals below projected levels and salary increases above projected levels. Plan liability gains decreased the normal cost accrual rate by $0.0064 \%$.

## 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 40 members during the fiscal year. The plan has experienced a decrease in the active plan population of 92 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 under-thirty age group has decreased while the proportion of active members over-fifty increased. Over the same tenyear period the plan showed a decrease in the percentage of members with service less than five years; the percentage of members with service over fifteen years has increased. These trends are indicative of an aging population. The number of retirees and beneficiaries receiving benefits from the system increased by 22 during the fiscal year; over the last five years the number of retirees has increased by 126.

Plan liability experience for fiscal 2007 was unfavorable. Salary increases above projected levels and withdrawals below projected levels increased costs. These were offset in part by retirements and DROP entries below projected levels, and actual retiree deaths over projected levels. Disabilities were near expected levels. Overall, plan liability losses increased the normal cost accrual rate by $0.1161 \%$.

## 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.

## G. S. Curran \& Company, Ltd.

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.

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 freeze the contribution rate and use the excess funds collected, if any, to reduce the UAL.

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

| Employer's Normal Cost Accrual Rate - Fiscal 2007 | $8.4843 \%$ |
| :--- | :--- |
| Factors Increasing the Normal Cost Accrual Rate: |  |
| Changes in Assumptions | $0.1749 \%$ |
| Cost of Living Increase | $0.2976 \%$ |
| Factors Decreasing the Normal Cost Accrual Rate: |  |
| Plan Liability Experience | $0.0064 \%$ |
| Asset Experience | $0.6821 \%$ |
| New Members | $0.2284 \%$ |
| Employer's Normal Cost Accrual Rate - Fiscal 2008 | $8.0399 \%$ |

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 2007, the net effect of the change in payroll on amortization costs was to decrease such costs by $0.12 \%$ 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 2008 will increase by $0.06 \%$ 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 2008 as of January 1, 2008 is $\$ 34,231,900$. The amortization payment on the plan's frozen unfunded actuarial accrued liability is $\$ 10,457,506$ as of January 1, 2008. 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.

## G. S. Curran \& Company, Ltd.

As given on line 14 of Exhibit I the total actuarially required contribution for fiscal 2008 is $\$ 47,317,981$. When this amount is reduced by projected tax contributions and revenue sharing funds, the resulting employers' net direct actuarially required contribution for fiscal 2008 is $\$ 42,094,094$. This is $8.98 \%$ of the projected Plan A payroll for fiscal 2008. The actual contribution rate for fiscal 2008 is $12.75 \%$. We recommend a minimum net direct employer contribution rate of $9.00 \%$ of payroll for fiscal 2009 for Plan A. Under the provisions of R.S. 11:107 the board of trustees may set the rate at any level between $9.00 \%$ and $12.75 \%$.

Under the provisions of R. S. 11:105, in any fiscal year in which the net direct employer contribution rate would otherwise decrease, the Board of Trustees may maintain the net direct employer contribution rate for the preceding year and utilize any excess funds generated to reduce the system's Unfunded Accrued Liability. We estimate that should the Board of Trustees elect to maintain the current contribution rate of $12.75 \%$ for fiscal 2009 the additional funds collected will total approximately $\$ 17.7$ million which would reduce the system's frozen unfunded accrued liability by a like amount. The result of the reduction in the Unfunded Accrued Liability would be to eliminate one year from the existing amortization period. Hence the Unfunded Accrued Liability would be fully amortized by fiscal 2013. This estimate does not include the effect of any additional contributions collected in fiscal 2008 which could further accelerate the amortization of the Unfunded Accrued Liability.

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

| Employer’s Normal Cost Accrual Rate - Fiscal 2007 | $6.7691 \%$ |
| :--- | :--- |
| Factors Increasing the Normal Cost Accrual Rate: |  |
| Changes in Assumptions | $0.8658 \%$ |
| Cost of Living Adjustment | $0.1366 \%$ |
| Liability Experience |  |
|  |  |
| Factors Decreasing the Normal Cost Accrual Rate: | $0.1161 \%$ |
| Asset Experience | $0.1188 \%$ |
| New Members | $0.1070 \%$ |
| Contribution Gain | $7.6068 \%$ |

In Plan B we estimate that the projected tax contribution as a percentage of payroll will increase by $0.06 \%$. 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 2008 is given on line 11 of Exhibit XII as $\$ 4,717,904$. When this amount is reduced by projected tax contributions and revenue sharing funds, the resulting employers' minimum net direct actuarially required contribution is $\$ 3,995,797$. This is $6.13 \%$ of projected payroll for fiscal 2008. The actual employer contribution rate for fiscal 2008 is $6.00 \%$ of payroll. After giving consideration to the expected contribution shortfall in fiscal 2008, 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 $6.25 \%$ of payroll for fiscal 2009 for Plan B.

## G. S. Curran \& Company, Ltd.

## COST OF LIVING INCREASES

During calendar 2007 the actual cost of living (as measured by the US Department of Labor CPI-U) increased by $4.08 \%$. 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 $\$ \mathrm{X} \times(\mathrm{A}+\mathrm{B})$ 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 $31^{\text {st }}$ 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 2007 both Plan A and Plan B have met the necessary target ratio and both Plan A and Plan B have an actuarial rate of return in excess of the $8 \%$ assumed rate of return. Investment earnings exceeded assumed earnings by $\$ 156,311,130$ in Plan A and $\$ 6,708,773$ in Plan B. This represents sufficient earnings for both Plan A and Plan B to grant the full COLAs detailed in R.S. 11:246 and R. S. 11:1937.

Below is a summary of the cost of living increases and their respective costs for granting at the full level described in the statutes:

| COLA Description | Plan |  | Annual ase in Benefits | Present Value of Increase |  | Contribution Cost as a \% of Payroll |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $21 / 2 \%$ to pensioners over age 62 | A | \$ | 1,391,023 | \$ | 11,446,740 | 0.32\% |
| $2 \%$ to pensioners over age 65 | A | \$ | 867,033 | \$ | 6,937,973 | 0.19\% |
| $21 / 2 \%$ to pensioners over age 62 | B | \$ | 83,934 | \$ | 714,198 | 0.15\% |
| $2 \%$ to pensioners over age 65 | B | \$ | 53,966 | \$ | 455,040 | 0.10\% |

In lieu of awarding the cost of living increases described above, R.S. 11:241(B) allows the board to grant a cost of living increase in an amount not to exceed $\$ 1$ for every year of service plus the number of years since retirement. There is insufficient information available on the system's database to provide meaningful estimates of the costs associated with awarding this type of cost of living increase.

## G. S. Curran \& Company, Ltd.

## Plan A - Components of Present Value of Future Benefits December 31, 2007


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

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




Projected Tax Contributions consist of Projected Ad Valorem and Revenue Sharing Funds as a percent of payroll
Plan A - Frozen Unfunded Accrued Liability

G. S. Curran \& Company, Ltd.

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



Plan A - Historical Asset Yield


## Plan A - Net Non-Investment Income



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

G. S. Curran \& Company, Ltd.


# Plan B - Components of Present Value of Future Benefits December 31, 2007 


$\square$ Present Value of Future Employer Normal Cost
$\square$ Present Value of Future Employee Contributions
$\square$ Actuarial Value of Assets

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




Projected Tax Contributions consist of Projected Ad Valorem and Revenue Sharing Funds as a percent of payroll
Plan B-Actuarial Value of Assets vs. Pension Benefit Obligation


## Plan B - Net Non-Investment Income



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


|  |  | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total Income (\$Mil) |  | 8.0 | 10.1 | 8.3 | 7.5 | 4.2 | 9.1 | 13.1 | 16.2 | 17.0 | 23.1 |
| Benefits and Expenses (\$Mil) | $\square$ | 2.5 | 2.4 | 2.9 | 3.3 | 3.1 | 3.5 | 3.8 | 4.3 | 4.8 | 5.1 |
| Net Change in AVA (\$Mil) | $\square$ | 5.5 | 7.7 | 5.4 | 4.2 | 1.1 | 5.6 | 9.3 | 11.9 | 12.2 | 18.0 |



Plan B - Historical Asset Yield


## Plan A Exhibits

## EXHIBIT I <br> PLAN A: ANALYSIS OF ACTUARIALLY REQUIRED CONTRIBUTIONS

1. Present Value of Future Benefits ..... \$ 2,685,159,246
2. Unfunded Actuarial Accrued Liability ..... \$ 66,328,358
3. Actuarial Value of Assets ..... \$ 2,027,214,660
4. Present Value of Future Employee Contributions ..... \$ 302,732,846
5. Present Value of Future Employer Normal Costs (1-2-3-4) ..... \$ 288,883,382
6. Present Value of Future Salaries ..... \$ 3,593,118,027
7. Employer Normal Cost Accrual Rate (5 $\div 6$ ) ..... 8.039908\%
8. Projected Fiscal 2008 Salary for Current Membership ..... \$ 425,774,774
9. Employer Normal Cost as of January 1, 2008 (7x 8) ..... \$ ..... 34,231,900
10. Amortization Payment on remaining frozen Unfunded Accrued Liability of \$66,328,358 with Payments increasing at $4 \%$ per year ..... \$ ..... 10,457,506
11. TOTAL Employer Normal Cost and Amortization Payment (9+10) ..... \$ ..... 44,689,406
12. Employer Normal Cost and Amortization Payment Interest Adjusted for Midyear Payment ..... \$ ..... 46,334,962
13. Estimated Administrative Cost for Fiscal 2008 ..... \$ ..... 983,019
14. TOTAL Administrative and Interest Adjusted Actuarial Costs $(12+13)$ ..... \$ ..... 47,317,981
15. Projected Ad Valorem Tax Contributions for Fiscal 2008 ..... \$ ..... 5,079,858
16. Projected Revenue Sharing Funds for Fiscal 2008 ..... \$ ..... 144,029
17. Employers' Minimum Net Direct Actuarially Required Contribution for Fiscal 2008 (14-15-16) ..... \$ ..... 42,094,094
18. Projected Payroll for Fiscal 2008 ..... \$ 468,970,094
19. Employers’ Minimum Net Direct Actuarially Required Contribution as a \% of Projected Payroll for Fiscal $2008(17 \div 18)$ ..... 8.98\%
20. Minimum Recommended Net Direct Employer Contribution Rate for Fiscal 2009 (19 + 22 Rounded to nearest . $25 \%$ ) ..... 9.00\%

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

## PRESENT VALUE OF FUTURE BENEFITS FOR ACTIVE MEMBERS:



TOTAL Present Value of Future Benefits for Active Members $\qquad$

## PRESENT VALUE OF FUTURE BENEFITS FOR TERMINATED MEMBERS:

Terminated Vested Members Due Benefits at Retirement..... \$ 42,432,309
Terminated Members with Reciprocals
Due Benefits at Retirement
332,297
Terminated Members Due a Refund ...................................... 5,125,264
TOTAL Present Value of Future Benefits for Terminated Members ...................... \$ 47,889,870

PRESENT VALUE OF FUTURE BENEFITS FOR RETIREES:

Regular Retirees
Maximum. \$ 329,628,798
Option 1................................................... 2,427,128
Option 2
147,132,121
Option 3
$\qquad$ 74,881,398
Option 4 34,498,650
TOTAL Regular Retirees ..... \$ 588,568,095
Disability Retirees ..... 56,125,533
Survivors \& Widows ..... 49,023,196
Reserve for Accrued Retiree DROP Account Balances. ..... 760,740
TOTAL Present Value of Future Benefits for Retirees \& Survivors ..... 694,477,564
TOTAL Present Value of Future Benefits ..... \$ 2,685,159,246

## EXHIBIT III <br> PLAN A: ACTUARIAL VALUE OF ASSETS

## CURRENT ASSETS:

Cash in Banks ..... \$ ..... 671,695
Contributions Receivable ..... 18,011,408
Ad Valorem Taxes Receivable ..... 4,808,522
Accrued Interest on Investments ..... 3,317,587
Investments Receivable ..... 3,449,723
TOTAL CURRENT ASSETS. ..... \$
30,258,935
NET ALLOCATED SHARE OF EXPENSE FUND ..... \$
610,375
INVESTMENTS:
Common Stock ..... \$ 467,550,399
Mutual Funds (Equities) ..... 862,167,261
Mutual Funds (Fixed Income) ..... 187,608,502
Mutual Funds (Alternative Investments) ..... 87,986,289
U.S. Agency Bonds ..... 359,513,196
U.S. Treasury Zeros ..... 31,406,133
Cash Equivalents. ..... 19,645,725
Government National Mortgage Association Bonds ..... 26,101,675
Corporate Bonds ..... 16,243,345
U.S. Treasury Notes ..... 8,264,520
U.S. Government Guaranteed Bonds ..... 2,414,119
Adjustment for Actuarial Smoothing. ..... $(60,781,093)$
TOTAL INVESTMENTS ..... \$ ..... 2,008,120,071
TOTAL ASSETS ..... \$ ..... 2,038,989,381
CURRENT LIABILITIES:
Accrued Pension \& Death Benefits ..... \$
6,418,811
Purchased Investments Payable ..... 3,998,842
Refunds Payable ..... 512,425
Due to Other Funds ..... 164,328
Accounts Payable ..... 680,315
TOTAL CURRENT LIABILITIES ..... \$
11,774,721ACTUARIAL VALUE OF ASSETS\$

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

Employee Contributions to the Annuity Savings Fund ..... \$ ..... 302,732,846
Employer Normal Contributions to the Pension Accumulation Fund. ..... 288,883,382
Employer Amortization Payments to the Pension Accumulation Fund ..... 66,328,358
TOTAL PRESENT VALUE OF FUTURE CONTRIBUTIONS ..... \$ ..... 657,944,586
EXHIBIT V
PLAN A: CHANGE IN FROZEN UNFUNDED ACTUARIAL ACCRUED LIABILITIES
Prior Year Frozen Unfunded Accrued Liability ..... \$ ..... 89,762,521
Interest on Frozen Unfunded Accrued Liability ..... \$ 7,181,002
Employer Normal Cost for Prior Year. ..... 33,529,040
Interest on the Normal Cost. ..... 2,682,323
Administrative Expenses and Expense Fund Adjustment ..... 850,748
Interest on Expenses ..... 33,375
TOTAL Increases to Frozen Unfunded Accrued Liability ..... \$
Interest on Employer Contributions. ..... 2,366,207
Ad Valorem Taxes and Revenue Sharing ..... 4,839,093
Interest on Ad Valorem Taxes and Revenue Sharing Funds ..... 189,840
TOTAL Decreases to Frozen Unfunded Accrued Liability ..... \$67,710,651

## G. S. Curran \& Company, Ltd.

# EXHIBIT VI <br> PLAN A: ANALYSIS OF INCREASE IN ASSETS 

Actuarial Value of Assets (December 31, 2006) ..... \$ 1,718,754,962
INCOME:
Member Contributions ..... \$ 41,065,373
Employer Contributions ..... 60,315,511
Ad Valorem Taxes ..... 4,698,757
Revenue Sharing. ..... 140,336
Purchases and Transfers of Service Credit ..... 1,748,231
Other Income ..... 183,123
Total Contributions\$ 108,151,331
Net Appreciation in Fair Value of Investments ..... \$ 104,623,447
Interest on Investments ..... 43,583,531
Dividends ..... 10,791,919
Investment Income Allocated from Expense Fund ..... 2,273
Securities Lending (Net) ..... 239,713
Allocated Share of Investment Expense ..... $(6,687,717)$
Adjustment for Actuarial Smoothing. ..... 141,811,515
Net Investment Income ..... \$ 294,364,681
TOTAL Income ..... \$ 402,516,012
EXPENSES:
Retirement Benefits ..... \$ 74,476,404
Refunds of Contributions ..... 9,047,402
DROP Disbursements ..... 7,313,651
Funds Transferred to Another System ..... 2,368,109
Allocated Share of Administrative Expense ..... 856,217
TOTAL Expenses ..... \$ 94,061,783
Net Income for Fiscal 2007 (Income - Expenses) ..... \$ 308,454,229
Unadjusted Fund Balance as of December 31, 2007
(Fund Balance Previous Year + Net Income) ..... \$ 2,027,209,191
Adjustments for Change in Allocated Share of Expense Fund ..... \$ ..... 5,469Actuarial Value of Assets: (December 31, 2007)\$ 2,027,214,660

## EXHIBIT VII <br> PLAN A: FUND BALANCES

PRESENT ASSETS OF THE SYSTEM CREDITABLE TO:
Annuity Savings Fund ..... \$ ..... 319,239,028
Annuity Reserve Fund ..... 693,716,824
Pension Accumulation Fund ..... 1,047,205,304
Deferred Retirement Option Plan Account ..... 27,224,222
NET MARKET VALUE OF ASSETS ..... \$ ..... 2,087,385,378
ALLOCATED SHARE OF THE EXPENSE FUND ..... 610,375
ADJUSTMENT FOR ACTUARIAL SMOOTHING ..... \$ ..... (60,781,093)
ACTUARIAL VALUE OF ASSETS. ..... \$
EXHIBIT VIII
PLAN A: PENSION BENEFIT OBLIGATION
Present Value of Credited Projected Benefits Payable to Current Employees. ..... \$ ..... 1,253,622,536
Present Value of Benefits Payable to Terminated Employees ..... 47,889,870
Present Value of Benefits Payable to Current Retirees and Beneficiaries ..... 694,477,564
TOTAL PENSION BENEFIT OBLIGATION ..... \$

## 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: ..... 28.18\%
Adjustments in Funded Ratio Due to Mergers or Changes in Assumption(s):
Changes for Fiscal 1987 ..... 8.18\%
Changes for Fiscal 1988 ..... -0.75\%
Changes for Fiscal 1989 ..... 0.06\%
Changes for Fiscal 1990 ..... -1.91\%
Mergers in Fiscal 1994 ..... 0.82\%
Changes for Fiscal 1995 ..... -5.88\%
Changes for Fiscal 1997. ..... -2.43\%
Changes for Fiscal 1998 ..... -3.78\%
Changes for Fiscal 1999 ..... -3.73\%
Changes for Fiscal 2001 ..... -0.03\%
Changes for Fiscal 2003 ..... 0.43\%
Changes for Fiscal 2005. ..... -2.29\%
Changes for Fiscal 2006 ..... 0.07\%
Changes for Fiscal 2007 ..... 1.89\%
TOTAL Adjustments ..... -9.35\%
Amortization of Adjustments in Funded Ratio over 30 years:
Changes for Fiscal 1987 ..... -5.45\%
Changes for Fiscal 1988 ..... 0.48\%
Changes for Fiscal 1989 ..... -0.04\%
Changes for Fiscal 1990 ..... 1.08\%
Mergers in Fiscal 1994 ..... -0.36\%
Changes for Fiscal 1995 ..... 2.35\%
Changes for Fiscal 1997 ..... 0.81\%
Changes for Fiscal 1998 ..... 1.13\%
Changes for Fiscal 1999 ..... 0.99\%
Changes for Fiscal 2001 ..... 0.01\%
Changes for Fiscal 2003 ..... -0.06\%
Changes for Fiscal 2005 ..... 0.15\%
Changes for Fiscal 2006 ..... -0.00\%
Changes for Fiscal 2007 ..... -0.00\%
TOTAL Amortization of Adjustments ..... 1.09\%
Target Ratio for Current Fiscal Year ..... 79.67\%
Actuarial Value of Assets Divided by PBO as of Fiscal 2007 ..... 101.56\%

EXHIBIT X
CENSUS DATA - PLAN A

|  | Active | Terminated with Funds on Deposit | DROP | Retired | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number of members as of December 31, 2006 | 12,836 | 6,662 | 408 | 4,978 | 24,884 |
| Additions to Census Initial membership Omitted in error last year | 1,735 | 48 |  |  | 1,783 |
| Change in Status during Year <br> Actives terminating service <br> Actives who retired <br> Actives entering DROP <br> Term. members rehired <br> Term. members who retire <br> Retirees who are rehired <br> Refunded who are rehired DROP participants retiring DROP returned to work Death of another member Omitted in error last year | (307) <br> (160) <br> (142) <br> 87 <br> 60 <br> 57 <br> (10) | 307 <br> (87) <br> (32) <br> 104 <br> (2) | 142 <br> (87) <br> (57) <br> (1) | 160 <br> 32 <br> 87 <br> 13 | 164 |
| Eliminated from Census <br> Refund of contributions <br> Deaths <br> Included in error last year Adjustment for multiple records | (901) <br> (10) | (376) <br> (5) |  | (187) | $\begin{array}{r} (1,277) \\ (202) \end{array}$ |
| Number of members as of December 31, 2007 | 13,245 | 6,619 | 405 | 5,083 | 25,352 |

-28-

## G. S. Curran \& Company, Ltd.

plan a - actives census by age:

| Age | Number | Number | Total | Average | Total <br> Sale |
| :---: | :---: | :---: | :---: | :---: | ---: |
| $16-20$ | 75 | Female | Number | Salary | Salary |
| $21-25$ | 325 | 354 | 109 | 19,814 | $2,159,673$ |
| $26-30$ | 496 | 587 | 1,083 | 22,824 | $15,497,299$ |
| $31-35$ | 486 | 609 | 1,095 | 28,037 | $30,364,081$ |
| $36-40$ | 641 | 777 | 1,418 | 31,708 | $34,720,713$ |
| $41-45$ | 884 | 969 | 1,853 | 33,278 | $47,188,499$ |
| $46-50$ | 1,083 | 1,163 | 2,246 | 33,910 | $62,835,601$ |
| $51-55$ | 1,075 | 1,057 | 2,132 | 35,892 | $80,612,649$ |
| $56-60$ | 884 | 817 | 1,701 | 36,118 | $77,003,697$ |
| $61-65$ | 470 | 379 | 849 | 34,991 | $59,520,274$ |
| $66-70$ | 196 | 113 | 309 | 35,490 | $30,130,594$ |
| $71-75$ | 89 | 47 | 136 | 32,574 | $10,065,316$ |
| $76-80$ | 23 | 10 | 6 | 29 | 25,054 |
| $81-85$ | 1 | 0 | 10 | $1,679,359$ |  |
| $86-90$ | 6,738 | 6,912 | 13,650 | 18,102 | 747,775 |
| TOTAL |  |  |  | 181,019 |  |

the active census Includes 7,126 actives with vested benefits, including 405 DROP PARTICIPANTS AND 168 ACTIVE FORMER DROP PARTICIPANTS.
pLan A - terminated members due a deferred retirement beneftt:

| Age | Number Male | Numbex <br> Female | Total <br> Number | Average <br> Benefit | Total <br> Benefit |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 26-30 | 1 | 2 | 3 | 7,171 | 21,514 |
| 31-35 | 5 | 9 | 14 | 6,864 | 96,100 |
| 36-40 | 10 | 19 | 29 | 11,987 | 347,634 |
| 41-45 | 34 | 37 | 71 | 12,013 | 852,929 |
| 46-50 | 27 | 46 | 73 | 14,662 | 1,070,302 |
| 51-55 | 73 | 69 | 142 | 17,672 | 2,509,447 |
| 56-60 | 64 | 49 | 113 | 13,205 | 1,492,110 |
| 61-65 | 26 | 13 | 3.9 | 10,707 | 417,574 |
| 66-70 | 1 | 3 | 4 | 3,953 | 15,810 |
| 71-75 | 3 | 2 | 5 | 4,992 | 24,960 |
| 76-80 | 1 | 1 | 2 | 567 | 1,134 |
| 81-85 | 0 | 1 | 1 | 666 | 666 |
| 86-90 | 0 | 1 | 1 | 374 | 374 |
| TOTAL | 245 | 252 | 497 | 13,784 | 6,850,554 |

PLAN A - TERMINATED MEMBERS DUE A REFUND OF CONTRTBUTIONS:

| Contributions Ranging |  |  |
| ---: | ---: | ---: |
| From | To |  |
| 0 | - | 99 |
| 100 | - | 499 |
| 500 | - | 999 |
| 1000 | - | 1999 |
| 2000 | - | 4999 |
| 5000 | - | 9999 |
| 10000 | - | 19999 |
| 20000 | - | 99999 |
|  | TOTAL |  |


|  | Total |
| :---: | :---: |
| Number | Contributions |
| 4,264 | 111,800 |
| 839 | 191,987 |
| 249 | 177,223 |
| 183 | 259,439 |
| 259 | 864,039 |
| 196 | $1,402,817$ |
| 110 | $1,512,628$ |
| 22 | 592,499 |
| 6,122 | $5,112,432$ |

-29-
G. S. Curran \& Company, Ltd.

PLAN A - REGULAR RETIREES:

| Age | Number <br> Male | Number <br> Female | Total <br> Number | Average <br> Benefit | Total <br> Benefit |
| :---: | :---: | :---: | :---: | :---: | ---: |
| $46-50$ | 3 | 7 | 10 | 36,555 | 365,551 |
| $51-55$ | 41 | 39 | 80 | 38,092 | $3,047,339$ |
| $56-60$ | 141 | 95 | 236 | 36,872 | $8,701,853$ |
| $61-65$ | 338 | 263 | 601 | 22,179 | $13,329,636$ |
| $66-70$ | 495 | 347 | 842 | 17,252 | $14,526,523$ |
| $71-75$ | 442 | 298 | 740 | 14,435 | $10,681,944$ |
| $76-80$ | 373 | 297 | 670 | 12,484 | $8,364,331$ |
| $81-85$ | 234 | 192 | 426 | 10,929 | $4,655,877$ |
| $86-90$ | 89 | 90 | 179 | 8,860 | $1,586,028$ |
| $91-99$ | 2,204 | 1,664 | 3,868 | 5,009 | 420,734 |
| TOTAL |  |  |  | 16,980 | $65,679,816$ |

PLAN A - DISABILTTY RETTREES:

| Age | Number Male | Number <br> Female | Total <br> Number | Average <br> Benefit | Total <br> Benefit |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 26-30 | 1 | 0 | 1 | 9,444 | 9,444 |
| 36-40 | 3 | 6 | 9 | 11,604 | 104,440 |
| 41-45 | 15 | 9 | 24 | 10,183 | 244,384 |
| 46-50 | 43 | 11 | 54 | 13,625 | 735,764 |
| 51-55 | 69 | 25 | 94 | 14,507 | 1,363,684 |
| 56-60 | 99 | 51 | 150 | 13,159 | 1,973,840 |
| 61-65 | 66 | 31 | 97 | 11,186 | 1,085,074 |
| 66-70 | 19 | 11 | 30 | 6,250 | 187,495 |
| 71-75 | 12 | 4 | 16 | 4,755 | 76,080 |
| 76-80 | 9 | 2 | 11 | 5,126 | 56,388 |
| 81-85 | 6 | 3 | 9 | 4,488 | 40,396 |
| 86-90 | 2 | 0 | 2 | 5,894 | 11,787 |
| 91-99 | 1 | 0 | 1 | 536 | 536 |
| тОТАД | 345 | 153 | 498 | 11,826 | 5,889,312 |

PLAN A - SURVIVORS:

| Age | Number Male | Number <br> Female | Total <br> Number | Average Benefit | Total <br> Benefit |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 0-25 | 7 | 4 | 11 | 5,843 | 64,277 |
| 26-30 | 1 | 0 | 1 | 8,689 | 8,689 |
| 31-35 | 1 | 1 | 2 | 8,583 | 17,165 |
| 36-40 | 2 | 2 | 4 | 10,388 | 41,553 |
| 41-45 | 1 | 9 | 10 | 16,758 | 167,575 |
| 46-50 | 2 | 9 | 11 | 13,445 | 147,897 |
| 51-55 | 7 | 24 | 31 | 13,394 | 415,223 |
| 56-60 | 0 | 33 | 33 | 11,238 | 370,865 |
| 61-65 | 8 | 64 | 72 | 10,099 | 727,127 |
| 66-70 | 3 | 93 | 96 | 9,375 | 899,968 |
| 71-75 | 8 | 89 | 97 | 8,460 | 820,654 |
| 76-80 | 7 | 117 | 124 | 8,130 | 1,008,078 |
| 81-85 | 2 | 118 | 120 | 5,912 | 709,405 |
| 86-90 | 4 | 69 | 73 | 4,704 | 343,394 |
| 91-99 | 0 | 32 | 32 | 2,880 | 92,148 |
| тотац | 53 | 664 | 717 | 8,137 | 5,834,018 |

-30-
G. S. Curran \& Company, Ltd.

Completed Years of Service

| Attained Ages | 0 | 1 | 2 | 3 | 4 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30\&Over | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0-20 | 90 | 17 |  | 2 |  |  |  |  |  |  |  | 109 |
| 21-25 | 323 | 199 | 64 | 41 | 20 | 32 |  |  |  |  |  | 679 |
| 26-30 | 273 | 213 | 150 | 93 | 94 | 236 | 24 |  |  |  |  | 1,083 |
| 31-35 | 203 | 161 | 90 | 85 | 73 | 339 | 133 | 1.1 |  |  |  | 1,095 |
| 36-40 | 200 | 161 | 92 | 97 | 90 | 376 | 258 | 139 | 5 |  |  | 1,418 |
| 41-45 | 206 | 180 | 110 | 101 | 93 | 401 | 324 | 232 | 151 | 55 |  | 1,853 |
| 46-50 | 212 | 168 | 100 | 86 | 87 | 461 | 361 | 256 | 230 | 257 | 28 | 2,246 |
| 51-55 | 135 | 149 | 90 | 113 | 97 | 399 | 343 | 290 | 222 | 204 | 90 | 2,132 |
| 56-60 | 89 | 89 | 68 | 67 | 69 | 340 | 334 | 272 | 158 | 147 | 68 | 1,701 |
| 61-65 | 21 | 23 | 19 | 24 | 26 | 194 | 177 | 159 | 103 | 57 | 46 | 849 |
| 66-70 | 12 | 13 | 8 | 2 | 5 | 44 | 69 | . 75 | 38 | 27 | 16 | 309 |
| 71 \& Over | 3 | 2 | 1 | 4 | 2 | 20 | 32 | 43 | 30 | 23 | 16 | 176 |
| Totals | 1767 | 1375 | 792 | 715 | 656 | 2842 | 2055 | 1477 | 937 | 770 | 264 | 13650 |



| Attained Ages | 0 | 1 | 2 | 3 | 4 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 308Over | Average Salary |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0-20 | 19,292 | 20,144 |  | 40,478 |  |  |  |  |  |  |  | 19,814 |
| 21-25 | 22,306 | 21,723 | 23,885 | 24,264 | 26,893 | 28,382 |  |  |  |  |  | 22,824 |
| 26-30 | 25,570 | 26,217 | 28,409 | 28,750 | 30,362 | 30,692 | 31,953 |  |  |  |  | 28,037 |
| 31-35 | 26,431 | 28,734 | 33,832 | 30,173 | 30,194 | 34,061 | 37,102 | 39,460 |  |  |  | 31,708 |
| 36-40 | 26,714 | 29,382 | 31,755 | 29,553 | 33,734 | 34,557 | 38,566 | 37,151 | 36,753 |  |  | 33,278 |
| 41-45 | 24,012 | 27,552 | 30,191 | 29,061 | 30,013 | 33,324 | 36,725 | 39,627 | 46,336 | 44,188 |  | 33,910 |
| 46-50 | 24,634 | 26,987 | 27,279 | 30,189 | 34,309 | 31,632 | 34,032 | 39,966 | 46,710 | 52,294 | 45,187 | 35,892 |
| 51-55 | 24,081 | 26,683 | 29,140 | 29,711 | 30,073 | 33,317 | 34,673 | 38,662 | 44,790 | 48,104 | 52,498 | 36,118 |
| 56-60 | 26,123 | 29,185 | 26,846 | 31,444 | 29,722 | 30,979 | 31,990 | 35,122 | 44,273 | 46,940 | 58,068 | 34,991 |
| 61-65 | 26,492 | 22,687 | 26,007 | 32,380 | 30,081 | 34,490 | 34,421 | 34,294 | 41,730 | 43,015 | 43,756 | 35,490 |
| 66-70 | 23,962 | 22,955 | 28,949 | 21,327 | 39,147 | 29,825 | 28,558 | 33,275 | 37,871 | 44,500 | 36,896 | 32,574 |
| 71 \& Over | 20,852 | 20,041 | 24,260 | 19,615 | 37,361 | 30,593 | 25,817 | 21,942 | 31,249 | 23,456 | 31,555 | 26,383 |
| Average | 24,494 | 26,569 | 29,045 | 29,475 | 31,141 | 32,751 | 34,697 | 37,021 | 44,330 | 47,761 | 49,419 | 33,314 |

pLan a - terminated members due a deferred retirement benefit:

PLAN A - SERVICE RETIREES:
Completed Years Since Retirement

| 0 | 1 | 2 | 3 | 4 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 308Over | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 6 | 4 |  |  |  |  |  |  |  |  |  | 10 |
| 22 | 19 | 20 | 5 | 8 | 6 |  |  |  |  |  | 80 |
| 51 | 50 | 38 | 37 | 21 | 37 | 1 |  | 1 |  |  | 236 |
| 102 | 107 | 82 | 81 | 62 | 124 | 36 | 7 |  |  |  | 601 |
| 38 | 47 | 71 | 87 | 76 | 362 | 107 | 41 | 12 | 1 |  | 842 |
| 20 | 12 | 21 | 27 | 26 | 234 | 261 | 96 | 33 | 9 | 1 | 740 |
| 6 | 6 | 5 | 11 | 17 | 62 | 221 | 238 | 83 | 19 | 2 | 670 |
| 1 | 4 | 1 | 3 | 2 | 14 | 48 | 138 | 183 | 29 | 3 | 426 |
| 2 | 1 |  | 2 |  | 7 | 12 | 24 | 78 | 46 | 7 | 179 |
|  |  |  | 1 |  |  |  | 4 | 10 | 49 | 20 | 84 |
| 248 | 250 | 238 | 254 | 212 | 846 | 686 | 548 | 400 | 153 | 33 | 3868 |



| Attained Ages | 0 | 1 | 2 | 3 | 4 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30\&Over | Average Benefit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0-50 | 32,409 | 42,775 |  |  |  |  |  |  |  |  |  | $36,555$ |
| 51-55 | 40,096 | 32,095 | 43.291 | 43,199 | 30,747 | 37,936 |  |  |  |  |  | 38,092 |
| 56-60 | 30,394 | 39,995 | 38,842 | 42,522 | 35,204 | 35,841 | 28,547 |  | 8,748 |  |  | 36,872 |
| 61-65 | 19,067 | 18,315 | 19,655 | 22,439 | 21,967 | 27,099 | 30,039 | 27,460 |  |  |  | 22,179 |
| 66-70 | 13,166 | 14,380 | 16,542 | 17,811 | 15,196 | 15,874 | 22,690 | 25,046 | 21,628 | 11,010 |  | 17,252 |
| 71-75 | 10,788 | 20,921 | 15,549 | 10,372 | 12,972 | 12,537 | 13,733 | 20,898 | 19,667 | 10,161 | 6,628 | 14,435 |
| 76-80 | 8,813 | 9,060 | 11,106 | 10,770 | 8,836 | 11,870 | 12,272 | 11,277 | 18,234 | 14,671 | 4,369 | 12,484 |
| 81-85 | 16,445 | 16,834 | 26,846 | 11,561 | 7,232 | 14,185 | 11,835 | 10,109 | 10,637 | 12,439 | 9,014 | 10,929 |
| 86-90 | 8,628 | 12,664 |  | 5,487 |  | 10,461 | $9 \times 245$ | 10,022 | 8,553 | 8,808 | 6,871 | 8,860 |
| 91 \& Orer |  |  |  | 11,209 |  |  |  | 7,351 | 8,840 | 4,460 | 3,659 | 5,009 |
| Average | 21,670 | 23,206 | 23,264 | 22,093 | 18,887 | 17,260 | 15,326 | 13,822 | 12,832 | 8,926 | 4,960 | 16,980 |




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

| Number of Active Members |  | 13,650 |  | 13,244 |  | 13,470 |  | 13,868 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of Retirees \& Survivors |  | 5,083 |  | 4,978 |  | 4,845 |  | 4,739 |
| Number of Terminated Due Deferred Benefits |  | 497 |  | 522 |  | 448 |  | 374 |
| Number Terminated Due Refunds |  | 6,122 |  | 6,140 |  | 5,723 |  | 5,641 |
| Active Lives Payroll | \$ | 454,741,830 | \$ | 420,104,038 | \$ | 429,459,653 | \$ | 407,022,806 |
| Retiree Benefits in Payment | \$ | 77,403,146 | \$ | 73,102,892 | \$ | 66,724,243 | \$ | 62,543,026 |
| Market Value of Assets | \$ | 2,087,385,378 | \$ | 1,921,293,624 | \$ | 1,695,523,143 | \$ | 1,577,051,547 |
| Ratio of AVA to GASB-25 Accrued Liability |  | 96.83\% |  | 95.04\% |  | 94.29\% |  | 93.46\% |
| Actuarial Value of Assets | \$ | 2,027,214,660 | \$ | 1,718,754,962 | \$ | 1,535,416,950 | \$ | 1,364,795,086 |
| Frozen Unfunded Actuarial Accrued Liability | \$ | 66,328,358 | \$ | 89,762,521 | \$ | 92,910,853 | \$ | 95,449,152 |
| Present Value of Future Employer Normal Cost | \$ | 288,883,382 | \$ | 280,817,883 | \$ | 422,308,841 | \$ | 351,288,808 |
| Present Value of Future Employee Contrib. | \$ | 302,732,846 | \$ | 279,197,353 | \$ | 291,917,848 | \$ | 269,026,244 |
| Present Value of Future Benefits | \$ | 2,685,159,246 | \$ | 2,368,532,719 | \$ | 2,342,554,492 | \$ | 2,080,559,290 |


| Number of Active Members |  | 13,650 |  | 13,244 |  | 13,470 |  | 13,868 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of Retirees \& Survivors |  | 5,083 |  | 4,978 |  | 4,845 |  | 4,739 |
| Number of Terminated Due Deferred Benefits |  | 497 |  | 522 |  | 448 |  | 374 |
| Number Terminated Due Refunds |  | 6,122 |  | 6,140 |  | 5,723 |  | 5,641 |
| Active Lives Payroll | \$ | 454,741,830 | \$ | 420,104,038 | \$ | 429,459,653 | \$ | 407,022,806 |
| Retiree Benefits in Payment | \$ | 77,403,146 | \$ | 73,102,892 | \$ | 66,724,243 | \$ | 62,543,026 |
| Market Value of Assets | \$ | 2,087,385,378 | \$ | 1,921,293,624 | \$ | 1,695,523,143 | \$ | 1,577,051,547 |
| Ratio of AVA to GASB-25 Accrued Liability |  | 96.83\% |  | 95.04\% |  | 94.29\% |  | 93.46\% |
| Actuarial Value of Assets | \$ | 2,027,214,660 | \$ | 1,718,754,962 | \$ | 1,535,416,950 | \$ | 1,364,795,086 |
| Frozen Unfunded Actuarial Accrued Liability | \$ | 66,328,358 | \$ | 89,762,521 | \$ | 92,910,853 | \$ | 95,449,152 |
| Present Value of Future Employer Normal Cost | \$ | 288,883,382 | \$ | 280,817,883 | \$ | 422,308,841 | \$ | 351,288,808 |
| Present Value of Future Employee Contrib. | \$ | 302,732,846 | \$ | 279,197,353 | \$ | 291,917,848 | \$ | 269,026,244 |
| Present Value of Future Benefits | \$ | 2,685,159,246 | \$ | 2,368,532,719 | \$ | 2,342,554,492 | \$ | 2,080,559,290 |


| Number of Active Members |  | 13,650 |  | 13,244 |  | 13,470 |  | 13,868 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of Retirees \& Survivors |  | 5,083 |  | 4,978 |  | 4,845 |  | 4,739 |
| Number of Terminated Due Deferred Benefits |  | 497 |  | 522 |  | 448 |  | 374 |
| Number Terminated Due Refunds |  | 6,122 |  | 6,140 |  | 5,723 |  | 5,641 |
| Active Lives Payroll | \$ | 454,741,830 | \$ | 420,104,038 | \$ | 429,459,653 | \$ | 407,022,806 |
| Retiree Benefits in Payment | \$ | 77,403,146 | \$ | 73,102,892 | \$ | 66,724,243 | \$ | 62,543,026 |
| Market Value of Assets | \$ | 2,087,385,378 | \$ | 1,921,293,624 | \$ | 1,695,523,143 | \$ | 1,577,051,547 |
| Ratio of AVA to GASB-25 Accrued Liability |  | 96.83\% |  | 95.04\% |  | 94.29\% |  | 93.46\% |
| Actuarial Value of Assets | \$ | 2,027,214,660 | \$ | 1,718,754,962 | \$ | 1,535,416,950 | \$ | 1,364,795,086 |
| Frozen Unfunded Actuarial Accrued Liability | \$ | 66,328,358 | \$ | 89,762,521 | \$ | 92,910,853 | \$ | 95,449,152 |
| Present Value of Future Employer Normal Cost | \$ | 288,883,382 | \$ | 280,817,883 | \$ | 422,308,841 | \$ | 351,288,808 |
| Present Value of Future Employee Contrib. | \$ | 302,732,846 | \$ | 279,197,353 | \$ | 291,917,848 | \$ | 269,026,244 |
| Present Value of Future Benefits | \$ | 2,685,159,246 | \$ | 2,368,532,719 | \$ | 2,342,554,492 | \$ | 2,080,559,290 |

Fiscal 2007
\$ 2,087,385,378
96.83\%
\$ 2,027,214,660
\$ 66,328,358
\$ 302,732,846
\$ 2,685,159,246
Fiscal 2006

Fiscal 2005
Fiscal 2004

Employee Contribution Rate
Projected Tax Contribution as \% of Payroll
Actuarially Required Net Direct Employer
Contribution Rate

Actual Employer Contribution Rate

Fiscal 2008
9.50\%
1.11\%
8.98\%
12.75\%

Fiscal 2007
9.50\%
1.05\%
9.58\%
13.25\%

Fiscal 2006
Fiscal 2005

| $9.50 \%$ | $9.50 \%$ |
| :--- | :--- |
| $0.94 \%$ | $1.02 \%$ |
| $13.12 \%$ | $12.39 \%$ |
| $12.75 \%$ | $12.75 \%$ |


|  | Fiscal 2003 |  | Fiscal 2002 |  | Fiscal 2001 |  | Fiscal 2000 |  | Fiscal 1999 |  | Fiscal 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 13,934 |  | 13,570 |  | 13,497 |  | 13,570 |  | 13,429 |  | 13,304 |
|  | 4,602 |  | 4,507 |  | 4,412 |  | 4,325 |  | 4,193 |  | 4,159 |
|  | 320 |  | 323 |  | 289 |  | 263 |  | 273 |  | 246 |
|  | 5,439 |  | 5,528 |  | 5,272 |  | 5,187 |  | 4,977 |  | 4,860 |
| \$ | 396,330,869 | \$ | 372,814,126 | \$ | 352,458,011 | \$ | 337,142,274 | \$ | 323,096,742 | \$ | 307,631,138 |
| \$ | 57,594,474 | \$ | 54,500,856 | \$ | 51,579,364 | \$ | 48,515,498 | \$ | 44,919,015 | \$ | 42,626,480 |
| \$ | 1,415,543,422 | \$ | 1,218,826,920 | \$ | 1,247,510,633 | \$ | 1,255,743,424 | \$ | 1,175,817,245 | \$ | 1,122,352,470 |
|  | 92.83\% |  | 92.47\% |  | 92.29\% |  | 91.39\% |  | 90.19\% |  | 88.33\% |
| \$ | 1,261,191,242 | \$ | 1,214,971,041 | \$ | 1,224,465,306 | \$ | 1,169,592,667 | \$ | 1,082,379,053 | \$ | 960,159,912 |
| \$ | 97,437,098 | \$ | 98,929,395 | \$ | 102,275,043 | \$ | 110,257,598 | \$ | 117,704,612 | \$ | 126,853,240 |
| \$ | 354,769,127 | \$ | 291,266,682 | \$ | 165,256,537 | \$ | 112,077,577 | \$ | 102,088,430 | \$ | 70,210,613 |
| \$ | 263,620,074 | \$ | 250,687,770 | \$ | 239,981,493 | \$ | 233,305,082 | \$ | 225,850,884 | \$ | 208,296,426 |
| \$ | 1,977,017,541 | \$ | 1,855,854,888 | \$ | 1,731,978,389 | \$ | 1,625,232,924 | \$ | 1,528,022,979 | \$ | 1,365,520,191 |


| Fiscal 2004 | Fiscal 2003 | Fiscal 2002 | Fiscal 2001 | Fiscal 2000 | Fiscal 1999 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $9.50 \%$ | $9.50 \%$ | $9.50 \%$ | $9.50 \%$ | $9.50 \%$ | $9.50 \%$ |
| $0.96 \%$ | $0.97 \%$ | $0.98 \%$ | $0.87 \%$ | $0.90 \%$ | $0.93 \%$ |
| $12.66 \%$ | $11.22 \%$ | $7.32 \%$ | $5.68 \%$ | $5.40 \%$ | $4.50 \%$ |
| $11.75 \%$ | $7.75 \%$ | $7.75 \%$ | $7.75 \%$ | $7.75 \%$ | $7.75 \%$ |

## Plan B Exhibits

EXHIBIT XII
PLAN B: ANALYSIS OF ACTUARIALLY REQUIRED CONTRIBUTIONS

1. Present Value of Future Benefits

$\qquad$ ..... \$\$
3. Present Value of Future Employee Contributions ..... \$
4. Present Value of Future Employer Normal Costs (1-2-3) ..... \$
5. Present Value of Future Salaries ..... \$
6. Employer Normal Cost Accrual Rate ( $4 \div 5$ ). ..... 7.606805\%
7. Projected Fiscal 2008 Salary for Current Membership ..... \$ ..... 58,096,558
8. Employer Normal Cost as of January 1, 2008 (6 x 7) ..... \$ ..... 4,419,292
9. Normal Cost Interest Adjusted for Midyear Payment ..... \$
10. Estimated Administrative Cost for Fiscal 2008 ..... \$
11. TOTAL Administrative and Interest Adjusted Actuarial Costs $(9+10)$ ..... \$
12. Projected Ad Valorem Tax Contributions for Fiscal 2008 ..... \$
13. Projected Revenue Sharing Funds for Fiscal 2008 ..... \$
14. Employers' Net Direct Actuarially Required Contribution for Fiscal 2008 (11-12-13) ..... \$
15. Projected Payroll for Fiscal 2008 ..... \$
16. Employers' Net Direct Actuarially Required Contribution as a \% of Projected Payroll for $2008(14 \div 15)$ ..... 6.13\%
17. Actual Employer Contribution Rate for Fiscal 2008 ..... 6.00\%
18. Contribution Shortfall (Excess) as a Percentage of Payroll (16-17)

$\qquad$ ..... 0.13\%
19 Increase (Reduction) to Following Year Payment for Contribution Shortfall (Excess) ..... 0.02\%
20. Minimum Recommended Net Direct Employer Contribution Rate for Fiscal 2009 (16 + 19 Rounded to Nearest .25\%) ..... 6.25\%

## EXHIBIT XIII <br> PLAN B: PRESENT VALUE OF FUTURE BENEFITS

## PRESENT VALUE OF FUTURE BENEFITS FOR ACTIVE MEMBERS:

Retirement Benefits ..... \$ 125,837,887
Survivor Benefits ..... 4,734,726
Disability Benefits ..... 5,484,478
Vested Termination Benefits ..... 8,927,073
Refunds of Contributions ..... 2,185,272
TOTAL Present Value of Future Benefits for Active Members ..... \$PRESENT VALUE OF FUTURE BENEFITS FOR TERMINATED MEMBERS:
Terminated Vested Members Due Benefits at Retirement ..... \$ 3,616,465
Terminated Members with Reciprocals Due Benefits at Retirement. ..... 56,237
Terminated Members Due a Refund. ..... 421,907
TOTAL Present Value of Future Benefits for Terminated Members ..... \$
4,094,609
PRESENT VALUE OF FUTURE BENEFITS FOR PENSIONERS:
Regular Retirees by Option Selected:
Maximum ..... \$ 15,668,006
Option 1 ..... 206,281
Option 2 ..... 14,151,406
Option 3 ..... 1,912,144
Option 4 ..... 565,842
TOTAL Regular Retirees ..... \$ 32,503,679
TOTAL Disability Retirees ..... \$ 3,997,324
TOTAL Survivors \& Widows ..... \$ 3,511,336
Reserve for Accrued Retiree DROP Account Balances ..... \$ 58,004
TOTAL Present Value of Future Benefits for Retirees \& Survivors ..... \$ ..... 40,070,343
TOTAL Present Value of Future Benefits ..... \$

## EXHIBIT XIV <br> PLAN B: ACTUARIAL VALUE OF ASSETS

## CURRENT ASSETS:

Cash in Banks ..... \$ ..... 133,346
Ad Valorem Taxes Receivable ..... 677,207
Accrued Interest on Investments ..... 318,154
Contributions Receivable ..... 1,026,670
Due From Other Funds ..... 164,328
Investments Receivable ..... 223,890
Other Current Assets ..... 850
TOTAL CURRENT ASSETS ..... \$
2,544,445
NET ALLOCATED SHARE OF EXPENSE FUND. ..... \$84,373
INVESTMENTS:
Common Stocks ..... \$ 30,505,454
Mutual Funds (Equities) ..... 56,854,931
Mutual Funds (Fixed Income) ..... 14,758,987
Mutual Funds (Alternative Investments) ..... 6,022,044
U.S. Agency Bonds ..... 16,374,972
U.S. Treasury Zeros ..... 8,231,712
Corporate Bonds ..... 2,430,198
U.S. Treasury Notes ..... 3,174,528
Cash Equivalents ..... 2,216,338
Municipal Bonds ..... 1,287,752
Government National Mortgage Association Bonds ..... 471,159
Adjustment for Actuarial Smoothing ..... $(2,491,777)$
TOTAL INVESTMENTS ..... \$ ..... 139,836,298
TOTAL ASSETS ..... \$ ..... 142,465,116
CURRENT LIABILITIES:
Accrued Pension and Death Benefits ..... \$ 359,118
Refunds Payable ..... 44,998
Investments Payable ..... 260,591
Accounts Payable ..... 44,022
TOTAL CURRENT LIABILITIES ..... \$
708,729
ACTUARIAL VALUE OF ASSETS\$
141,756,387

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

Employee Contributions to the Annuity Savings Fund ..... \$ ..... $13,275,174$
Employer Normal Contributions to the Pension Accumulation Fund ..... 36,302,827
TOTAL PRESENT VALUE OF FUTURE CONTRIBUTIONS ..... \$
EXHIBIT XVI
PLAN B: RECONCILIATION OF CONTRIBUTIONS
Employer Normal Cost for Prior Year. ..... \$3,704,226
Interest on Normal Cost ..... 296,338
Administrative Expenses and Expense Fund Adjustment. ..... 123,826
Interest on Expenses ..... 4,858
TOTAL Interest Adjusted Actuarially Required Contributions ..... \$4,129,248
Direct Employer Contributions ..... \$ 3,776,928
Interest on Employer Contributions. ..... 148,172
Ad Valorem Taxes and Revenue Sharing Funds ..... 681,444
Interest on Taxes and Revenue Sharing Funds. ..... 26,733
TOTAL Interest Adjusted Employer Contributions ..... \$

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

Actuarial Value of Assets (December 31, 2006)\$Income:
Member Contributions ..... \$ 1,847,745
Employer Contributions ..... 3,776,928
Ad Valorem Taxes ..... 662,622
Revenue Sharing ..... 18,822
Purchases and Transfers of Service Credit ..... 137,264
Other ..... 8,584Total Other Contributions\$6,451,965
Interest on Investments ..... 2,561,071
Dividends ..... 646,933
Net Appreciation in Fair Value of Investments ..... 7,464,697
Investment Income Allocated from Expense Fund ..... 314
Securities Lending (Net) ..... 19,314
Allocated Investment Expense ..... $(458,707)$
Adjustment for Actuarial Smoothing. ..... 6,429,157
Net Investment Income ..... \$16,662,779
TOTAL Income ..... \$ ..... 23,114,744
Expenses:
Retirement Benefits ..... \$ 4,206,324
Refunds of Contributions. ..... 467,354
DROP Disbursements ..... 340,877
Allocated Administrative Expenses ..... 118,357
Funds Transferred to Another System ..... 1,748
TOTAL Expenses ..... \$ ..... 5,134,660
Net Income for Fiscal 2007 (Income - Expenses) ..... \$
17,980,084
Unadjusted Fund Balance as of December 31, 2007
(Fund Balance Previous Year + Net Income) ..... \$ ..... 141,761,856
Adjustments for Change in Allocation of Expense Fund ..... \$$(5,469)$
Actuarial Value of Assets (December 31, 2007) ..... \$

# EXHIBIT XVIII <br> PLAN B: FUND BALANCES 

## PRESENT ASSETS OF THE SYSTEM CREDITABLE TO:

Annuity Savings Fund ..... \$
Annuity Reserve Fund

$\qquad$ ..... 40,012,339
Pension Accumulation Fund ..... 90,586,042
Deferred Retirement Option Plan Account ..... 1,289,187
NET MARKET VALUE OF ASSETS ..... \$ ..... 144,163,791
ALLOCATED SHARE OF THE EXPENSE FUND ..... 84,373
ADJUSTMENT FOR ACTUARIAL SMOOTHING

$\qquad$$(2,491,777)$
ACTUARIAL VALUE OF ASSETS ..... \$
EXHIBIT XIX - Schedule A
PLAN B: PENSION BENEFIT OBLIGATION
Present Value of Credited Projected Benefits Payable to Current Employees. ..... \$ ..... 87,777,321
Present Value of Benefits Payable to Terminated Employees ..... 4,094,609
Present Value of Benefits Payable to Current Retirees and Beneficiaries ..... 40,070,343
TOTAL PENSION BENEFIT OBLIGATION ..... \$ ..... 131,942,273
NET ACTUARIAL VALUE OF ASSETS ..... \$ ..... 141,756,387
Ratio of Net Actuarial Value of Assets to Pension Benefit Obligation.107.44\%
EXHIBIT XIX - Schedule B ENTRY AGE NORMAL ACCRUED LIABILITIES
Accrued Liability for Active Employees ..... \$Accrued Liability for Terminated Employees4,094,609
Accrued Liability for Current Retirees and Beneficiaries

$\qquad$ ..... 40,070,343
TOTAL ENTRY AGE NORMAL ACCRUED LIABILITY ..... \$ ..... 144,913,286
NET ACTUARIAL VALUE OF ASSETS. ..... \$141,756,387
Ratio of Net Actuarial Value of Assets to Entry Age Normal Accrued Liability97.82\%

## G. S. Curran \& Company, Ltd.

## EXHIBIT XX <br> 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: ..... -0.16\%
Adjustments in Funded Ratio Due to Mergers or Changes in 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 1998 ..... -3.43\%
Changes for Fiscal 1999 ..... -3.95\%
Changes for Fiscal 2001 ..... -0.11\%
Changes for Fiscal 2003 ..... -0.23\%
Changes for Fiscal 2005 ..... -3.19\%
Changes for Fiscal 2006 ..... -0.65\%
Changes for Fiscal 2007 ..... -0.58\%
TOTAL Adjustments ..... -4.49\%
Amortization of Adjustments in Funded Ratio over 30 years:
Changes for Fiscal 1987 ..... -9.07\%
Changes for Fiscal 1988 ..... 2.00\%
Changes for Fiscal 1989 ..... -0.08\%
Changes for Fiscal 1990 ..... 2.16\%
Changes for Fiscal 1995 ..... 1.33\%
Changes for Fiscal 1997. ..... -1.40\%
Changes for Fiscal 1998 ..... 1.03\%
Changes for Fiscal 1999 ..... 1.05\%
Changes for Fiscal 2001 ..... 0.02\%
Changes for Fiscal 2003 ..... 0.03\%
Changes for Fiscal 2005 ..... 0.21\%
Changes for Fiscal 2006 ..... 0.02\%
Changes for Fiscal 2007 ..... 0.00\%
TOTAL Amortization of Adjustments ..... -2.70\%
Target Ratio for Current Fiscal Year (Not more than 100\%) ..... 92.88\%
Actuarial Value of Assets Divided by PBO as of 2007 ..... 107.44\%

## EXHIBIT XXI CENSUS DATA - PLAN B

\begin{tabular}{|c|c|c|c|c|c|}
\hline \& Active \& Terminated with Funds on Deposit \& DROP \& Retired \& Total \\
\hline Number of members as of December 31, 2006 \& 1,957 \& 1,467 \& 33 \& 508 \& 3,965 \\
\hline \begin{tabular}{l}
Additions to Census \\
Initial membership \\
Omitted in error last year
\end{tabular} \& 263 \& 11 \& \& \& 274 \\
\hline \begin{tabular}{l}
Change in Status during Year \\
Actives terminating service \\
Actives who retired \\
Actives entering DROP \\
Term. members rehired \\
Term. members who retire \\
Retirees who are rehired \\
Refunded who are rehired \\
DROP participants retiring \\
DROP returned to work \\
Death of another member \\
Omitted in error last year
\end{tabular} \& \begin{tabular}{l}
(54) \\
(25) \\
(13) \\
16 \\
8 \\
3 \\
(3)
\end{tabular} \& \begin{tabular}{l}
54 \\
(16) \\
(5) \\
6
\end{tabular} \& \begin{tabular}{l}
13 \\
(5) \\
(3)
\end{tabular} \& 25
5
5
5
3
3 \& 14

3 <br>

\hline | Eliminated from Census |
| :--- |
| Refund of contributions |
| Deaths |
| Included in error last year |
| Adjustment for multiple records | \& | (156) |
| :--- |
| (3) | \& | (65) |
| :--- |
| (2) | \& (1) \& (19) \& | (221) |
| :--- |
| (24) |
| (1) | <br>

\hline Number of members as of December 31, 2007 \& 1,993 \& 1,450 \& 37 \& 530 \& 4,010 <br>
\hline
\end{tabular}

## G. S. Curran \& Company, Ltd.

plan b - actives census by age:

| Age | Number Male | Number <br> Female | Total <br> Number | Average Salary | Total Salary |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 16-20 | 6 | 3 | 9 | 18,688 | 168,192 |
| 21-25 | 54 | 53 | 107 | 23,096 | 2,471,259 |
| 26-30 | 76 | 93 | 169 | 25,971 | 4,389,175 |
| 31-35 | 71 | 90 | 161 | 28,396 | 4,571,773 |
| 36-40 | 90 | 133 | 223 | 31,682 | 7,065,020 |
| 41-45 | 131 | 154 | 285 | 32,155 | 9,164,233 |
| 46-50 | 156 | 133 | 289 | 33,000 | 9,536,979 |
| 51-55 | 167 | 14.9 | 316 | 32,603 | 10,302,530 |
| 56-60 | 144 | 102 | 246 | 32,887 | 8,090,260 |
| 61-65 | 88 | 60 | 148 | 33,496 | 4,957,339 |
| 66-70 | 35 | 18 | 53 | 29,212 | 1,548,254 |
| 71-75 | 16 | 3 | 19 | 26,160 | 497,032 |
| 76-80 | 2 | 2 | 4 | 21,440 | 85,761 |
| 81-85 | 1 | 0 | 1. | 12,000 | 12,000 |
| TOTAL | 1,037 | 993 | 2,030 | 30,965 | 62,859,807 |

THE ACTIVE CENSUS INCLUDES 930 ACTIVES WITH VESTED BENEFITS, INCLUDING 37 DROP PARTICIPANTS AND 14 ACTIVE FORMER DROP PARTICIPANTS.

PLAN B - TERMINATED MEMBERS DUE A DEFERRED RETIREMENT BENEFIT:

| Age | Number Male | Numbex <br> Female | Total <br> Number | Average <br> Benefit | Total <br> Benefit |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 31-35 | 3 | 2 | 5 | 5,779 | 28,896 |
| 36-40 | 6 | 4 | 10 | 7,782 | 77,820 |
| 41-45 | 6 | 12 | 18 | 7,368 | 132,617 |
| 46-50 | 9 | 9 | 18 | 9,738 | 175,286 |
| 51-55 | 6 | 15 | 21 | 9,181 | 192,806 |
| 56-60 | 6 | 9 | 15 | 6,814 | 102,204 |
| 61-65 | 4 | 1 | 5 | 8,144 | 40,719 |
| 66-70 | 1 | 2 | 3 | 1,769 | 5,307 |
| 71-75 | 1 | 0 | 1 | 3,497 | 3,497 |
| 81-85 | 1 | 0 | 1 | 42 | 42 |
| тоtal | 43 | 54 | 97 | 7,827 | 759,194 |

PLAN B - TERMINATED MEMBERS DUE A REFUND OF CONTRIBUTIONS:

| Contribu From | ions | Ranging To |
| :---: | :---: | :---: |
| 0 | - | 99 |
| 100 | - | 499 |
| 500 | - | 999 |
| 1000 | - | 1999 |
| 2000 | - | 4999 |
| 5000 | - | 9999 |
| 10000 | - | 19999 |
|  |  | TAL |

Total
Contributions
23,377
47,117
38,389
60,594
106,058
108,169
38,165
421,869

PLAN B - REGULAR RETTREES:

| Age | Number | Number | Total | Average | Total |
| :---: | :---: | :---: | :---: | :---: | ---: |
| $56-60$ | 12 | Male | 5 | Number | Benefit |

PLAN B - DISABILITY RETIREES:

| Age | Number | Number | Total | Average | Total |
| ---: | :---: | :---: | :---: | ---: | ---: |
| $31-35$ | 1 | Female | Number | Benefit | Benefit |
| $41-45$ | 2 | 0 | 1 | 5,293 | 5,293 |
| $46-50$ | 3 | 0 | 2 | 6,153 | 12,306 |
| $51-55$ | 13 | 0 | 3 | 5,265 | 15,795 |
| $56-60$ | 13 | 4 | 17 | 7,585 | 128,939 |
| $61-65$ | 9 | 2 | 15 | 7,669 | 115,035 |
| $66-70$ | 2 | 0 | 14 | 5,986 | 83,801 |
| $71-75$ | 1 | 0 | 2 | 10,597 | 21,194 |
| TOTAL | 44 | 11 | 2 | 2,935 | 2,935 |
|  |  |  |  |  | 7,005 |

PLAN B - SURVIVORS:

| Age | Number Male | Number <br> Female | Total <br> Number | Average Benefit | Total <br> Benefit |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 0-25 | 0 | 1 | 1 | 5,808 | 5,808 |
| 26-30 | 0 | 2 | 2 | 7,785 | 15,569 |
| 46-50 | 2 | 1 | 3 | 6,566 | 19,697 |
| 51-55 | 1 | 6 | 7 | 9,917 | 69,419 |
| 56-60 | 0 | 4 | 4 | 8,100 | 32,398 |
| 61-65 | 0 | 9 | 9 | 9,324 | 83,918 |
| 66-70 | 0 | 4 | 4 | 7,264 | 29,055 |
| 71-75 | 1 | 7 | 8 | 4,979 | 39,833 |
| 76-80 | 0 | 6 | 6 | 3,351 | 20,105 |
| 81-85 | 1 | 4 | 5 | 6,621 | 33,105 |
| 86-90 | 0 | 4 | 4 | 2,574 | 10,295 |
| 91-99 | 0 | 3 | 3 | 1,023 | 3,069 |
| TOTAL | 5 | 51 | 56 | 6,469 | 362,271 |

PLAN B - ACTIVE MEMBERS:

| $\begin{gathered} \text { Attained } \\ \text { Ages } \end{gathered}$ | 0 | 1 | 2 | 3 | 4 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30\&Over | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0-20 | 9 |  |  |  |  |  |  |  |  | . |  | 9 |
| 21-25 | 49 | 33 | 14 | 3 | 2 | 6 |  |  |  |  |  | 107 |
| 26-30 | 56 | 34 | 15 | 8 | 12 | 43 | 1 |  |  |  |  | 169 |
| 31-35 | 32 | 30 | 12 | 7 | 16 | 51 | 13 |  |  |  |  | 161 |
| 36-40 | 25 | 30 | 11 | 11 | 17 | 60 | 45 | 22 | 2 |  |  | 223 |
| 41 - 45 | 30 | 32 | 17 | 15 | 21 | 69 | 40 | 27 | 24 | 10 |  | 285 |
| $46-50$ | 21 | 25 | 15 | 14 | 14 | 75 | 42 | 31 | 26 | 25 | 1 | 289 |
| 51-55 | 25 | 23 | 18 | 17 | 22 | 72 | 44 | 35 | 18 | 33 | 9 | 316 |
| 56-60 | 21 | 17 | 15 | 8 | 13 | 56 | 34 | 38 | 26 | 11 | 7 | 246 |
| 61-65 | 3 | 7 | 8 | 7 | 6 | 41 | 18 | 29 | 12 | 12 | 5 | 148 |
| 66-70 | 2 | 4 | 1 | 4 | 2 | 14 | 18 | 5 | 1 | . 3 |  | 53 |
| $71 \& \mathrm{O}_{\text {ver }}$ |  |  | 2 | 1 |  | 5 | 6 | 4 | 1 | 1 | 4 | 24 |
| Totals | 273 | 235 | 128 | 95 | 124 | 492 | 261 | 191 | 110 | 95 | 26 | 2030 |


| Attained Ages | 0 | 1 | 2 | 3 | 4 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30\&Over | Average Salary |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0-20 | 18,688 |  |  |  |  |  |  |  |  |  |  | 18,688 |
| 2I-25 | 22,336 | 21,747 | 22,845 | 40,073 | 19,384 | 30,059 |  |  |  |  |  | 23,096 |
| 26-30 | 25,723 | 24,707 | 28,264 | 27,158 | 22,280 | 26,989 | 39,566 |  |  |  |  | 25,971 |
| 32-35 | 23,822 | 25,860 | 28,039 | 23,347 | 31,141 | 32,203 | 30,242 |  |  |  |  | 28,396 |
| 36-40 | 27,701 | 32,794 | 30,570 | 31,309 | 35,068 | 27,698 | 35,587 | 35,779 | 30,701 |  |  | 31,682 |
| 41-45 | 26,477 | 30,043 | 31,381 | 31,985 | 24,236 | 31,667 | 36,029 | 37,461 | 35,915 | 38,678 |  | 32,155 |
| 46-50 | 31,700 | 27,816 | 30,535 | 30,487 | 28,352 | 32,952 | 29,065 | 35,654 | 41,789 | 38,331 | 51,879 | 33,000 |
| 51-55 | 26,235 | 30,926 | 22,957 | 38,671 | 28,380 | 28,861 | 33,745 | 35,359 | 39,871 | 40,018 | 44,639 | 32,603 |
| 56-60 | 26,746 | 27,796 | 41,604 | 31,551 | 30,396 | 32,729 | 32,727 | 32,320 | 31,589 | 35,620 | 56,799 | 32,887 |
| 61-65 | 32,466 | 25,438 | 29,958 | 49,076 | 29,575 | 30,170 | 32,266 | 31,372 | 37,274 | 40,478 | 52,135 | 33,496 |
| 66-70 | 19,957 | 14,561 | 17,812 | 39,479 | 36,400 | 29,187 | 32,933 | 29,635 | 14,400 | 24,663 |  | 29,212 |
| 71 \& Over |  |  | 23,118 | 39,655 |  | 15,205 | 27,246 | 28,561 | 21,416 | 32,839 | 25,226 | 24,783 |
| Average | 25,542 | 27,210 | 29,289 | 33,714 | 28,547 | 30,354 | 33,067 | 34,250 | 36,654 | 38,421 | 46,646 | 30,965 |

PLAN B - TERMINATED MEMBERS DUE A DEFERRED RETIREMENT BENEFIT:
Years Until Retirement Eligibility

| Attained Ages | 0 | 1 | 2 | 3 | 4 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 308Over | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0-30 |  |  |  |  |  |  |  |  |  | . |  | 0 |
| 31-35 |  |  |  |  |  |  |  |  |  | 2 | 3 | 5 |
| 36-40 |  |  |  |  |  |  |  |  | 7 | 3 |  | 10 |
| 41- $\leq 5$ |  |  |  |  |  |  |  | 12 | 6 |  |  | 18 |
| 46-50 |  |  |  |  |  |  | 14 | 4 |  |  |  | 18 |
| 51-55 |  |  |  |  |  | 16 | 5 |  |  |  |  | 21 |
| 56-60 | 2 | 4 | 3 | 2 |  | 4 |  |  |  |  |  | 15 |
| 6I-65 | 3 |  | 1 | 1 |  |  |  |  |  |  |  | 5 |
| 66-70 | 3 |  |  |  |  |  |  |  |  |  |  | 3 |
| 71-75 | 1 |  |  |  |  |  |  |  |  |  | . | 1 |
| 76-80 |  |  |  |  |  |  |  | - |  | . |  | 0 |
| 81-85 | 1 |  |  |  |  |  |  |  |  |  |  | 1 |
| 86 \& Over |  |  |  |  |  |  |  |  |  |  |  | 0 |
| Totals | 10 | 4 | 4 | 3 | 0 | 20 | 19 | 16 | 13 | 5 | 3 | 97 |
| PLAN B - AVERAGE ANNUAJ BENEFITS OF TERMINATED MEMBERS DUE A DEFERRED RETIREMENT BENEFIT: <br> Years Until Retirement Eligibility |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Attained Ages | 0 | 1 | 2 | 3 | 4 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30\&Ovex | Average Benefit |
| 0-30 |  |  |  |  |  |  |  |  |  |  |  | 0 |
| 31-35 |  |  |  |  |  |  |  |  |  | 6,871 | 5,052 | 5,779 |
| 36-40 |  |  |  |  |  |  |  |  | 8,980 | 4,988 |  | 7,782 |
| 41-45 |  |  |  |  |  |  |  | 9,014 | 4,075 |  |  | 7,368 |
| 46-50 |  |  |  |  |  |  | 11,286 | 4,322 |  |  |  | 9,738 |
| 51-55 |  |  |  |  |  | 10,426 | 5,197 |  |  |  |  | 9,181 |
| 56-60 | 11,848 | 3,171 | 10,071 | 9,159 |  | 4,323 |  |  |  |  |  | 6,814 |
| 61-65 | 10,465 |  | 5,339 | 3,987 |  |  |  |  |  |  |  | 8,144 |
| 66-70 | 1,769 |  |  |  |  |  |  |  |  |  |  | 1,769 |
| 71-75 | 3,497 |  |  |  |  |  |  |  |  |  |  | 3,497 |
| 76-80 |  |  |  |  |  |  |  |  |  |  |  | 0 |
| 81-85 | 42 |  |  |  |  |  |  |  |  |  |  | 42 |
| 86 \& Over 0 |  |  |  |  |  |  |  |  |  |  |  |  |
| Average | 6,394 | 3,171 | 8,888 | 7,435 | 0 | 9,206 | 9,683 | 7,841 | 6,716 | 5,741 | 5,052 | 7,827 |

PLAN B - SERVICE RETIREES:

| Attained Ages | Completed Years Since Retirement |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0 | 1 | 2 | 3 | 4 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | $3080 v e r$ | Total |
| 0-55 |  |  |  |  |  |  |  |  |  |  |  | 0 |
| 56-60 | 5 | 4 | 2 | 2 | 3 | 1 |  |  |  |  |  | 17 |
| 61-65 | 9 | 15 | 10 | 12 | 5 | 8 |  |  |  |  |  | 59 |
| 66-70 | 10 | 8 | 17 | 21 | 6 | 40 | 7 |  | 2 |  |  | 111 |
| 71-75 | 2 | 2 | 1 | 11 | 5 | 36 | 25 | 3 | 2 |  |  | 87 |
| 76-80 |  | 1 |  | 3 |  | 8 | 25 | 25 |  | 1 |  | 63 |
| 81-85 |  |  |  | 1 |  |  | 6 | 20 | 21 |  |  | 48 |
| 86-90 |  |  |  |  |  |  | 1 | 5 | 10 | 11 | , | 27 |
| $91 \&$ Over |  |  |  |  |  |  |  | 1 | 1 | . 3 | 2 | 7 |
| Totals | 26 | 30 | 30 | 50 | 19 | 93 | 64 | 54 | 36 | 15 | 2 | 419 |


| Attained Ages | Completed Years Since Retirement |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0 | 1 | 2 | 3 | 4 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 3080ver | Average Benefit |
| 0-55 |  |  |  |  |  |  |  |  |  |  |  | 0 |
| 56-60 | 19,988 | 36,085 | 23,082 | 21,022 | 19,622 | 13,748 |  |  |  |  |  | 23,830 |
| 61-65 | 9,646 | 10,603 | 8,350 | 8,732 | 11,439 | 13,157 |  |  |  |  |  | 10,112 |
| 66-70 | 10,944 | 9,661 | 6,663 | 7,264 | 7,233 | 10,245 | 6,512 |  | 3,129 |  |  | 8,627 |
| 71-75 | 7,723 | 6,523 | 11,453 | 5,784 | 7,570 | 8,139 | 8,524 | 16,367 | 10,187 |  |  | 8,242 |
| 76-80 |  | 11,241 |  | 7,446 |  | 7,253 | 5,323 | 8,960 |  | 1,685 |  | 7,149 |
| 81-85 |  |  |  | 3,629 |  |  | 7,168 | 5,440 | 6,201 |  |  | 5,951 |
| 86-90 |  |  |  |  |  |  | 21,696 | 9,018 | 8,957 | 3,519 |  | 7,225 |
| 91 \& Ovex |  |  |  |  |  |  |  | 14,421 | 3,920 | 6,036 | 4,375 | 6,457 |
| Average | 11,986 | 13,499 | 8,479 | 7,779 | 10,385 | 9,460 | 7,132 | 8,174 | 6,954 | 3,900 | 4,375 | 8,717 |

plan b - SURVIVING beneficiaries of former members :

Completed Years Since Retirement

| Attained Ages | 0 | 1 | 2 | 3 | 4 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30\&Over | Average Benefit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0-20 |  |  |  |  |  |  |  |  |  |  |  | $\bigcirc$ |
| 21-25 |  | 5,808 |  |  |  |  |  |  |  |  |  | 5,808 |
| 26-30 |  | 12,078 |  |  |  |  | 3,490 |  |  |  |  | 7,784 |
| 31-35 |  |  |  |  |  |  |  |  |  |  |  | 0 |
| $36-40$ |  |  |  |  |  |  |  |  |  |  |  | 0 |
| 41-45 |  |  |  |  |  |  |  |  |  |  |  | 0 |
| 46-50 |  |  |  |  |  | 6,070 | 7,556 |  |  |  |  | 6,566 |
| 51-55 | 23,550 | 5,571 | 15,462 |  |  | 6,209 |  |  |  |  |  | 9,917 |
| 56-60 |  |  |  |  |  | 9,576 | 3,669 |  |  |  |  | 8,099 |
| 6I - 65 | 4,227 | 2,048 |  | 24,694 | 14,319 | 8,644 | 8,470 |  |  |  |  | 9,324 |
| 66-70 |  |  |  |  |  | 851 | 9,365 | 9,474 |  |  |  | 7,264 |
| 71-75 |  |  |  | 6,465 | 6,357 | 3,910 | 5,093 |  |  |  |  | 4,979 |
| 76-80 |  |  |  |  |  | 1,787 | 5,253 | 5,006 | 1,233 | 1,820 |  | 3,351 |
| 81-85 |  |  |  |  |  |  |  | 3,301 | 7,451 |  |  | 6,621 |
| 86-90 |  |  |  |  |  |  |  |  |  | 2,574 |  | 2,574 |
| 91 \& Over |  |  |  |  |  |  |  |  |  | 774 | 1,147 | 1,023 |
| Average | 10,668 | 6,377 | 15,462 | 15,580 | 10,338 | 6,236 | 6,245 | 5,697 | 6,207 | 2,148 | 1,147 | 6,469 |

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

|  | Fiscal 2007 | Fiscal 2006 | Fiscal 2005 | Fiscal 2004 |
| :---: | :---: | :---: | :---: | :---: |
| Number of Active Members | 2,030 | 1,990 | 1,970 | 2,062 |
| Number of Retirees \& Survivors | 530 | 508 | 486 | 461 |
| Number of Terminated Due Deferred Benefits | 97 | 98 | 91 | 69 |
| Number Terminated Due Refunds | 1,353 | 1,369 | 1,298 | 1,243 |
| Active Lives Payroll | \$ 62,859,807 | \$ 59,155,664 | \$ 54,810,437 | \$ 54,325,541 |
| Retiree Benefits in Payment | \$ 4,400,123 | \$ 4,029,570 | \$ 3,588,698 | \$ 3,313,829 |
| Market Value of Assets | \$ 144,163,791 | \$ 132,695,110 | \$ 117,661,283 | \$ 110,700,198 |
| Actuarial Value of Assets | \$ 141,756,387 | \$ 123,781,772 | \$ 111,443,610 | \$ 99,526,756 |
| Present Value of Future Employer Normal Cost | \$ 36,302,827 | \$ 30,194,074 | \$ 30,452,448 | \$ 30,454,650 |
| Present Value of Future Employee Contrib. | \$ 13,275,174 | \$ 12,440,078 | \$ 11,815,922 | \$ 12,600,693 |
| Present Value of Future Benefits | \$ 191,334,388 | \$ 166,415,924 | \$ 153,711,980 | \$ 142,582,099 |
| ******************************************************************************************) |  |  |  |  |
|  | Fiscal 2008 | Fiscal 2007 | Fiscal 2006 | Fiscal 2005 |
| Employee Contribution Rate | 3.00\% | 3.00\% | 3.00\% | 3.00\% |
| Projected Tax Contribution as \% of Payroll | 1.11\% | 1.05\% | 1.03\% | 1.00\% |
| Actuarially Required Net Direct Employer |  |  |  |  |
| Contribution Rate | 6.13\% | 5.39\% | 5.90\% | 5.45\% |
| Actual Employer Contribution Rate | 6.00\% | 6.00\% | 5.75\% | 5.75\% |


|  | Fiscal 2003 |  | Fiscal 2002 |  | Fiscal 2001 |  | Fiscal 2000 |  | Fiscal 1999 |  | Fiscal 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2,189 |  | 2,122 |  | 2,046 |  | 1,922 |  | 1,896 |  | 1,782 |
|  | 417 |  | 404 |  | 401 |  | 395 |  | 371 |  | 355 |
|  | 64 |  | 64 |  | 44 |  | 42 |  | 43 |  | 40 |
|  | 1,182 |  | 1,199 |  | 1,099 |  | 1,062 |  | 1,000 |  | 1,004 |
| \$ | 54,823,785 | \$ | 52,863,764 | \$ | 48,507,063 | \$ | 43,079,182 | \$ | 41,609,920 | \$ | 38,518,764 |
| \$ | 2,898,810 | \$ | 2,704,346 | \$ | 2,542,212 | \$ | 2,373,678 | \$ | 2,109,116 | \$ | 1,878,636 |
| \$ | 99,612,361 | \$ | 85,214,085 | \$ | 84,474,861 | \$ | 82,785,072 | \$ | 79,220,309 | \$ | 76,318,545 |
| \$ | 90,234,749 | \$ | 84,572,863 | \$ | 83,407,668 | \$ | 79,249,113 | \$ | 73,932,718 | \$ | 66,212,388 |
| \$ | 31,528,445 | \$ | 28,501,122 | \$ | 19,615,292 | \$ | 13,032,125 | \$ | 13,815,875 | \$ | 9,556,953 |
| \$ | 12,689,583 | \$ | 12,282,205 | \$ | 11,353,565 | \$ | 6,859,540 | \$ | 6,660,945 | \$ | 5,643,738 |
| \$ | 134,452,777 | \$ | 125,356,190 | \$ | 114,376,525 | \$ | 99,140,778 | \$ | 94,409,538 | \$ | 81,413,079 |
| ************************************************************************************* |  |  |  |  |  |  |  |  |  |  |  |
| Fiscal 2004 |  | Fiscal 2003 |  | Fiscal 2002 |  | Fiscal 2001 |  | Fiscal 2000 |  | Fiscal 1999 |  |
|  | 3.00\% | 3.00\% |  | 3.00\% |  | 2\% over \$1200 |  | 2\% over \$1200 |  | 2\% over \$1200 |  |
| 0.95\% |  | 0.96\% |  | 0.96\% |  | 0.85\% |  | 0.89\% |  | 0.92\% |  |
|  | 5.61\% | 5.18\% |  | 3.62\% |  | 2.47\% |  | 2.73\% |  | 2.07\% |  |
|  | 5.25\% | 3.75\% |  | 2.75\% |  | 2.75\% |  | 2.50\% |  | 2.50\% |  |

## SUMMARY OF PRINCIPAL PLAN PROVISIONS

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 and use the excess contributions to reduce the plan's frozen unfunded actuarial accrued liability.

RETIREMENT BENEFITS - Members hired on or before December 31, 2006, 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 regardless of age. Members hired on or after January 1, 2007, with seven years of creditable service may retire at age sixty-seven; ten years of creditable service may retire at age sixtytwo; 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 plus two dollars per month for each year of service credited prior to the revision date, and three 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, 2006. 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 before December 31, 2006 or age sixty-two 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.

RETIREMENT BENEFITS: - Members hired on or before December 31, 2006, 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-two; members with thirty years of 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, 2006. 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, not to be less than fifteen years, or two percent of final compensation multiplied by the years of service assuming continued service to age sixty for members hired on or before December 31, 2006 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.
-56-

## 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, 2006; or at least sixty months for those individuals hired on or after January 1, 2007.

## G. S. Curran \& Company, Ltd.

## 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<br>Investment Earnings Rate<br>Annual Rate of Salary Increase<br>Rates of Retirement<br>Rates of Termination<br>Rates of Disability<br>Rates of Mortality

Increase in Factor Results in
Decrease in Cost
Increase in Cost
Increase in Cost
Decrease in Cost
Increase in Cost
Decrease in Cost
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, threefifths 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. Under this methodology the value of the assets will not be less than $90 \%$ nor more than $110 \%$ of the actual market value. A pro-rata share of the expense fund assets was allocated to each plan in proportion to current salaries.

## VALUATION INTEREST RATE: 7.50\%

ANNUITANT AND ACTIVE For males 1983 Group Annuity Male Mortality Table MORTALITY: 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 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 |  |  |
|  |  |  |  |  |
|  | SLAN B: | Service | Factor | Service |
|  | $<1$ | 0.23 | 10 | Factor |
|  | 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 |
|  | 7 | 0.08 | 17 | 0.03 |
|  | 8 | 0.08 | $>17$ | 0.01 |
|  | 9 | 0.06 |  |  |

-59-

## G. S. Curran \& Company, Ltd.

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 <br> Death | \% with <br> Children | \# of <br> Children | Average <br> 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

 FemalesVESTING 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.

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 $100 \%$.

## G. S. Curran \& Company, Ltd.

## ACTUARIAL TABLES AND RATES

|  | Male <br> Mortality | Female <br> Mortality <br> Rates | Rates | Disability <br> Rates | Plan A <br> Retirement <br> Rates | Plan B <br> Retirement <br> Rates | Plan A <br> DROP Entry <br> Rates | Plan B <br> DROP Entry <br> Rates |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | Remarriage |  |

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

## GLOSSARY

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 an allocation of pension costs to each fiscal year. Although all proper cost methods will accumulate sufficient assets to provide for members pensions, some accumulate assets more or less rapidly than others by producing higher or lower costs in the earlier years with corresponding decreasing or increasing costs in future years.

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 possibility 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.

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.

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.

Net Direct Employer Contribution Rate - Contribution rate applied to the employers’ active payroll. This does not include contributions made to the plan by revenue sharing or ad valorem taxes.

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.

## G. S. Curran \& Company, Ltd.

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

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

