# MUNICIPAL EMPLOYEES' 

 RETIREMENT SYSTEMACTUARIAL VALUATION AS OF JUNE 30, 2001

# G. S. CURRAN \& COMPANY, LTD. <br> Actuarial Services <br> 10555 N. Glenstone Place - Baton Rouge, Louisiana 70810 • (225) 769-4825 

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

October 31, 2001

## Board of Trustees

Municipal Employees' Retirement System
7937 Office Park Blvd.
Baton Rouge, LA 70809
Ladies and Gentlemen:
We are pleased to present our report on the actuarial valuation of the Municipal Employees' Retirement System for the fiscal year ending June 30, 2001. Our report is based on the actuarial assumptions specified and relies on the data supplied by the system's administrative director and auditors. This report was prepared at the request of the Board of Trustees of the Municipal Employees' Retirement System. The primary purposes of the report are to determine the actuarially required contribution for the retirement system for the fiscal year ending June 30 , 2002, and to provide information required for the system's financial statements. In addition, this report recommends employer contribution rates for fiscal 2003.

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.

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


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

Valuation Date:

Census Summary: | Active Members |
| :--- |
| Retirees and Beneficiaries |
| Terminated Due a Deferred Benefit |
| Terminated Due a Refund |

Payroll:
Benefits in Payment:
Frozen Unfunded Actuarial Accrued Liability:
Market Value of Assets:
Actuarial Asset Value:
Actuarial Accrued Liability (as defined by GASB-25)
Ratio of Actuărial Value of Assets to Actuarial Accrued Liability:

| June 30,2001 | June 30,2000 |
| :---: | :---: |
|  | 5,455 |
| 2,255 | 5,558 |
| 189 | 2,213 |
|  | 2,122 |

FISCAL 2002
\$ 8,057,287 - \$ 6,933,099
\$ 3,664,548 \$ 3,515,154
Total Employer Actuarially Required Contribution (Including Estimated Administrative Costs):

FISCAL 2001

| Net Employer Normal Cost (July 1): | $\$$ | $8,057,287$ | $\$$ | $6,933,099$ |
| :--- | :---: | :---: | :---: | :---: |
| Amortization Cost (July 1): | $\$$ | $3,664,548$ | $\$$ | $3,515,154$ |
| Total Employer Actuarially Required Contribution <br> (Including Estimated Administrative Costs): | $\$$ | $13,041,549$ | $\$ 11,634,277$ |  |
| Net Direct Employer Actuarially Required <br> Contribution as a Percentage of Propected Payroll: <br> $* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * ~$ |  |  |  |  |

Employee Contribution Rate: $9.25 \%$ of Payroll
Actuarial Cost Method: Frozen Attained Age Normal Actuarial Cost Method
Valuation Interest Rate: 8\% (Net of Investment Expense)
Exclusions from Census: None
Basis of Actuarial Asset Value: Fixed income securities are valued at amortized cost; common stock is valued at market value adjusted to reflect a three year smoothing of realized and unrealized capital gains. Expense fund assets were allocated to each plan in proportion to reported payroll.
Changes in Valuation Methods, Assumptions, and Amortization Periods: None
Method of Recognizing Gains and Losses: Under the Frozen Attained Áge Normal Method, actuarial gains and losses are spread over future normal costs.

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



## 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 5,455 active members in Plan A of whom 2215 have vested retirement benefits including 221 participants in the Deferred Retirement Option Plan (DROP); 2,255 former Plan A members or their beneficiaries are receiving retirement benefits. An additional 2,311 Plan A members have contributions remaining on deposit with the system; of this number, 189 have vested rights for future retirement benefits. Census data on Plan B members may be found in Exhibit XXI. There are 2,069 active members in Plan B of whom 783 have vested retirement benefits including 49 participants in the Deferred Retirement Option Plan (DROP); 700 former Plan B members or their beneficiaries are receiving retirement benefits. An additional 766 Plan B members have contributions remaining on deposit with the system; of this number, 53 have vested rights for future retirement benefits. All individuals submitted were included in the valuation.

Census data submitted to our office is audited 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 reviewindicates 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. Notwithstanding the efforts made to improve data quality, ultimately we must rely on the accuracy of information provided to our office.

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. As indicated in the system's audit report, the net market value of Plan A's assets was $\$ 447,796,046$ as of June 30, 2001. Net investment income for fiscal 2001 measured on a market value basis for Plan A amounted to a net loss of $\$ 19,363,102$. The net market value of Plan B's assets was- $\$ 85,702,933$ as of June 30, 2001. Net investment income for fiscal 2001 measured on a market value basis for Plan B amounted to a net loss of $\$ 4,154,046$.

## COMMENTS ON ACTUARIAL METHODS AND ASSUMPTIONS

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

The actuarial assumptions utilized for the report are outlined on pages sixty-one through sixty-four. Assumptions for Plan A were the same as those used for the prior fiscal year. In Plan B, the rates of DROP entry in the first year of eligibility were reduced by eliminating the multiplier of 2.5 applied to the tabular rates. (Note: the fiscal 2000 report had inadvertently not stated that the tabular rates of Drop entry were multiplied by 2.5 in the first year of eligibility for both Plan A and Plan B.) Also, changes were made in the tabular rates of retirement and Drop entry to the extent that such changes were required by changes in the Plan's benefits. Since the eligibility standards for Plan B were reduced to allow members to retire or enter DROP at thirty years of service regardless of age, rates of retirement and DROP entry were necessary at ages below fifty-five. For retirement, these rates were set equal to 0.18 at ages below age fifty-five; for DROP entry at these ages these rates were set equal to 0.25 . In addition, rates for retirement and DROP entry were changed at age sixty since the reduction for early retirement at this age was eliminated. Rates of retirement and DROP entry were increased from 0.15 and 0.20 to 0.20 and 0.30 respectively. In the aggregate the assumptions represent our "best estimate" of future long-term experience for the fund. All calculations, recommendations, and conclusions are based on the assumptions specified. To the extent that prospective experience differs from that assumed, adjustments will be required to contribution levels. Such differences will be revealed in future actuarial valuations.

## CHANGES IN PLAN PROVISIONS

The following acts of the 2001 regular legislative session resulted in changes to provisions that affect the Municipal Employees' Retirement System:

Act 89 provides that any member who retires while in service on a disability retirement and has credit for the years of service required for normal retirement will, upon reaching normal retirement age, be eligible to receive full normal retirement benefits. To receive these benefits a member must
.file an application with the board of trustees of the retirement system. Upon commencement of the normal retirement benefits, payment of the disability benefits will cease. In addition, this act provides that any terminated member who is eligible for a disability benefit, and who retires under such benefit will, upon attaining normal vested retirement age, receive his full vested regular retirement and his disability benefit will cease.

Act 154 amended the statutes that govern the Public Retirement Systems' Actuarial Committee. It removed the "independent" actuary from the committee and reduced the number of members necessary for a quorum from five to four. It also changes the requirement for approval of the employer contribution rate from the consent of six members of the committee to the consent of a majority of those members who are present and voting.

Act 419 amends the statutes governing the purchase of credit for prior military service, including credit for state National Guard, coast guard, and reserve service. It eliminates the requirement that the member must have at least 18 months of creditable service in a retirement system before applying for purchase of military service credit. It also states that any member may purchase credit for his military service even when receiving retirement benefits pursuant to Chapter 1223 of Title 10 of the U.S. Code provided that the military service was rendered prior to the initial date of employment with the public retirement system.

Act 436 repealed the statutory provision that required the Board of Trustees of a system to approve all retirement benefits or other benefit allowances.

Act 452 amends the definition of "earnings" for retirement purposes to include supplemental salary received from the state, fees received for service of civil papers, commissions received as a result of sales and garnishment pursuant to R.S. 33:1704, and any taxable vehicle allowance.' This act is applicable only to the city marshal and deputy city marshals for the cities of Bossier City and Ruston.

Act 841 sets the rate of judicial interest for the past four years and stipulates that henceforth, the judicial interest rate for each calendar year will be 3.25 percentage points above the discount rate set by the Federal Reserve Board of Governors for October $1^{\text {st }}$ of the preceding year.

Act 843 provides that any person of the age of majority may inspect or obtain a copy of certain information related to any active member of a retirement system. That information includes the name of employer and dates of employment, salary reported by employer for the purpose of determining contributions paid, the number of years of service credited to the member's account, and the amount of benefits paid or payable to a member's DROP account.

Act 848 provides that the term of office for the person elected to the board of trustees in 2003 will be 5 years. The term of office for the person elected in 2006 will be 7 years. The terms of those individuals elected to succeed these board members will be 6 years.

Act 873 provides for retirement eligibility under Plan B with 30 years of service credit regardless of age and eliminates the penalty under Plan $B$ for retirement prior to age 62. In addition, this act amends the provision for survivor benefits under Plan B. The benefit payable to the surviving
spouse of a member who has at least 5 years of service credit, and who is not eligible for normal retirement benefits is either $30 \%$ of the member's final compensation payable to the spouse when they attain age 60 or an actuarial equivalent of $30 \%$ of the deceased member's final compensation, but not less than $15 \%$ of such final compensation. Either selection is payable for the life of the surviving spouse.

Act 960 provides that interest be credited to a member's BROP account after he has completed DROP participation.

Act 999 provides for the conversion of unused annual and sick leave to retirement credit. This provision will only apply to members of the system whose employer irrevocably elects to have this coverage. The actuarial cost of providing this conversion will be borne solely by the employer and will be paid to the board within thirty days of the member's retirement date.

Act 1079 repealed the provision that prevented a member from transferring credit from one system to 'another, retiring from or entering the DROP plan of the receiving system, and later becoming a member of the transferring system if he became employed in a position that made him eligible to join that system.

## ASSET EXPERIENCE

The actuarial and market rates of return for the past ten years are given below. These rates of return on assets were arrived at by assuming a uniform distribution of income and expense throughout the fiscal year.

PLAN A
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001

PLAN B
1992 1993

## 1994

1995
1996
1997.

1998 1999

| Actuarial Value | Market Value |
| :---: | :---: |
| 11.7\% | 13.4\% |
| 11.0\% | 10.7\% |
| 5.6\% | 1.0\% |
| 10.0\% | 13.2\% |
| 12.0\% | 10.6\% |
| 9.1\% * | 14.1\% |
| 10.0\% ** | 16.4\% |
| 12.1\% | 8.2\% |
| 11.0\% | 9.1\% |
| 4.5\% | -4.2\% |
| Actuarial Value | Market. Value |
| 13.2\% | 15.6\% |
| 10.8\% | 10.8\% |
| 5.7\% | -0.3\% |
| 9.8\% | 13.6\% |
| 11.6\% | 10.5\% |
| 9.2\% * | 14.7\% |
| 9.7\% ** | 16.2\% |
| 11.7\% | 7.9\% |


|  |  |  |
| :--- | ---: | ---: |
| $2000^{\prime}$ | $10.8 \%$ | $8.4 \%$ |
| 2001 | $4.2 \%$ | $-4.2 \%$ |

* Includes the effect of a change in methodology for determining actuarial value of assets. Prior to 1997 the values were based on market values for stocks and amortized cost for fixed income securities. In 1997, values for common stock were based on two-year smoothing of realized and unrealized capital gains.
** Includes the effect of a change from two-year smoothing of realized and unrealized capital gains on common stock to a threeyear smoothing method.

The actuarial rate of return is presented for comparison to the assumed long-term rate of return of $8 \%$ used for the valuation. This rate is calculated based on the actuarial value of assets and all interest; dividends, bond amortization, and recognized capital gains as given in Exhibit VI for Plan A and Exhibit XVII for Plan B. For Fiscal 2001, it includes one-third of all realized and unrealized capital gains or losses on common stock accrued during the fiscal year and one-third of those gains or losses accrued in the prior two fiscal years. It excludes unrealized gains or losses on fixed income securities. Prior to fiscal 1998, various other methods were used to calculate the actuarial value of assets. Yields in excess of the $8 \%$ assumption will reduce future costs; yields below $8 \%$ will increase future costs. The geometric mean rate of return on an actuarial basis over the past ten years has been $9.7 \%$ for Plan A and $9.6 \%$ for Plan B. For fiscal 2001, Plan A experienced net actuarial investment earnings of $\$ 15,904,829$ less than the actuarial assumed earnings rate of $8 \%$. For Plan B, the shortfall in earnings amounted to $\$ 3,266,633$. These actuarial losses increased the normal cost accrual rate by $1.5733 \%$ and $0.9004 \%$ respectively for Plan A and B.

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. The deferral of realized and unrealized capital gains and/or losses on common stocks was the main reason for the difference between the actuarial and market rates of return. Since the actuarial value of assets uses amortized cost for fixed income securities, this measure excludes the effect of unrealized capital gains (losses) on the fixed income investments. Also, the allocation of expense fund assets and income to both Plan A and Plan B produces an additional very small difference between the actuarial and market rates of return. During 2001, the fund earned $\$ 17,502,695$ of dividends and interest for Plan A and $\$ 3,716,637$ for Plan B. This income was offset by realized and unrealized capital losses of $\$ 35,303,761$ for Plan A and $\$ 7,529,945$ for Plan B. The geometric mean of the market value rates of return measured over the last ten years was $9.1 \%$ for Plan A and 9.1\% for Plan B.

At the end of the fiscal year, an exchange of assets and liabilities was made between the Plan A and Plan B trust funds in accordance with provisions of R.S. 11: 1862(F). Since the revision of the system on October 1, 1978, into Plans A and B, the number of members who have service in both plans has continued to increase. During fiscal 2001 a study was made to determine the liability in each plan related to members currently participating in the other plan. The study concluded that effective June 30, 2001 assets and liabilities totaling $\$ 9,304,083$ should be transferred from the Plan B to the Plan A trust. The result of the transfer was to relieve each plan of the liability associated with former plan members who were currently participating or had retired out of the other plan. Although the objective of the transaction was to transfer equal amounts of liabilities and assets, an actuarial loss to Plan B and gain to Plan A was produced. Analysis of the prior history revealed that
liabilities had previously been improperly assigned for retirees with service in both plans. In such cases, all payments had been made from the plan out of which the member retired; consequently liability had been solely assigned to that plan. The resulting actuarial gains and losses in plans A and B reduced the normal cost accrual rate in Plan A by $0.3310 \%$ and increased the normal cost accrual rate in Plan B by $0.9222 \%$. This result will be avoided in the future by transferring the appropriate assets and liabilities between funds at such time as members change membership from one fund to another. For fiscal 2001, we have identified three additional members who have changed plans as a result of a change in employment. In order to properly assign liabilities to the plan in which they currently contribute we recommend a transfer of assets of $\$ 5,517$ from Plan B to Plan A (adjusted with $8 \%$ interest from June 30, 2001 to the date of the transfer). The actuarial value of assets for Plan A and Plan B reflećt this recommended transfer of assets.

## PLAN A - DEMOGRAPHICS AND LIABILITY EXPERIENCE

A reconciliation of the census for the Plan is given in Exhibit X. The Plan's active contributing membership declined during the fiscal year with a population decrease of 131 members. The plan has experienced a decline in the active plan population of 425 members since 1997. If this trend continues, the plan will not be able to continue funding using the current approach. A restructuring of the amortization of the current frozen unfunded actuarial accrued liability will be required to prevent contributions as a percentage of payroll from continually increasing

A review of the active census by age indicates that over the last ten years the population in the under-forty age group has decreased while the proportion of active members over-forty increased. Over the same ten-year period the plan showed a slight decrease in the percentage of members with service less than ten years; the percentage of members with service over fifteen years has increased. These trends are indicative of a maturing population. The number of retirees and beneficiaries receiving benefits from the system increased by 42 during the fiscal year.

Plan liability experience for fiscal 2001 was favorable. The most significant factors were related to salary increases that were less than projections and withdrawals that exceeded projections. Both of these elements reduced costs. Retirements and disabilities below projected levels further reduced costs as did the excess of actual retiree deaths over projections. However, entries to the DROP exceeded projections. Plan liability gains reduced the normal cost accrual rate by $0.8382 \%$.

## PLAN B - DEMOGRAPFIICS AND LIABILITY EXPERIENCE

A reconciliation of the census for the Plan is given in Exhibit XXI. The Plan's active contributing membership decreased during the fiscal year with a population decrease of 3 members. The number of retirees and beneficiaries receiving benefits from the system increased by 11 .

A review of the active census by age indicates that over the last ten years the population in the under-forty age group has decreased while the proportion of active members over-forty increased. Over the same ten-year period the system showed a slight decrease in the percentage of members
with service less than ten years and the corresponding increase in the percentage of members with service over ten years. These trends are indicative of a maturing population.

Plan liability experience for fiscal 2001 was favorable absent the loss from transfer of assets to Plan A. The most significant factors were related to rates of DROP entry and disability, which were below projected levels. Actual withdrawals were in excess of projections as were retiree deaths; both of these factors reduced costs. Salary increases and rates of retirement were near assumed levels. Plan liability gains reduced the normal cost accrual rate by $0.2991 \%$.

## FUNDING ANALYSIS AND RECOMMENDATIONS

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

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

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. As a result of a freeze in the employer contribution rate in Plan B during fiscal 2001 excess employer contributions (adjusted with interest) of $\$ 454,561$ were collected. Pursuant to R.S. 11:105, these funds were utilized to reduce the Plan's frozen unfunded actuarial accrued liability by a like amount. Hence, the scheduled outstanding balance (as of June 30, 2001) of $\$ 7,374,197$ was reduced to $\$ 6,919,636$. Future amortization payments will be made according to the original amortization schedule. This will reduce the payment due in fiscal 2023 and eliminate the six final payments on the UAL. Notwithstanding, that the board of trustees froze the net direct employer contribution at $4.5 \%$ for fiscal 2002, it is unlikely any excess contributions will be
generated in fiscal 2002 since the actuarially required net direct employer contribution for fiscal 2002 exceeds $4.5 \%$.

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 2002 as of July 1, 2001, is $\$ 8,057,287$. The amortization payment on the plan's frozen unfunded actuarial accrued liability as of July 1,2001 , is $\$ 3,664,548$. The total actuarially required contribution is determined by adjusting these two values for interest (since payments are made throughout the fiscal year) and adding estimated administrative expenses. As given on line 14 of Exhibit I the total actuarially required contribution for fiscal 2002 is $\$ 13,041,549$. When this amount is reduced by projected tax contributions and revenue sharing funds, the resulting employers' net direct actuarially required contribution for fiscal 2002 is $\$ 10,223,883$. This is $7.89 \%$ of the projected Plan A payroll for fiscal 2002

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

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

Normal Cost Accrual Rate - Fiscal 2000
Factors Increasing the Normal Cost Accrual Rate:

| Asset Experience | $1.5733 \%$ |
| :--- | :--- |
| Cost of Living Increase | $0.3278 \%$ |
| Contribution Shortfall | $0.0695 \%$ |
| New Members | $0.0650 \%$ |
| Change in Benefits | $0.0539 \%$ |

Factors Decreasing the Normal Cost Accrual Rate:

| Liability Experience | $-0.8382 \%$ |
| :--- | :---: |
| Transfer of Funds and Liabilities from Plan B | $-0.3310 \%$ |
| Cost Accrual Rate - Fiscal 2001 | $6.7243 \%$ |

Normal Cost Accrual Rate - Fiscal 2001
6.7243\%

For Plan B, the derivation of the actuarially required contribution for the current fiscal year is given in Exhibit XII. The normal cost for fiscal 2002 as of July 1, 2001, is $\$ 2,512,850$. The amortization payment on the plan's frozen unfunded actuarial accrued liability as of July 1,2001 , is $\$ 730,917$. The total actuarially required contribution is determined by adjusting these to values for interest (since payments are made throughout the fiscal year) and adding estimated administrative expenses. As given on line 14 of Exhibit XII the total actuarially required contribution for fiscal 2002 is $\$ 3,663,161$. When this amount is reduced by projected tax contributions and revenue sharing funds, the resulting employers' net direct actuarially required contribution for fiscal 2002 is $\$ 2,705,856$. This is $6.16 \%$ of the projected Plan B payroll for fiscal 2002.

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

| Normal Cost Accrual Rate - Fiscal 2000 | $3.4404 \%$ |
| :--- | :--- |
| Factors Increasing the Normal Cost Accrual Rate: |  |
|  |  |
| Benefit Increase | $1.2687 \%$ |
| Transfer of Funds and Liabilities to Plan A | $0.9222 \%$ |
| Asset Experience | $0.9004 \%$ |
| Cost of Living Increase | $0.1658 \%$ |
| New Members | $0.0976 \%$ |

Factors Decreasing the Normal Cost Accrual Rate:

| Liability Experience | $-0.2991 \%$ |
| :--- | ---: |
| Assumption Change | $-0.2624 \%$ |
| Cost Accrual Rate - Fiscal 2001 | $6.2336 \%$ |

In addition to the above factors, payroll growth affects plan costs to the extent that payments on the system's unfunded liability are on a schedule that varies from actual trends in payroll growth or decline. If payroll changes at rates not consistent with the amortization schedule the result will be costs that change as a percentage of payroll. For fiscal 2002, the net effect of the change in payroll on amortization costs was to increase such costs by $0.10 \%$ of payroll for Plan A and reduce costs $.07 \%$ of payroll for Plan B. Required net direct employer contributions are also affected by the available ad valorem taxes and revenue sharing funds which the system receives each year. When these funds change as a percentage of payroll, net direct employer contributions are adjusted accordingly. We estimate that for Plan A these funds collected in fiscal 2002 will increase by $0.15 \%$ of payroll; in Plan B the corresponding increase is $0.17 \%$. Although the actuarially required net direct employer contribution rate for Plan A for fiscal 2002 is $7.89 \%$, the actual employer contribution rate for fiscal 2002 is $7.00 \%$ of payroll. After giving consideration to the expected shortfall in contributions collected in fiscal 2002, as detailed in Exhibit I, we recommend a net direct employer contribution of $8.00 \%$ of payroll for Plan A during fiscal 2003. Although the actuarially required net direct employer contribution rate in Plan B is $6.16 \%$, the actual employer contribution rate for fiscal 2002 is $4.50 \%$ of payroll. After giving consideration to the expected contribution shortfall in fiscal 2002, as detailed in Exhibit XII, we recommend a net direct employer contribution of $6.25 \%$ of payroll for Plan B during fiscal 2003.

## COST OF LIVING INCREASES

During fiscal 2001 the actual cost of living (as measured by the US Department of Labor CPI-U) increased by $3.25 \%$. Cost of living provisions for the system are detailed in R.S. 11:1761 and R.S. 11:246. The former statute allows the board to use interest earnings in excess of the normal
requirements to grant annual cost of living increases of $2 \%$ of each retiree's original benefit. R.S. 11:246 provides cost of living increases of retirees and beneficiaries over the age of 65 equal to $2 \%$. of the benefit in payment on October 1, 1977, or the date the benefit was originally received if retirement commenced after that date. R.S. 11:241 provides that cost of living benefits shall be in the form (unless the board otherwise specifies) of $\$ X \times(A+B)$ where $X$ is at most $\$ 1$ and " $A$ " represents the number of years of credited service accrued at retirement or at death of the member or retiree and " B " is equal to the number of years since retirement or since death of the member or retiree to June $30^{\text {th }}$ of the initial year of such increase. The provisions of this subpart do not repeal provisions f 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 2001 both Plan A and Plan B have met the necessary target ratio, but plan investment experience was below assumptions. Since COLAs can only be paid out of investment income in excess of the $8 \%$ assumption, the plan is unable to fund any cost of living increase for the fiscal year.

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

 June 30, 2001

AVA - Actuarial Value of Assets
UAL - Unfunded Accrued Liability

PVFeeCont - Present Value of Future Employee Contributions
PVFerCont - Present Value of Future Employer Normal Cost

Plan A
Components of Present Value of Future Benefits


## Plan A

## Components of Actuarial Funding



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

## Plan A <br> Frozen Unfunded Accrued Liability



Plan A


Plan A
Historical Asset Yields

G. S. CURRAN \& COMPANY, LTD.

## Plan A: Active - Census by Age (as a percent)



## Plan A: Active - Census by Service <br> (as a percent)


G. S. CURRAN \& COMPANY, LTD.

# Plan B - Components of Present Value of Future Benefits June 30, 2001 

AVA $\mathbf{\$ 8 9 , 9 3 7 , 9 4 0}$


AVA - Actuarial Value of Assets
UAL - Unfunded Accrued Liability

PVFeeCont - Present Value of Future Employee Contributions
PVFerCont - Present Value of Future Employer Normal Cost

## Plan B

## Components of Present Value of Future Benefits



## Plan B

## Components of Actuarial Funding



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

## Plan B

Frozen Unfunded Accrued Liability


## Plan B

Actuarial Value of Assets vs. GASB-25 Accrued Liability


Plan B
Historical Asset Yields

G. S. CURRAN \& COMPANY, LTD.

Plan B: Active - Census by Age
(as a percent)



## Plan A Exhibits

- 21 -
G. S. CURRAN \& COMPANY, LTD.


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

1. Present Value of Future Benefits
2. Present Value of Future Benefits
3. Frozen Unfunded Actuarial Accrued Liability ..... \$ 681,775,063
4. Actuarial Value of Assets ..... 66,303,626
465,259,344
5. Present Value of Future Employee Contributions ..... 82,237,210
6. Present Value of Future Employer Normal Costs (1-2-3-4)
. Prent Valup ..... 67,974,883
7. Present Value of Future Salaries ..... \$1,010,889,735
8. Employer Normal Cost Accrual Rate $(5 \div 6)$ ..... 6.724263\%
9. Projected Fiscal 2002 Salary for Current Membership ..... $\$ 119,824,097$
10. Employer Normal Cost as of July 1, 2001 (7x 8) ..... \$ 8,057,287
11. Amortization Payment on Frozen Unfunded Accrued Liability of $\$ 66,303,626$ over 28 remaining years with Payments increasing at $4.25 \%$ per year ..... 3,664,548
12. Total Employer Normal Cost \& Amortization Payment $(9+10)$ ..... $\$ 11,721,835$
13. Employer Normal Cost and Amortization Payment Interest Adjusted for Midyear Payment. ..... \$ 12,181,688
14. Estimated Administrative Cost for Fiscal 2002 ..... \$14. Gross Employer Actuarially Required Contribution forFiscal $2002(12+13)$$\$ 13,041,549$
15. Projected Tax Contributions for Fiscal 2002. ..... \$ ..... 2,696,292
16. Projected Revenue Sharing Funds for Fiscal 2002 ..... \$ ..... 121,374
17. Net Direct Employer Actuarially Required Contribution for Fiscal 2002 (14-15-16) ..... $10,223,883$
18. Projected Payroll (July 1, 2001 through June 30, 2002) ..... $\$ 129,613,359$
19. Net Direct Employer Actuarially Required Contribution as a \% of Projected Payroll for Fiscal $2002(17 \div 18)$. ..... 7.89\%
20. Actual Employer Contribution Rate for Fiscal 2002. ..... 7.00\%
21. Contribution Gain (Loss) as a Percentage of Payroll (20-19) ..... (0.89\%)
22. Adjustment to Following Year Payment for Contribution Gain(Loss) ..... (0.11\%)
23. Recommended Net Direct Employer Contribution Rate for 2003 (19-22) (Rounded to nearest .25\%) ..... 8.00\%

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

## Present Value of Future Benefits for Active Members:

Retirement Benefits ..... \$ 405,373,956
Survivor Benefits ..... 13,479,223
Disability Benefits ..... 15,871,403
Vested Deferred Termination Benefits ..... 17,099,917
Contribution Refunds ..... 12,566,050
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.. \$ ..... 5,730,307
Terminated Members with ReciprocalsDue Benefits at Retirement1,203,969
Terminated Members Due a Refund ..... 1,218,855
TOTAL Present Value of Future Benefits for Terminated Members ..... \$ ..... 8,153,131
Present Value of Future Benefits for Retirees:
Regular Retirees ..... \$ 161,587,435
Disability Retirees ..... $16,089,419$
Survivors \& Widows ..... 29,271,027
Reserve for Accrued Retiree DROP Account Balances ..... 2,283,502
TOTAL Present Value of Future Benefits for Retirees \& Survivors. ..... \$ 209,231,383
TOTAL Present Value of Future Benefits ..... \$ 681,775,063

## EXHIBIT III PLAN A: ACTUARIAL VALUE OF ASSETS

## Current Assets:

Cash ..... \$ 2,277,130
Contributions Receivable from Members ..... 2,763,663
Contributions Receivable from Employers ..... 1,947,814
Accrued Interest and Dividends on Investments ..... 3,514,359
6,372,710
Due From Other Funds ..... 9,175,752
TOTAL CURRENT ASSETS ..... $\$ 26,051,428$
Allocated Share of the Expense Fund ..... $\$ 1,701,239$
Property Plant \& Equipment ..... \$ ..... 590,398
Investments:
Common Stock ..... \$ 193,621,245Corporate Bonds116,141,739
Federal National Mortgage Corporation ..... 49,641,749
Federal Home Loan Mortgage Corporation ..... 34,308,748
Government National Mortgage Association ..... 14,142,307
U.S. Treasury Notes, Bonds and Bills ..... 10,812,063
Cash Equivalents
5,849,201
Deferred Capital Loses on Common stock ..... 19,276,560
TOTAL INVESTMENTS. ..... $\$ 443,793,612$
TOTAL ASSETS ..... \$ 472,136,677
Current Liabilities:
Investment Payable ..... \$
6,511,102
Accounts Payable ..... 234,679
Refunds Payable ..... 131,552
TOTAL CURRENT LIABILITIES ..... $\$ 6,877,333$
ACTUARIAL VALUE OF ASSETS ..... \$ 465,259,344
EXHIBIT IV
PLAN A: PRESENT VALUE OF FUTURE CONTRIBUTIONS
Employee Contributions to the Annuity Savings Fund ..... \$ 82,237,210
Employer Normal Contributions to the Pension Accumulation Fund ..... 67,974,883
Employer Amortization Payments to the Pension Accumulation Fund ..... 66,303,626
TOTAL PRESENT VALUE OF FUTURE CONTRIBUTIONS ..... $\$ 216,515,719$
EXHIBIT V
PLAN A: CHANGE IN FROZEN UNFUNDED ACTUARIAL ACCRUED LIABLLITY
Prior Year Frozen Unfunded Accrued Liability ..... \$ 64,907,400
Interest on Frozen Unfunded Accrued Liability ..... \$ 5,192,592
Employer Normal Cost for Prior Year ..... 6,933,099
Interest on the Normal Cost ..... 554,648
Administrative Expenses ..... 534,543
Interest on Expenses ..... 20,970
TOTAL Increases to Frozen Unfunded Accrued Liability ..... \$ $13,235,852$
Gross Regular Employer Contributions ..... \$ 10,716,260
Interest on Employer Contributions ..... 420,404
Contribution Shortfall (Excess) ..... 676,426
Interest on Contribution Shortfall (Excess) ..... 26,536
TOTAL Decreases to Frozen Unfunded Accrued Liability ..... \$ 11,839,626
CURRENT YEAR FROZEN UNFUNDED ACCRUED LIABILITY ..... \$ 66,303,626

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

Actuarial Value of Assets (June 30, 2000) ..... \$ ..... $447,557,888$
Income:
Member Contributions ..... \$Employer Contributions8,031,004
Ad Valorem Taxes ..... 2,564,113
Revenue Sharing Funds ..... 121,143
Irregular Contributions ..... 140,378
Transfer of Funds From Plan B 9,309,600
Total Contribution Income ..... \$
$31,407,077$
Interest and Dividend Income ..... \$Recognized Realized Capital Gains (Losses)17,606,909
Recognized Unrealized Capital Gains (Losses) ..... $(13,707,163)$
Realized Gains (Losses) on Fixed Income Securities ..... $(71,298)$
Bond Amortization Income (Expense) ..... $(46,112)$
Investment Expense$(1,562,036)$
Net Investment Income ..... \$$19,816,815$
TOTAL Income ..... \$ ..... 51,223,892
Expenses:
Retirement Benefits ..... \$
24,070,367
Funds Transferred to Another System. ..... 3,667,665
Refunds of Contributions ..... 3,359,372
DROP Disbursements ..... 1,896,945
Administrative Expenses ..... 534,543
TOTAL Expenses ..... \$ ..... $33,528,892$
Net Income for Fiscal 2001 (Income - Expenses) ..... \$ ..... $17,695,000$
Unadjusted Fund Balance as of June 30, 2001 ..... $\$ 465,252,888$
Adjustment for Change in Allocated Expense Fund Balance ..... \$6,456
Actuarial Value of Assets (June 30, 2001)\$ 465,259,344

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

Present Assets of the System Creditable to:
Annuity Savings Fund.................................................................................. \$ 82,735,604
Annuity Reserve Fund................................................................................. 206,947,881
Pension Accumulation Fund ........................................................................ 148,018,316
Deferred Retirement Option Plan Account ................................................... 10,094,245

NET MARKET VALUE OF ASSETS ............................................................. \$ 447,796,046
ADJUSTMENT FOR DEFERRAL OF REALIZED AND UNREALIZED
CAPITAL GAINS ON COMMON STOCK .................................................... $19,276,560$
ADJUSTMENT FOR UNRECOGNIZED CHANGE IN VALUE OF FIXED INCOME SECURITIES
$(3,520,018)$
ALLOCATED SHARE OF THE EXPENSE FUND ........................................... 1,706,756
ACTUARIAL VALUE OF ASSETS............................................................... \$ 465,259,344

## EXHIBIT VIII PLAN A: PENSION BENEFIT OBLIGATION

Present Value of Credited Projected Benefits Payable to Current Employees ..... \$ 294,107,184
Present Value of Benefits Payable to Terminated Employees ..... 8,153,131
Present Value of Benefits Payable to Current Retirees and Beneficiaries ..... 209,231,383.
TOTAL PENSION BENEFIT OBLIGATION ..... $511,491,698$

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

1. Actuarial Value of Assets Divided by PBO as of Fiscal 1986: ..... 65.05\%
2. Amortization of Unfunded Balance over 30 years: ..... 17.48\%
Adjustments in Funded Ratio Due to Changes in Assumption(s):
Changes for Fiscal 1988 ..... 4.97\%
Changes for Fiscal 1989 ..... (1.98)\%
Changes for Fiscal 1995 ..... (1.38)\%
Changes for Fiscal 1997 ..... (3.44)\%
Changes for Fiscal 1998 ..... (3.63)\%
Changes for Fiscal 2000 ..... (1.35)\%
3. TOTAL Adjustments ..... (6.81)\%
Amortization of Adjustments in Funded Ratio over 30 years:
Changes for Fiscal 1988 ..... (2.15)\%
Changes for Fiscal 1989 ..... 0.79\%
Changes for Fiscal 1995 ..... 0.28\%
Changes for Fiscal 1997 ..... 0.46\%
Changes for Fiscal 1998 ..... 0.36\%
Changes for Fiscal 2000 ..... 0.05\%
4. TOTAL Amortization of Adjustments ..... (0.21)\%
5. Target Ratio for Current Fiscal Year (Lesser of $1+2+3+4$ or $100 \%$ ) ..... $75.51 \%$
6. Actuarial Value of Assets Divided by PBO as of June 30, 2001 ..... 90.96\%

EXHIBIT X
PLAN A: CENSUS DATA

|  | Active | Terminated with Funds on Deposit | DROP | Retired | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number of members as of June 30, 2000 | 5,365 | 2,295 | 193 | 2,213 | 10,066 |
| Additions to Census <br> Initial membership <br> Death of another member Omitted in error last year | $\begin{array}{r} 596 \\ (2) \end{array}$ | 87 |  | 2 | 683 |
| 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 <br> DROP participants retiring <br> DROP returned to work <br> Omitted in error last year | (121) <br> (78) <br> (84) <br> 14 <br> 1 <br> 21 <br> 28 | 121 <br> (14) <br> (12) | 84 <br> (28) <br> (28) | 78 <br> 12 <br> (1) <br> 28 | 21 |
| Eliminated from Census <br> Refund of contributions <br> Deaths <br> Included in error last year <br> Adjustment for multiple records | (489) <br> (13) <br> (3) <br> (1) | (161) <br> (2) <br> (3) |  | (78) | (650) <br> (93) <br> (6) <br> (1) |
| Number of members as of June 30, 2001 | 5,234 | 2,311 | 221 | $2,255$ | 10,021 |

plan a - actives census by age:

| Age | Number <br> Male | Number <br> Female | Total <br> Number | Average | Salary |
| :---: | :---: | :---: | :---: | :---: | ---: |

the ACtive census Includes 2,215 ACIIVES WITH VESTED BENEFITS, INCLUDING 221 DROP PARTICIPANTS AND 73 ACTIVE FORMER DROP PARTICIPANTS.

PLAN A - TERMINATED MEMBERS DUE A DEFERRED RETIREMENT BENEFIT:

| Age | Number Male | Number <br> Female | Total <br> Number | Average Benefit | Total <br> Benefit |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 31-35 | 4 | 4 | 8 | 6,529 | 52,229 |
| 36-40 | 5 | 12 | 17 | 8,079 | 137,341 |
| 41-45 | 11 | 17 | 28 | 8,556 | 239,566 |
| 46-50 | 17 | 9 | 26 | 11,313 | 294,147 |
| 51-55 | 34 | 12 | 46 | 8,484 | 390,285 |
| 56-60 | 40 | 10 | 50 | 6,904 | 345,182 |
| 61-65 | 11 | 2 | 13 | 4,204 | 54,653 |
| 66-70 | 0 | 1 | 1 | 1,43.7 | 1,437 |
| TOTAL | 122 | 67 | 189 | 8,015 | 1,514,840 |

PLAN A - terminated members due a refund of contributions:

| Contributions Ranging |  | Total |  |
| ---: | ---: | ---: | :---: |
| From | To | Number | Contributions |
| 0 | - | 99 | 1,526 |

PLAN A - REGULAR RETIREES:

| Age | Number Male | Number <br> Female | Total <br> Number | Average <br> Benefit | Total <br> Benefit |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 36-40 | 2 | 1 | 3 | 8,667 | 26,001 |
| 41-45 | 2 | 1 | 3 | 13,135 | 39,405 |
| 46-50 | 6 | 5 | 11 | 19,771 | 217,484 |
| 51-55 | 39 | 6 | 45 | 21,550 | 969,757 |
| 56-60 | 62 | 18 | 80 | 21,040 | 1,683,225 |
| 61-65 | 210 | 58 | 268 | 15,032 | 4,028,684 |
| 66-70 | 275 | 69 | 344 | 13,312 | 4,579,309 |
| 71-75 | 244 | 76 | 320 | 11,872 | 3,798,979 |
| 76-80 | 197 | 49 | 246 | 9,980 | 2,455,199 |
| 81-85 | 104 | 34 | 138 | 8,805 | 1,215,043 |
| 86-90 | 56 | 8 | 64 | 7,214 | 461,727 |
| 91-99 | 16 | 4 | 20 | 3,158 | 63,161 |
| TOTAL | 1,213 | 329 | 1,542 | 12,671 | 19,537,974 |

PLAN A - DISABILITY RETIREES:

| Age | Number Male | Number <br> Female | Total <br> Number | Average Benefit | Total <br> Benefit |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 26-30 | 1 | 0 | 1 | 8,208 | 8,208 |
| 31-35 | 1 | 1 | 2 | 13,119 | 26,237 |
| 36-40 | 7 | 1 | 8 | 7,637 | 61,094 |
| 41-45 | 10 | 3 | 13 | 8,851 | 115,057 |
| 46-50 | 30 | 5 | 35 | 8,907 | 311, 751 |
| 51-55 | 31 | 4 | 35 | 10,580 | 370,295 |
| 56-60 | 32 | 8 | 40 | 8,947 | 357,883 |
| 61-65 | 19 | 5 | 24 | 7,333 | 175,988 |
| 66-70 | 15 | 3 | 18 | 6,735 | 121,230 |
| 71-75 | 12 | 3 | 15 | 4,253 | 63,802 |
| 76-80 | 7 | 1 | 8 | 5,460 | 43,682 |
| 81-85 | 2 | 0 | 2 | 8,411 | 16,822 |
| 91-99 | 0 | 1 | 1 | 1,437 | 1,437 |
| TOTAL | 167 | 35 | 202 | 8,285 | 1,673,486 |

PLAN A - SURVIVORS:

| Age | Number Male | Number Female | Total <br> Number | Average Benefit | Total <br> Benefit |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 0-25 | 0 | 4 | 4 | 7,995 | 31,978 |
| 26-30 | 0 | 1 | 1 | 7,042 | 7,042 |
| 31-35 | 2 | 2 | 4 | 3,141 | 12,564 |
| 36-40 | 2 | 8 | 10 | 8,317 | 83,171 |
| 41-45 | 2 | 13 | 15 | 6,834 | 102,514 |
| 46-50 | 1 | 16 | 17 | 9,732 | 165,438 |
| 51-55 | 1 | 27 | 28 | 6,597 | 184,718 |
| 56-60 | 2 | 36 | 38 | 8,595 | 326,607 |
| 61-65 | 2 | 52 | 54 | 8,258 | 445,924 |
| 66-70 | 2 | 60 | 62 | 6,761 | 419,162 |
| 71-75 | 1 | 81 | 82 | 9,240 | 757,702 |
| 76-80 | 8 | 63 | 71 | 7,047 | 500,305 |
| 81-85 | 1 | 69 | 70 | 5,152 | 360,607 |
| 86-90 | 0 | $\wedge 0$ | 40 | 4,150 | 166,006 |
| 91-99 | 1 | 14 | 15 | 4,205 | 63,075 |
| TOTAL | 25 | 486 | 511 | 7,097 | 3,626,813 |

PLAN A - ACTIVE MEMBERS:

Completed Years of Service

plan a - average annoal sanary of active mevbers:

| Attained Ages | Completed Years of Service |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0 | 1 | 2 | 3 | 4 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30\&Over | Average Salary |
| 0-20 | 12,611 | 14,315 | 14,142 |  |  |  |  |  |  |  |  |  |
| 21-25 | 14,335 | 15,024 | 16,235 | 17,745 | 20,038 |  |  |  |  |  |  | 13,009 |
| 26-30 | 17,825 | 17,452 | 18,978. | 19,384 | 21,226 | 21,306 | 25,744 |  |  |  |  | 15,462 |
| 31-35 | 16,433 | 18,344 | 18,472 | 19,352 | 20,523 | 22,955 | 25,716 |  |  |  |  | 19,560 |
| 36-40 | 15,211 | 18,613 | 19,258 | 19,257 | 18,802 | 22,664 | 25,716 26,428 | 23,644 |  |  |  | 20,910 |
| $42-45$ $46-50$ | 18,022 | 16,805 | 19,598 | 20,429 | 20,808 | 23,214 | 26,428 | 28,810 29,755 | 30,492 29,580 |  |  | 22,655 24,152 |
| $46-50$ $51-55$ | 16,410 19,256 | 19,074 | 20,817 | 21,205 | 21,951 | 22,295 | 27,036 | 28,045 | 29,580 33,300 | 37,967 32,085 |  | 24,152 25,436 |
| $51-55$ $56-60$ | 19,256 | 20,650 | 22,210 | 20,398 | 20,400 | 21,704 | 25,482 | 28,165 | 29,882 | 31,335 | 27,872 33,933 | 25,436 25,133 |
| 61-65 | 18,150 | 16,973 23,320 | 19,263 24,633 | 20,640 | 19,266 | 20,286 | 22,961 | 26,296 | 29.485 | 28,976 | 31,290 | 23,329, |
| 66-70 | 11,587 | 18,168 | 27,291 | 27,811 | 23,972 12,596 | 19,543 | 24,154 | 26,678 | 27,646 | 28,904 | 29,433 | 24,452 |
| 71 \& Over | 12,180 | 11, 763 | 14,843 | 12,84 | 12,596 | 18,210 14,116 | 18,601 | 24,424 | 26,854 | 30,994 | 21,196 | 20,885 |
|  |  |  |  |  | 11,267 | 14,116 | 24,617 | 19,410 | 27,955 | 19,561 | 17,817 | 17,147 |
| Average | 16,375 | 17,853 | 19,610 | 20,202 | 20,412 | -21,859 | 25,179 | 27,925 | 30,438 | , |  |  |

PLAN A - TERMINATED LIEMBERS DUE A DEFERRED RETIREMENT BENEFIT:

plan a - average annual benefits of terminated members due a deferred retitrempnt benerit:
Years Until Retirement Eligibility

| Attained Ages | 0 | 1 | 2 | 3 | 4 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30\&Over | Average Benefit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0-30 |  |  |  |  |  |  |  |  |  |  |  |  |
| 31-35 |  |  |  |  |  |  |  |  |  |  |  | 0 |
| 36-40 |  |  |  |  |  |  |  |  |  | 6,529 |  | 6,529 |
| 41-45 |  |  | . |  |  | 1,480 |  | 8.556 | 8,491 |  |  | 8,079 |
| 46-50 |  |  |  |  |  |  | 11,313 | 8,556 |  |  |  | 8,556 |
| 51-55 |  |  |  |  |  |  | 21,313 |  |  |  |  | 11,313 |
| 56-60 | 7,006 | 3,074 | 5,079 | 7,122 | 8,462 | $33,827$ |  |  |  |  |  | 8,484 |
| 61-65 | 4,204 |  | 5,079 | 7,122 | 0,462 |  |  |  |  |  |  | 6,904 |
| 66-70 | 1,437 |  |  |  |  |  |  |  |  |  |  | 4,204 |
| 71 \& Over |  |  |  |  |  |  |  |  |  |  |  | 1,437 |
| Average | 5,097 | 3,074 | 5,079 | 7,122 | 8,462 | 8,866 | 11,313 | 8,556 | 8, 491 | 6, 529 |  |  |

PLAN A - SERVICE RETIREES:
Completed Years Since Retirement

| Attained Ages | 0 | 1 | 2 | 3 | 4 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30\&0ver | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $0-50$ | 4 | 12 |  | 1 |  |  |  |  |  |  |  |  |
| 51-55 | 14 | 16 | 3 | 7 | 1 | 2 | 2 |  |  |  |  | 17 |
| 56-60 | 15 | 12 | 9 | 14 | 7 | 18 | 5 |  |  |  |  | 45 |
| 61-65 | 41 | 32 | 39 | 28 | 25 | 66 | 34 |  |  |  |  | 80 |
| 66-70 | 19 | 26 | 27 | 16 | 27 | 147 | 62 | 17 | 1 |  |  | 268 |
| 71-75 | 4 | 10 | 11 | 11 | 3 | 106 | 124 | 47 | 3 |  |  | 344 |
| 76-80 | 2 | 2 | 3 | 2 | 4 | 106 | 124 | 83 | 8 |  |  | 320 |
| 81-85 | 2 |  | 1 | 2 |  | 26 1 | 29 | 87 | 21 |  |  | 246 |
| 86-90 |  |  | 1 | 1 |  | 1 | 20 | 56 | 56 | 2 |  | 138 |
| $91 \&$ Over |  |  |  | 1 |  | 3 | 8 | 8 | 35. | 8 |  | 64 |
|  |  |  |  |  |  |  | 2 | 3 | 3 | 11 | 2 | 20 |
| Totals | 101 | 110 | 94 | 80 | 67 | 369 | 355 | 216 | 127 | 21 | 2 | 1542 |

plan a - average annual benefits payable to service retirees:

| Attained Ages | Completed Years Since Retirement |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0 | 1 | 2 | 3 | 4 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30\&Over | Average Benefit |
| 0-50 | 13,323 | 18,693 |  | 5,287 |  |  |  |  |  |  |  |  |
| $51-55$ | 18,084 | 23,967 | 29,776 | 25,536 | 23,185 | 15,139 | 5,782 |  |  |  |  | 16,641 |
| 56-60 | 21,402 | 17,897 | 18,955 | 26,004 | 18,782 | 22,497 | 15,272 |  |  |  |  | 21,550 |
| 61-65 | 12,552 | 10,743 | 14,012 | 15,065 | 12,182 | 18,375 | 15,272 19,755 |  |  |  |  | 21,040 |
| $66-70$ $71-75$ | 8,675 | 11,019 | 10,858 | 11,337 | 13,491 | 12,409 | 17,850 | 2,894 19,683 | 7,222 |  |  | 15,032 13,312 |
| 71-75 | 7,878 | 7,257 | 9,326 | 10,885 | 13,219 | 11,409 | 11,263 | 16,199 | 16,307 |  |  | 13,312 11,872 |
| $76-80$ $81-85$ | 7,407 | 7,474 | 5,778 | 5,847 | 7,467 | 10,482 | 10,974 | 8,825 | 11,420 |  | 7 | 11,872 9,980 |
| 81-85 | 9,871 |  | 7,126 23,837 |  |  | 15,768 | 10,536 | 9,227 | 7,669 | 7,759 |  | 8,805 |
| $91 \&$ Over |  |  | 23,837 | 10,443 |  | 4,309 | 8,007 | $3,975$ | 8,182 | 4,038 |  | 7,214 |
| $91 \times$ Over |  |  |  |  |  |  |  | 2,915 | 3,263 | 3,254 | 743 | 3,158 |
| Average | 13,594 | 14,003 | 13,303 | 16,165 | 13,328 | 13,503 | 13,046 | 10,935 | 8,874 | 3,982 | 743 | 12,671 |

pLAN A - dISABILITY RETTREES:

| Attained Ages | Completed Years Since Retirement |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0 | 1 | 2 | 3 | 4 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 3080ver | Total |
| 0-30 |  | 1 |  |  |  |  |  |  |  |  |  |  |
| 31-35 |  |  | 1 |  | 1 |  |  |  |  |  |  | 1 |
| 36. - 0 |  |  | 1 |  | 1 | 6 |  |  |  |  |  | 2 |
| 41-45 | 2 | 2 | 1 | 1 | 1 | 5 |  |  |  |  |  | 8 |
| 46-50 | 4 | 2 | 3 | 7 | 2 | 10 | 6 | 1 |  |  |  | 13 |
| 51-55 | 5 | 3 | 5 |  | 1 | 14 | 5 | 1 |  |  |  | 35 |
| 56-60 | 6 | 5 | 4 |  | 2 | 14 | - 5 |  | 2 |  |  | 35 |
| 61-65 |  | 1 |  |  | 2 | 13 | 3 | 4 | 2 |  |  | 40 |
| 66-70 |  |  |  | 2 | 1 | 13 | 1 | 5 | 3 | 1 |  | 24 |
| 71-75 |  |  |  | 1 | 1 | 7 | 6 | 4 |  | 1 |  | 18 |
| 76-80 |  | 1 | 1 |  |  | 1 |  | 3 | 2 | 2 |  | 15 |
| 81-85 |  |  |  |  |  | 1 |  | 1 | 1 | 3 |  | 8 |
| 86-90 |  |  |  |  |  |  |  | 1 | 1 |  |  | 2 |
| 91 \& Over. |  |  |  |  |  |  |  |  |  |  |  | 0 |
|  |  |  |  |  |  |  |  |  |  |  | 1 | 1 |
| Totals | 17 | 15 | 16 | 10 | 9 | 75 | 22 | 19 | 11 | 7 | 1 | 202 |

plan A - average annual benefits payable to disability retirees:

|  | Completed Years since Retirement |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Attained Ages | 0 | 1 | 2 | 3 | 4 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30\&Over | Average Benefit |
| 0-30 |  | 8,208 |  |  |  |  |  |  |  |  |  |  |
| 31-35 |  |  | 14,175 |  | 12,062 |  |  |  |  |  |  | $8,208$ |
| 36-40 |  |  | 5,878 |  | 7,614 |  |  |  |  |  |  | $13,118$ |
| 41-45 | 8,030 | 12,250 | 6,837 | 7,983 | 9,167 | 8,880 | 6,110 |  |  |  |  | 7,637 |
| 46-50 | 10,460 | 5,440 | 10,295 | 8,594 | 11,226 | 8,599 | 8,914 |  |  |  |  | 8,851 |
| 51-55 | 9,894 | 10,459 | 11,660 |  | 22,681 | 12,305 | 6,914 | 6,060 |  |  |  | 8,907 10,580 |
| $56-60$ $61-65$ | 9,842 | 6,166 | 7,955 |  | 22,403 | 11,395 | 6,016 |  | 3,062 5,717 |  |  | 10,580 8,947 |
| $61-65$ $66-70$ |  | 9,081 |  |  | 5, 174 | 7,601 | 7,618 | 6,894 | 5,717 4,913 | 5,611 |  | 8,947 7,333 |
| 71-75 |  |  |  | 4,188 4.582 | 5,174 | 5,674 | 6,783 | 9,395 |  | 5,220 |  | 6,735 |
| 76-80 |  | 3,054 | 13,175 | 4,582 |  | 4,187 |  | 4,593 | 4.732 | 3,332 |  | 4,254 |
| 81-85 |  |  | 13,175 |  |  | 5,206 |  | 8,458 | 2,014 | 3,925 |  | 5,460 |
| 86-90 |  |  |  |  |  |  |  | 10,027 | 6,795 |  |  | 8,411 |
| 91 \& Over |  |  |  |  |  |  |  |  |  |  |  | 0 |
|  |  |  |  |  |  |  |  |  |  |  | 1,437 | 1,437 |
| Average | 9,789 | 7,862 | 10,067 | 7,691 | 10,439 | 8,953 | 7,200 | 7,686 | 4,597 | 4,182 | 1.437 | 8,285 |

PLAN A - SURVIVING bENEFTCIARIES of FORMER MEMBERS:

plan a - average annual benefits payable to survivors of former members:

| Attained Ages | Completed Years Since Retirement |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0 | 1 | 2 | 3 | 4 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30\&Over | Average <br> Benefit |
| 0-20 |  | 4,443 | - |  |  |  |  |  |  |  | * |  |
| 21-25 |  |  |  |  |  | 11,546 |  |  |  |  |  | 7,995 |
| 26-30 |  | - |  |  |  | 7,042 |  |  |  |  |  | 0 |
| 31-35 |  |  | 4,554 | , |  | 7,042 |  |  |  |  |  | 7,042 |
| 36-40 |  | 20,823 | 7,286 | 15,682 | 8,215 | 7,025 | 6,416 |  |  |  |  | 3,141 |
| 41-45 |  |  | 11,230 | 15,682 | $15,810$ | 6,025 | 3,199 |  | 1,533 |  |  | 8,317 |
| 46-50 |  | 20,220 | 16,057 | 8,486 |  | 9,811 | 7,199 |  |  |  |  | 6,834 |
| $51-55$ $56-60$ |  |  | 4,554 | 8,412 | 10,937 | 4,611 | 5,576 | 9,826 7,147 |  |  | - | $9,732$ |
| $56-60$ $61-65$ | 8,083 | 7,149 | 13,935 | 8,044 | 10,902 | -9,982 | 5,576 | 7,167 6,232 |  |  |  | $6,597$ |
| $61-65$ $66-70$ |  | 13,176 | 11,065 | 12,711 | 13,092 | 5,693 |  | 5,796 |  |  |  | 8,595 |
| $66-70$ $71-75$ | 8,013 |  | 6,715 | 2,586 | $8,951$ | 7,444 | 7,591 | 5,796 6,870 | 6,748 2,947 | 2,008 |  | 8,258 |
| $71-75$ $76-80$ |  |  | 6,142 |  |  | 8,081 | 10,981 | 10,064 | 6,367 | 2,008 | 257 | 6,761 |
| 81-85 |  |  | 11,732 |  |  | 8,824 | 11,693 | 7,561 | 5,515 | 2,639 | 871 | 9,240 |
| 86-90 |  |  |  |  |  | 16,914 | 6,875 | 6,146 | 4,371 | 2,144 | 1,711 | 5,152 |
| 91 \& Over |  |  |  |  |  |  | 6,843 | 10,440 | 5,144 | 2,976 | 319 | 4,150 |
|  |  |  |  | - |  |  | 4,707 | 9,421 | 5,923 | 4,542 | 982 | 4,205 |
| Average | 8,060 | 11,057 | 9,344 | 9,327 | 11,136 | 7,897 | 8,960 | 7,733 | 4,974 | 2,921. | 975 |  |
|  |  |  |  |  |  |  |  |  |  |  |  | 7,097 |

## EXHIBIT XI <br> PLAN A: YEAR TO YEAR COMPARISON

|  |  | Fiscal 2001 |  | Fiscal 2000 |  | Fiscal 1999 |  | Fisçal 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of Active Members |  | 5,455 |  | 5,558 |  | 5,706 |  | 5,740 |
| Number of Retirees and Survivors |  | 2,255 |  | 2,213 |  | 2,130 |  | 2,081 |
| Number Terminated Due Deferred Benefits |  | 189 |  | 187 |  | 150 |  | 152 |
| Number Terminated Due Refund |  | 2,122 |  | 2,108 |  | 2,010 |  | 1,942 |
| Active Lives Payroll | \$ | 125,304,827 | \$ | 124,683,590 | \$ | 120,568,583 |  | 116,609,501 |
| Retiree Benefits in Payment | \$ | 24,838,273 | \$ | 23,418,404 | \$ | 21,553,214 | \$ | 20,129,226 |
| Market Value of Assets | \$ | 447,796,046 | \$ | 469,525,372 | \$ | 436,446,684 | \$ | 408,685,269 |
| Ratio of Actuarial Value of Assets to Actuarial Accrued Liability |  | 87.53\% |  | 87.33\% |  | 86.57\% |  | 85.65\% |
| Actuarial Accrued Liability (As defined by GASB-25) | \$ | 531,562,970 | \$ | 512,465,288 | \$ | 472,653,880 | \$ | 432,158,125 |
| Actuarial Value of Assets | \$ | 465,259,344 | \$ | 447,557,888 | \$ | 409,182,585 | \$ | 370,154,019 |
| Unfunded Actuarial Accrued Liability | \$ | 66,303,626 | \$ | 64,907,400 | \$ | 63,471,295 | \$ | 62,004,106 |
| Present Value of Future Employer Normal Cost | \$ | 67,974,883 | \$ | . $59,512,163$ | \$ | 48,158,874 | \$ | 38,443,452 |
| Present Value of Future Employee Contributions | \$ | 82,237,210 | \$ | 83,646,334 | \$ | 81,782,562 | \$ | 86,763,021 |
| Present Value of Future Benefits | \$ | 681,775,063 | \$ | 655,623,785 | \$ | 602,595,316 | \$ | 557,364,598 |

Fiscal 2002 Fiscal 2001- Fiscal 2000 Fiscal 1999

| Employee Contribution Rate | $9.25 \%$ | $9.25 \%$ | $9.25 \%$ | $9.25 \%$ |
| :--- | :--- | :--- | :--- | :--- |
| Proj. Tax Contribution as \% of Projected Payroll | $2.17 \%$ | $2.02 \%$ | $2.02 \%$ | $2.08 \%$ |
| Actuarially Req'd Net Direct Employer Cont. Rate | $7.89 \%$ | $7.03 \%$ | $6.20 \%$ | $4.92 \%$ |
| Actual Employer Direct Contribution Rate | $7.00 \%$ | $6.25 \%$ | $5.75 \%$ | $5.75 \%$ |


|  | Fiscal 1997 |  | Fiscal 1996 |  | Fiscal 1995 | Fiscal 1994 | Fiscal 1993 | Fiscal 1992 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 5,880 |  | 5,820 |  | . 5,668 | 5,655 | 5,639 | 5,503 |
|  | 2,045 |  | 2,022 |  | 1,951 | 1,923 | 1,832 | 1,756 |
|  | 163 |  | 158 |  | 135 | 124 | 126 | 136 |
|  | 1,882 ${ }^{\text {「 }}$ |  | 1,888 |  | 1,827 | 1,755 | 1,700 | 1,716 |
| \$ | 115,687,749 | \$ | 112,212,880 | \$ | 105,755,181 | \$ 102,250,546 | \$ 98,361,409 | \$ 94,452,028 |
| \$ | 18,865,469 | \$ | 17,947,961 | \$ | 16,540,168 | \$ 15,975,744 | \$ 14,436,698 | \$ 13,094,424 |
| \$ | 358,812,541 | \$ | 317,277,291 | \$ | 290,829,063 | \$ 265,002,413 | \$ 264,500,017 | \$ 238,680,536 |
|  | 85.05\% |  | 84.36\% |  | 83.37\% | 82.87\% | 82.51\% | 81.31\% |
| \$ | 404,727,303 | \$ | 377,279,030 | \$ | 345,626,503 | \$ 326,696,611 | \$ 311,303,558 | \$ 283,259,835 |
| \$ | 344,213,563 | \$ | 318,271,740 | \$ | 288,135,401 | \$ 270,725,765 | \$ 256,851,992 | \$ 230,322,094 |
| \$ | 60,513,740 | \$ | 59,007,290 | \$ | 57,491,102 | \$ 55,970,846 | \$ 54,451,566 | \$ 52,937,741 |
| \$ | 45,413,959 | \$ | $46,384,507$ | \$ | 46,295,326 | \$ 46,572,782 | \$ 35,853,896 | \$ 39,896,383 |
| \$ | 87,008,081 | \$ | 85,308,608 | \$ | 80,932,808 | \$ 79,722,087 | \$ 76,682,342 | \$ 74,026,176 |
| \$ | 537,149,343 | \$ | 508,972,145 | \$ | 472,854,637 | \$ 452,991,480 | \$ 423,839,796 | \$ 397,182,394 |


| Fiscal 1998 | Fiscal 1997 | Fiscal 1996 | Fiscal 1995 | Fiscal 1994 | Fiscal 1993 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $9.25 \%$ | $9.25 \%$ | $9.25 \%$ | $9.25 \%$ | $9.25 \%$ | $9.25 \%$ |
| $1.93 \%$ | $1.76 \%$ | $1.81 \%$ | $1.80 \%$ | $1.76 \%$ | $1.68 \%$ |
| $5.73 \%$ | $5.91 \%$ | $6.24 \%$ | $6.55 \%$ | $5.49 \%$ | $6.03 \%$ |
| $5.75 \%$ | $6.25 \%$ | $6.75 \%$ | $5.50 \%$ | $6.00 \%$ | $7.25 \%$ |

## Plan B Exhibits

G. S. CURRAN \& COMPANY, LTD.

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

1. Present Value of Future Benefits ..... \$ 135,968,943
2. Frozen Unfunded Actuarial Accrued Liability ..... \$ 6,919,636
3. Actuarial Value of Assets ..... \$ 89,937,940
4. Present Value of Future Employee Contributions ..... \$ 16,496,208
5. Present Value of Future Employer Normal Costs (1-2-3-4) ..... \$ 22,615,159
6. Present Value of Future Salaries ..... \$ 362,795,982
7. Employer Normal Cost Accrual Rate ( $5 \div 6$ ) ..... $6.233575 \%$
8. Projected Fiscal 2002 Salary for Current Membership ..... \$ ..... 40,311,546
9. Employer Normal Cost as of July 1, 2001 (7x8) ..... 2,512,850
10. Amortization Payment on Frozen Unfunded Accrued Liability of $\$ 6,919,636$ with Payments decreasing at 2\% per year ..... \$ ..... 730,917
11. TOTAL Employer Normal Cost \& Amortization Payment $(9+10)$ ..... \$ ..... 3,243,767
12. Employer Normal Cost and Amortization Payment Interest Adjusted for Midyear Payment. ..... \$ ..... 3,371,022
13. Estimated Administrative Cost for Fiscal 2002 ..... \$ ..... 292,139
14. TOTAL Employer Actuarially Required Contribution for Fiscal $2002(12+13)$ ..... \$ ..... 3,663,161
15. Projected Tax Contributions for Fiscal 2002 ..... \$ ..... 916,068
16. Projected Revenue Sharing Funds for Fiscal 2002 ..... \$ ..... 41,237
17. Net Direct Employer Actuarially Required Contribution for Fiscal 2002 (14-15-16) ..... \$ ..... 2,705,856
18. Projected Payroll (July 1, 2001 through June 30, 2002) ..... \$ ..... 43,912,771
19. Net Direct Employer Actuarially Required Contribution as a \% of Projected Payroll for Fiscal $2002(17 \div 18)$ ..... 6.16\%
20. Actual Employer Contribution Rate for Fiscal 2002 ..... 4.50\%
21. Contribution Gain (Loss) as a Percentage of Payroll (20-19) ..... (1.66\%)
22. Adjustment to Following Year Payment for Contribution Gain(Loss) ..... (.18\%)
23. Recommended Net Direct Employer Contribution Rate for 2003 (19-22) (Rounded to nearest .25\%) ..... 6.25\%

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

Present Value of Future Benefits for Active Members:
Retirement Benefits ..... \$ 80,775,827
Survivor Benefits ..... 3,749,476
Disability Benefits ..... 3,976,927
Vested Deferred Termination Benefits ..... 4,994,435
Contribution Refunds ..... 2,534,462
TOTAL Present Value of Future Benefits for Active Members ..... \$ 96,031,127
Present Value of Future Benefits. for Terminated Members:
Terminated Vested Members Due Benefits at Retirement.... \$ ..... 761,516
Terminated Members with Reciprocals
Due Benefits at Retirement ..... 177,086
Terminated Members Due a Refund ..... 151,255
TOTAL Present Value of Future Benefits for Terminated Members

$\qquad$ ..... \$
1,089,857
Present Value of Future Benefits for Retirees:
Regular Retirees ..... \$ 29,999,031
Disability Retirees ..... 2,041,072
Survivors \& Widows ..... 6,494,658
Reserve for Accrued Retiree DROP Account Balances. ..... 313,198
TOTAL Present Value of Future Benefits for Retirees \& Survivors ..... \$ ..... 38,847,959
TOTAL Present Value of Future Benefits ..... \$ 135,968,943

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

Current Assets:
Cash ..... \$ 532,062
Contributions Receivable from Members ..... 508,986
Contributions Receivable from Employers ..... 472,878
Accrued Interest on Investments ..... 741,261
Dividends Receivable ..... 18,173
Investments Receivable ..... 1,448,996
TOTAL CURRENT ASSETS ..... \$ 3,722,356
Allocated Share of the Expense Fund ..... \$ ..... 577,998
Property, Plant \& Equipment ..... \$ 182,615
Investments:
Common Stock ..... \$ 42,782,232
Corporate Bonds ..... 26,093,437
Federal National Mortgage Corporation ..... 13,591;818
Federal Home Loan Mortgage Corporation ..... 3,960,057
Government National Mortgage Association ..... 2,374,443
Cash Equivalents ..... 1,728,246
US Treasury Bonds and Notes. ..... 1,378,661
Deferred Capital Loses on Common Stock ..... 4,206,248
TOTAL $\operatorname{NVESTMENTS}$ ..... \$ 96,115,142
TOTAL ASSETS ..... \$ 100,598,111
Current Liabilities:
Investments Payable ..... \$ 1,392,555
Accounts Payable ..... 52,186
Refunds Payable ..... 39,678
Refunds Payable to Plan A ..... 9,175,752
TOTAL CURRENT LIABILITIES ..... \$ 10,660,171
ACTUARIAL VALUE OF ASSETS ..... \$ 89,937,940
EXHIBIT XV
PLAN B: PRESENT VALUE OF FUTURE CONTRIBUTIONS
Employee Contributions to the Annuity Savings Fund ..... \$ 16,496,208
Employer Normal Contributions to the Pension Accumulation Fund ..... $22,615,159$
Employer Amortization Payments to the Pension Accumulation Fund ..... 6,919,636
TOTAL PRESENT VALUE OF FUTURE CONTRIBUTIONS ..... \$ 46,031,003
EXHIBIT XVI
PLAN B: CHANGE IN FROZEN UNFUNDED ACTUARIAL ACCRUED LIABILITY
Prior Year Frozen Unfunded Accrued Liability ..... \$ ..... $7,573,794$
Interest on Frozen Unfunded Accrued Liability ..... \$ 605,904
Employer Normal Cost for Prior Year ..... 1,363,123
Interest on the Normal Cost ..... 109,050
Administrative Expenses ..... 181,117
Interest on Expenses7,105
TOTAL Increases to Frozen Unfunded Accrued Liability ..... \$ 2,266,299
Gross Employer Contributions ..... \$ 2,810,211
Interest on Employer Contributions ..... 110,246
TOTAL Decreases to Frozen Unfunded Accrued Liability ..... \$ ..... 2,920,457
CURRENT YEAR FROZEN UNFUNDED ACCRUED LIABILITY ..... \$ ..... 6,919,636

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

Actuarial Value of Assets (June 30, 2000) ..... \$ 96,602,212
Income:
Member Contributions ..... \$ 2,072,674
Employer Contributions ..... 1,925,087
Ad Valorem Taxes ..... 845,189
Revenue Sharing Funds ..... 39,935
Irregular Contributions ..... 46,871
Funds Transferred to Plan A ..... $(9,309,600)$
Total Contribution Income ..... \$
$(4,379,844)$
Interest and Dividend Income ..... \$ 3,748,513
Recognized Realized Capital Gains (Losses) ..... 3,404,867
Recognized Unrealized Capital Gains (Losses) ..... $(2,704,475)$
Bond Amortization Expense ..... $(28,705)$
Realized Gains (Losses) on Fixed Income Securities ..... $(37,914)$
Investment Expense ..... $(340,738)$
Net Investment Income ..... \$4,041,548
TOTAL Income ..... \$$(338,296)$
Expenses:
Retirement Benefits ..... \$ 4,659,494
Refunds of Contributions ..... 722,547
Funds Transferred to Another System ..... 436,941
DROP Disbursements ..... 319,421
Administrative Expenses ..... 181,117
TOTAL Expenses ..... \$ ..... 6,319,520
Net Income for Fiscal 2001 (Income - Expenses) ..... \$ ..... $(6,657,816)$
Unadjusted Fund Balance as of June 30, 2001
(Fund Balance Previous Year + Net Income) ..... \$ ..... 89,944,396
Adjustment for Change in Allocated Expense Fund Balance ..... \$$(6,456)$
Actuarial Value of Assets (June 30, 2001) ..... $\$ 89,937,940$

## EXHIBIT XVIII <br> PLAN B: FUND BALANCE

Present Assets of the System Creditable to:
Annuity Savings Fund.............................................................................. \$ 14,249,959
Annuity Reserve Fund........................................................................... 38,. 334,761
Pension Accumulation Fund .................................................................... 31,066,486
Deferred Retirement Option Plan Account................................................ 1, $1,851,727$

NET MARKET VALUE OF ASSETS ........................................... \$ 85,702,933
ADJUSTMENT FOR DEFERRAL OF REALIZED AND UNREALIZED
CAPITAL GAINS ON COMMON STOCK ............................ $4,206,248$
ADJUSTMENT FOR UNRECOGNIZED CHANGE IN
VALUE OF FIXED INCOME SECURITIES .......................... $\quad(543,722)$
ALLOCATION OF EXPENSE FUND........................................... 572,481
ACTUARIAL VALUE OF ASSETS .............................................. \$ 89,937,940

## EXHIBIT XIX <br> PLAN B: PENSION BENEFIT OBLIGATION

Present Value of Credited Projected Benefits Payable to Current Employees ...... \$ 57,464,310
Present Value of Benefits Payable to Terminated Employees ............................. $1,089,857$
Present Value of Benefits Payable to Current Retirees and Beneficiaries............ 38,847,959
TOTAL PENSION BENEFIT OBLIGATION ....................... \$ 97,402,126
G. S. CURRAN \& COMPANY, LTD.

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

1. Actuarial Value of Assets Divided by PBO as of Fiscal 1986: ..... 63.44\%
2. Amortization of Unfunded Balance over 30 years: ..... 18.28\%
Adjustments in Funded Ratio Due to Changes in Assumption(s):
Changes for Fiscal 1988 ..... 2.40\%
Changes for Fiscal 1989 ..... (2.94)\%
Changes for Fiscal 1995 ..... (1.22)\%
Changes for Fiscal 1997 ..... (3.84)\%
Changes for Fiscal 1998 ..... (3.71)\%
Changes for Fiscal 2000 ..... (2.29)\%
Changes for Fiscal 2001 ..... 1.21\%
3. TOTAL Adjustments ..... (10.39)\%
Amortization of Adjustments in Funded Ratio over 30 years:
Changes for Fiscal 1988 ..... (1.04)\%
Changes for Fiscal 1989 ..... 1.18\%
Changes for Fiscal 1995 ..... 0.24\%
Changes for Fiscal 1997 ..... 0.51\%
Changes for Fiscal 1998 ..... 0.37\%
Changes for Fiscal 2000 ..... 0.08\%
Changes for Fiscal 2001 ..... 0.00\%
4. TOTAL Amortization of Adjustments ..... 1.34\%
5. Target Ratio for Current Fiscal Year (Lesser of $1+2+3+4$ or $100 \%$ ) ..... $72.67 \%$
6. Actuarial Value of Assets Divided by PBO as of June 30, 2001 ..... 92.34\%

EXHIBIT XXI
PLAN B - CENSUS DATA

\begin{tabular}{|c|c|c|c|c|c|}
\hline \& Active \& Terminated with Funds on Deposit \& DROP \& Retired \& Total \\
\hline Number of members as of June 30, 2000 \& 2,023 \& 767 \& 45 \& 689 \& 3,524 \\
\hline \begin{tabular}{l}
Additions to Census \\
Initial membership \\
Death of another member Omitted in error last year
\end{tabular} \& \[
\begin{array}{r}
263 \\
(2)
\end{array}
\] \& 28 \& \& 2 \& 291 \\
\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 \\
Omitted in error last year
\end{tabular} \& \begin{tabular}{l}
(37) \\
(27) \\
(18) \\
3 \\
7 \\
7
\end{tabular} \& \begin{tabular}{l}
37 \\
(3) \\
(3)
\end{tabular} \& 18

(7)
(7) \& 27
3
7
7 \& 7

1 <br>

\hline | Eliminated from Census |
| :--- |
| Refund of contributions |
| Deaths |
| Included in error last year |
| Adjustment for multiple records | \& | (186) |
| :--- |
| (7) |
| (6) | \& (60) \& . \& | (28) |
| :--- |
| (1) | \& | (246) |
| :--- |
| (35) |
| (6) |
| (1) | <br>

\hline Number of members as of June 30, 2001 \& 2,020 \& 766 \& 49 \& 700 \& 3,535 <br>
\hline
\end{tabular}

Plan B - actives census by age:

| Age | Number <br> Male | Number <br> Female | Total <br> Number | Average | Salary |
| :---: | :---: | :---: | :---: | :---: | ---: |

THE ACTIVE CENSUS INCLUDES 783 ACTIVES WITH VESTED BENEFITS, INCLUDING 49 DROP PARTICIPANTS AND 27 ACTIVE FORMER DROP PARTICIPANTS:

PLAN B - TERMINATED MEMBERS DUE A DEFERRED RETIREMENT BENEFIT:


PrAN B - TERMINATED MEMBERS DUE A REFUND OF CONTRIBUTIONS:

| Contributions Ranging |  | Total |  |
| ---: | ---: | ---: | :---: |
| From | To | Number | Contributions |
| 0 | - | 99 | 597 |
| 100 | - | 499 | 69 |
| 500 | - | 999 | 16 |
| 1000 | - | 1999 | 10 |
| 2000 | - | 4999 | 15 |
| 5000 | - | 9999 | 5 |
| 10000 | - | 19999 | 1 |

PLAN B - REGULAR RETIREES:

| Age | Number Maíe | Number <br> Female | Total <br> Number | Average Benefit | Total <br> Benefit |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 46-50 | 1 | 0 | 1 | 8,629 | 8,629 |
| 51-55 | 1 | 0 | 1 | 9,571 | 9,571 |
| 56-60 | 8 | 2 | 10 | 13,735 | 137,349 |
| 61-65 | 61 | 16 | 77 | 9,664 | 744,095 |
| 66-70 | 100 | 27 | 127 | 7,511 | 953,848 |
| 71-75 | 88 | 27 | 115 | 7,487 | 861,057 |
| 76-80 | 71 | 30 | 101 | 7,132 | 720,317 |
| 81-85 | 43 | 12 | 55 | 5,313 | 292,194 |
| 86-90 | 12 | 5 | 17 | 3,555 | 60,427 |
| 91-99 | 3 | 2 | 5 | 4,316 | 21,582 |
| TOTAL | 388 | 121 | 509 | 7,483 | 3,809,069 |

PLAN B - DISABILITY RETIREES:

| Age | Number Male | Number <br> Female | Total <br> Number | Average Benefit | Total <br> Benefit |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 41-45 | 3 | 1 | 4 | 4,683 | 18,732 |
| 46-50 | 6 | 1 | 7 | 4,540 | 31,780 |
| 51-55 | 6 | 2 | 8 | 6,288 | 50,307 |
| 56-60 | 3 | 2 | 5 | 6,006 | 30,031 |
| 61-65 | 6 | 1 | 7 | 6,130 | 42,913 |
| 66-70 | 2 | 0 | 2 | 8,374 | 16,748 |
| 76-80 | 2 | 2 | 4 | 4,265 | 17,061 |
| TOTAL | 28 | 9 | 37 | 5,610 | 207,572 |

PLAN B - SURVIVORS:

| Age | Number Male | Number <br> Female | Total <br> Number | Average <br> Benefit | Total <br> Benefit |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 26-30 | 0 | 1 | 1 | 4,143 | 4,143 |
| 41-45 | 2 | 0 | 2 | 3,888 | 7,775 |
| 46-50 | 1 | 3 | 4 | 5,284 | 21,137 |
| 51-55 | 0 | 4 | 4 | 4,330 | 17,319 |
| 56-60 | 0 | 10 | 10 | 7,865 | 78,651 |
| 61-65 | 0 | 20 | 20 | 6,204 | 124,076 |
| 66-70 | 1 | 19 | 20 | 6,791 | 135,814 |
| 71-75 | 0 | 21 | 21 | 6,527 | 137,062 |
| 76-80 | 0 | 37 | 37 | 4,670 | 172,791 |
| 81-85 | 1 | 23 | 24 | 4,707 | 112,961 |
| 86-90 | 0 | 7 | 7 | 2,652 | 18,563 |
| 91-99 | 1 | 3 | 4 | 2,055 | 8,221 |
| TOTAL | 6 | 148 | 154 | 5,445 | 838,513 |

PLAN B - ACTIVE MEMBERS:

|  |  | Completed Years of Service |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Attained <br> Ages | 0 | 1 | 2 | 3 | 4 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30\&Over | Total |
|  | 0-20 | 12 | 3 |  |  |  |  |  |  |  |  |  |  |
|  | 21-25 | 50 | 24 | 17 | 14 | 5 | 3 |  |  |  |  |  | 15 |
|  | 26-30 | 42 | 20 | 22 | 10 | 8 | 42 |  |  |  |  |  | 113 |
|  | 31-35 | 39 | 30 | 25 | 21 | 14 | 46 | 21 |  |  |  |  | 148 |
|  | 36-40 | 28 | 30 | 34 | 24 | 16 | 47 | 21 | 2 23 | 10 |  |  | 198 |
|  | 41-45 | 38 | 25 | 26 | 26 | 16 | 69 | - 72 | 44 |  |  |  | 241 |
| 9 | 46-50 | 27 | 18 | 18 | 11 | 16 | 62 | 72 | 34 | 32 | 16 |  | 349 |
| 0 | 51-55 | 20 | 14 | 11 | 6 | 11 | 55 | 57 | 27 | 20 | 16 | 1 | 311 |
| 4 | 56-60 | 11 | 12 | 8 | 4 | 116 | 48 | 41 | 27 17 | 20 18 | 24 | 8 | 253 |
| Q | 61-65 | 3 | 7 | 4 | 11 | 6 | 30 | 11 37 | 17 | 18 | 18 | 6 | 189 |
| E | 66-70 | 2 | 1 | 1 | 7 | 2 | 13 | 16 | 8 | $\begin{array}{r}15 \\ \hline 6\end{array}$ | 10 | 12 | 156 |
| D | 71 \& Over | 2 |  |  |  | 2 | 11 | 7 | 5 | 5 | 1 |  | 63 33 |
| 5 | Totals | 274 | 184 | 166 | 134 | 102 | 426 |  |  |  |  |  |  |
| 7 |  |  |  |  |  | 102 | 426 | 356 | 181 | 142 | 71 | 33 | 2069 |

plan $B$ - average annuäl salary of active members:
Completed Years of Service

| Attained Ages | 0 | 1 | 2 | 3 | 4 | 5-9 | 10-14, | 15-19 | 20-24 | 25-29 | 308Over | Average Salary |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0-20 | 11,565 | 13,493 |  |  |  |  |  |  |  |  |  |  |
| 21-25 | 12,628 | 13,512 | 15,330 | 17,709 | 19,628 | 18,961 |  |  |  |  |  | 11,951 |
| 26-30 | 13,086 | 15,806 | 18,060 | 15,960 | 16,102 | 19,468 | 19,564 |  |  |  |  | 14,330 |
| 31-35 | 14,096 | . 16,501 | 19,635 | 16,307 | 20,824 | 18,326 | 23,279 |  |  |  |  | 16,536 |
| 36-40 | 18,194 | 19,382 | 19,637 | 17,897 | 17,677 | 121,486 | 22,934 | 25,994 24,847 |  |  |  | 17,947 20,592 |
| 41-45 | 15,486 | 16,901 | 18,178 | 18,921 | 14,661 | 20,381 | 23,955 | 26,659 | 27,611 | 28,750 |  | 20,592 |
| $46-50$ $51-55$ | 15,877 | 20,734 | 17,801 | 18,780 | 15,946 | 16,660 | 24,353 | 25,115 | 27,310 | 33,758 | 34,401 | 21,279 |
| $51-55$ $56-60$ | 16,656 20,518 | 17,838 20,731 | 16,200 22,873 | 18,906 | 21,272 | 18,164 | 22,334 | 25,903 | 29,153 | 30,789 | 27,030 | 22,206 |
| 61-65 | 25,881 | 13,431 | 22,873 | 16,553 | 17,341 | 20,237 | 19,489 | 21,615 | 24,643 | 33,368 | 34,923 | 22,324 |
| 66-70 | 18,203 | 29,304 | 8,000 | 25,409 | 16,388 | 16,897 | 23,230 27,019 | 26,123 | 30,598 | 29,380 | 39,184 | 23,567 |
| 71 \& over | 34,091 |  |  |  | 10,477 | 18,357 9,989 | 27,019 | 27,559 16,741 | 34,022 7,351 | 43,263 31,175 | 34,148 | 25,793 |
| Average | 15,099 | 17,255 | 18,395 | 18,461 | 17,432 | 18,762 | 22,997 | 25,01 |  | 32,066 |  |  |

PLAN B - TERMINATED MEMBERS DUE A DEFERRED RETIREMENT BENEFTT:

|  | Attained Ages | Years Until Retirement Eligibility |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 0 | 1 | 2 | 3 | 4 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 3080ver | Total |
|  | 0-20 |  |  |  |  |  |  |  |  |  |  |  |  |
|  | $21-25$ $26-30$ |  |  |  |  |  |  |  |  |  |  | 1 | 1 |
|  | 31-35 |  |  |  | , |  |  |  |  |  | 1 |  | 0 |
|  | 36-40 |  |  |  |  |  |  |  |  | 2 | 1 |  | 1 |
|  | 41-45 |  |  |  |  |  |  |  | 9 | 2 |  |  | 2 11 |
| 9 | $46-50$ $51-55$ |  |  |  |  |  |  | 7 |  |  |  |  | 11 |
| 5 | $51-55$ $56-60$ |  |  | 1 |  |  | 8 |  |  |  |  |  | $\begin{array}{r}9 \\ \hline\end{array}$ |
| $\bigcirc$ | 61-65 | 5 | 2 | 6 | 3 |  |  |  |  |  |  |  | 14 |
| C | 66-70 |  |  |  |  |  |  |  |  |  |  |  | 5 |
| 总 | 71-75 | 3 |  |  |  |  |  |  |  |  |  |  | 0 |
| 0 | 76 \& Over |  |  |  |  |  |  |  |  |  |  |  | 3 |
| 2 | Totals | 11 | 2 | 7 | 3 | 0 | 8 | 9 | 9 | 2 | 1 | 1 | 53 |
| 80 |  |  |  |  |  |  |  |  |  |  |  |  |  |

pLan b - average annual benefits of terminated members due a deferred retirgment benefit:

| Attained Ages | Years Until Retirement Eligibility |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0 | 1 | 2 | 3 | 4 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30\&Over | Average Benefit |
| 0-20 |  |  |  |  |  |  |  |  |  |  |  |  |
| 21-25 |  |  | - |  |  |  |  |  |  |  | 729 | 729 |
| 26-30 |  |  |  |  |  |  |  |  |  |  | 729 | 729 |
| 31-35 |  |  |  |  |  |  |  |  |  | 4.962 |  | - 0 |
| 36-40 |  |  |  |  |  |  |  |  | 5,295 | 4,962 |  | 4,962 |
| 41-45 |  |  |  |  |  |  | 4,409 | 4.498 |  |  |  | 5,295 4,482 |
| 46-50 |  |  |  |  |  |  | 4,401 |  |  |  |  | 4,401 |
| 51-55 |  |  | 5,203 |  |  | 6,244 |  |  |  |  |  | 6,128 |
| $56-60$ $61-65$ | 2,413 633 | 3,527 | 3,018 | 2,130 |  |  |  |  |  |  | - | 2,771 |
| $61-65$ $66-70$ | 633 |  |  |  |  |  |  |  |  |  |  | 633 |
| 71-75 | 1,393 |  |  |  |  |  |  |  |  |  |  | 0 |
| 76 \& Ovex |  |  |  |  |  |  |  |  |  |  |  | 1,393 |
| Average | 1,326 | 3,527 | 3,330 | 2,130 | 0 | 6,244 | 4,403 | 4,498 | 5,295 | 4,962 | 729 | 3,730 |

PLAN B - SERVICE RETIREES:

| Attained Ages | Completed Xears since Retirement |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0 | 1 | 2 | 3 | 4 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 308Over | rotal |
| 0-50 | 1 |  |  |  |  |  |  |  |  |  |  |  |
| 51-55 | 1 |  |  |  |  |  |  |  |  |  |  | 1 |
| 56-60 | 3 |  |  | 1 | 5 | 1 |  | - |  |  |  | 10 |
| 61-65 | 17 | 17 | 20 | 8 | 4 | 9 | 2 |  |  |  | - | 77 |
| 66-70 | 8 | 15 | 18 | 14 | 13 | 49 | 9 | 1 |  |  |  | 77 127 |
| 71-75 | 3 | 2 | 2 | 2 | 3 | 44 | 54 | 6 |  |  |  | 127 115 |
| 76-80 | 1 | 2 | 2 |  | 1 | 9 | 40 | 42 | 5 |  | , | 115 |
| 81-85 |  |  |  | 1 | 1 | 2 | 5 |  |  |  |  | 101 |
| 86-90 |  |  |  |  |  | 2 | 5 | 28 2 | 18 |  |  | 55 |
| 91 \& Over |  |  |  |  |  |  | 1 | 2 | 10 | 5 2 |  | 17 |
| Totals | 34 | 36 | 41 | 25 | 27 | 114 | 111 | 79 | 35 | 7 | 0 | 509 |

plan b - average annual benefits payable to service retirees:

|  | Completed Yeaxs Since Retirement. |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Attained Ages | 0 | $1{ }^{1}$ | 2 | 3 | 4 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30\&0ver | Average Benefit |
| 0-50 | 8,629 |  |  |  |  |  |  |  |  |  |  |  |
| 51-55 | 9,571 |  |  |  |  |  |  |  |  |  |  | 8,629 |
| 56-60 | 17,518 |  |  | 18,145 | 11,130 | 11,002 |  |  |  |  |  | 9,571 13,735 |
| 61-65 | 10,568 | 7,445 | 8,570 | 8,318 | 13,324 | 14,677 | 7,265 |  |  |  |  | 13,735 |
| 66-70 | 4,797 | 8,506 | 7,673 | 7,861 | 5,728 | 7,560 | 9,057 | 13,308 |  |  |  | 9,664 |
| 71-75 | 5,120 | 7,166 | 6,774 | 9,631 | 5,843 | 7,762 | 7,554 | 6,865 |  |  |  | 7,511 |
| $76-80$ $81-85$ | 7,340 | 6,459 | 3,452 |  | 3,954 | 5,962 | 7,587 | 7,066 | 7,744 |  |  | 7,132 |
| $81-85$ $86-90$ |  |  |  | 2,300 | 4,394 | 9,883 | 6,708 | 6,248 | 3,181 |  |  | 5,313 |
| 91-8 Over |  |  |  |  |  |  |  | 7,716 | 3,541 3,180 | 1,918 |  | 3,555 |
|  |  |  |  |  |  | . | 10,945 |  | 3,180 | 2,138 |  | 4,316 |
| Average | 9,161 | 7,817 | 7,964 | 8,267 | 7,751 | 8,145 | 7,675 | 6,856 | 3,935 | 1,981 | 0 | 7,483 |

plan a - disability rettrees:
Completed Years Since Retixement

pLian b - average annual benefits payable to disability retirees:

| - | Completed Years Since Retirement |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Attained Ages | 0 | 1 | 2 | 3 | 4 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30\&Over | Average Benefit |
| 0-40 |  |  |  |  |  |  |  |  |  |  |  |  |
| 41-45 |  | 5,625 |  |  |  | 4,369 |  |  |  |  |  | 0 |
| 46-50 | 4,845 | 2,069 | 4,282 | 8,476 |  | 4,369 3,631 |  |  |  |  |  | 4,683 |
| 51.-55 |  | 4,732 | 7,169 |  |  | 8,070 |  |  |  |  |  | 4.540 |
| 56-60 |  |  | 12,789 |  | 3,928 | 3,656 | . |  |  |  |  | 6,288 |
| 61-65 |  |  | 9,969 |  | 5,883 | 6,465 |  |  | 6,002 |  |  | 6,006 |
| 66-70 |  |  |  |  |  | $\begin{aligned} & 6,465 \\ & 6,725 \end{aligned}$ | $10,023$ | 3,453 |  |  |  | 6,130 |
| 71-75 |  |  |  |  |  |  | 10,023 |  |  |  |  | 8,374 |
| 76-80 |  |  |  |  |  |  |  |  |  |  |  | 0 |
| 81 \& Over |  |  |  |  |  | . |  | 5,571 | 2,959 |  |  | 4,265 |
| Average | 4,845 | 4,437 | 8,552 | 8,476 | 4.905 | 5,572 | 7,118 | 4,865 | 3,974 |  |  |  |
|  |  |  |  |  |  |  |  | 4,865 | , | 0 | 0 | 5,610 |

PLAN B ~ SURVIVING BENEFICIARIES OF FORMER MEMBERS:

plan b - average annual benerits payable to survivors of former members:

| Attained Ages | Completed Years Since Retirement |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0 | 1 | 2 | 3 | 4 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 3080vex | Average Benefit |
| 0-25 |  |  | - |  |  |  |  |  |  |  |  |  |
| 26-30 |  |  |  |  | 4,143 |  |  |  | ; |  |  | 0 |
| 31-35 |  |  |  |  | -,143 |  |  |  |  |  |  | 4,143 |
| 36-40 |  |  |  |  |  |  |  |  |  |  |  | 0 |
| 41-45 |  |  |  |  |  |  |  |  |  |  |  | 0 |
| 46-50 |  | 3,531 |  | 6,965 |  |  | 3,888 6,687 |  |  |  |  | 3,888 |
| $51-55$ |  |  | 3,312 | 6,965 | $4,866$ |  | 6,687 |  |  |  |  | 5,284 |
| 56-60 | 6,490 | 4,649 |  |  | 8,143 | 9,634 | 6.200 | 3,818 |  |  |  | 4,330 |
| 61-65 |  | 2,980 | 12,992 | 3,840 | 6,586 | 6,879 | 5,200 | 5,778 | 953 |  |  | 7, 865 |
| 66-70 |  |  | 6,411 |  |  | 7,577 | 7,088 | 6,856 | 953 |  |  | 6,204 |
| $72-75$ $76-80$ |  | 2.022 |  |  |  | 10,150 | 8,000 | 3,943 | 5,009 |  |  | 6,791 |
| 81-85 |  | 2,022 |  |  |  | 7,442 | 5,837 | 5,006 | 2,961 | 2,489 |  | ¢,670 |
| 86-90 |  |  |  |  |  |  | 12,585 | 5,742 | 2,950 | 1,085 | 2,255 | 4,707 |
| 91 \& Over |  |  |  |  |  | 2,552 |  | 9,611 |  | 880 |  | 2,652 |
|  |  |  |  |  |  |  |  |  | 3,708 | 1,645 | 1,434 | 2,055 |
| Average | 4,327 | 3,296 | 7,282 | 5,402 | 5,972 | 7,650 | 7,135 | 5,363 | 3,278 | 1,170 | 1,708 |  |

## EXHIBIT XXII <br> PLAN B: YEAR TO YEAR COMPARISON

|  |  | Fiscal 2001 |  | Fiscal 2000 |  | Fiscal 1999 |  | Fiscal 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of Active Members |  | 2,069 |  | 2,068 |  | 2,152 |  | 2,102 |
| Number of Retirees and Survivors |  | 700 |  | 689 |  | 664 |  | 653 |
| Number Terminated Due Deferred Benefits |  | 53 |  | 52 |  | 58 |  | 63 |
| Number Terminated Due Refund |  | 713 |  | 715 |  | 702 |  | 680 |
| Active Lives Payroll | \$ | 42,572,472 | \$ | 41,586,147 | \$ | 41,646,939 | \$ | 37,963,401 |
| Retiree Benefits in Payment | \$ | 4,855,154 | \$ | 4,579,320 | \$ | 4,235,936 | \$ | 3,926,054 |
| Market Value of Assets | \$ | 87,702,933 | \$ | 100,649,110 | \$ | 94,054,385 | \$ | 87,582,921 |
| Ratio of Actuarial Value of Assets to Actuarial Accrued Liability |  | 92.86\% |  | 92.73\% |  | 91.92\% |  | 90.88\% |
| Actuarial Accrued Liability <br> (As defined by GASB- 25 ) | \$ | 96,857,576 | \$ | 104,176,006 | \$ | 96,158,035 | \$ | 87,395,782 |
| Actuarial Value of Assets | \$ | 89,937,940 | \$ | 96,602,212 | \$ | 88,384,208 | \$ | 79,421,207 |
| Unfunded Actuarial Accrued Liability | \$ | 6,919,636 | \$ | 7,573,794 | \$ | 7,773,827 | \$ | 7,974,575 |
| Present Value of Future Employer Normal Cost | \$ | 22,615,159 | \$ | 12,529,147 | \$ | 10,902,426 | \$ | 12,607,109 |
| Present Value of Future Employee Contributions | \$ | 16,496,208 | \$ | 16,317,771 | \$ | 16,469,405 | \$ | 15,103,116 |
| Present Value of Future Benefits | \$ | 135,968,943 | \$ | 133,022,924 | \$ | 123,529,866 | \$ | 115,106,007 |


|  | Fiscal 2002 | Fiscal 2001. | Fiscal 2000 | Fiscal 1999 |
| :--- | :---: | :---: | :---: | :---: |
| Employee Contribution Rate | $5.00 \%$ | $5.00 \%$ | $5.00 \%$ | $5.00 \%$ |
| Proj. Tax Contribution as \% of Projected Payroll | $2.18 \%$ | $2.01 \%$ | $2.01 \%$ | $2.03 \%$ |
| Actuarially Req'd Net Direct Employer Cont. Rate | $6.16 \%$ | $3.68 \%$ | $3.32 \%$ | $4.31 \%$ |
| Actual Employer Direct Contribution Rate | $4.50 \%$ | $4.50 \%$ | $4.50 \%$ | $3.75 \%$ |



| Fiscal 1998 | Fiscal 1997 | Fiscal 1996 | Fiscal 1995 | Fiscal 1994 | Fiscal 1993 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 5.00\% | 5.00\% | 5.00\% | 5.00\% | 5.00\% | 5.00\% |
| 1.93\% | 1.77\% = . | 1.80\% | 1.76\% | 1.76\% | 1.72\% |
| 3.73\% | 2.72\% | 3.34\% | 3.00\% | 4.00\% | 4.00\% |
| 2.75\% | 3.25\% | 3.75\% | 4.00\% | 5.00\% | 5.00\% |

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

## SUMMARY OF PRINCIPAL PLAN PROVISIONS

All members of the Municipal Employees' Retirement System are participants in either Plan A or B according to the provisions of the agreement entered into by their employer. All employees of a participating employer must participate in the same plan. The principal provisions of each plan are given below. The following summary of plan provisions as of July 1, 2001, is for general informational purposes only and does not constitute a guarantee of benefits.

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

## PLAN A PROVISIONS:

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

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

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

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

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

## PLAN B PROVISIONS:

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

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

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

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

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

## PROVISIONS APPLICABLE TO BOTH PLAN A AND B:

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

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

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

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

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

DEFERRED RETIREMENT OPTION PLAN - In lieu of terminating employment and accepting a service retirement allowance, any member of Plan A or B who is eligible for a normal retirement may elect to participate in the Deferred Retirement Option Plan (DROP) for up to three years and defer the receipt of benefits. Upon commencement of participation in the plan, membership in the system terminates. During participation in the plan, employer contributions are payable but employee contributions cease. The monthly retirement benefits that would have been payable, had the person elected to cease employment and receive a service retirement allowance, are paid into the

DROP account. After a member terminates his participation in DROP his account will earn interest at the actual rate of return earned on the funds left on deposit as certified by the custodian of the system's assets. This interest will be credited to the individual member's account balance on an annual basis. In addition, no cost of living increases are payable to participants until employment which made them eligible to become members of the system has been terminated for at least one full year.

Upon termination of employment prior to, or at the end of, the specified period of participation, a participant in the plan may receive, at his option, a lump sum payment from the account equal to the payments into the account, a true annuity based upon his account balance in that fund, or any other method of payment if approved by the board of trustees. The monthly benefits that were being paid into the DROP account will begin to be paid to the retiree. If a participant dies during the participation in the plan, a lump sum equal to his account balance in the plan fund shall be paid to his named beneficiary or, if none, to his estate. If employment is not terminated at the end of the three years, payments into the plan fund cease and the person resumes active contributing membership in the system. 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.

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

## ACTUARIAL ASSUMPTIONS

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

Factor<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

ACTUARIAL COST METHOD:

ACTUARIAL ASSET VALUES:

VALUATION INTEREST RATE:
ANNUAL SALARY INCREASE RATE:
ANNUITANT MORTALITY: $110 \%$ of 1971 Group Annuity Mortality Table (Set back 6 years for females)

RETIREE COST OF LIVING INCREASES:

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

DROP ENTRY RATES: The table of these rates is included later in the report. These rates apply only to those individuals eligible to participate in DROP. In Plan A, the tabular rate is multiplied by 2.5 in the first year of eligibility.

DROP PARTICIPATION PERIOD:

RETIREMENT RATES FOR ACTIVE FORMER DROP PARTICIPANTS:

DISABILITY RATES:
DISABILITY RATES: $\quad 70 \%$ of the base disability rates listed in the table of rates included later in the report.

RATES OF WITHDRAWAL: The table of these rates is included later in the report. In the first ten years of service, the tabular rates were multiplied by the following adjustment factors:

| Service | Adjustment Factor |
| :---: | :---: |
| 1 | 7.000 |
| 2 | 5.500 |
| 3 | 4.000 |
| 4 | 3.500 |
| 5 | 3.000 |


| 6 | 2.666 |
| ---: | ---: |
| 7 | 2.333 |
| 8 | 2.000 |
| 9 | 1.666 |
| 10 | 1.333 |

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 utilized in determining the costs of various survivor benefits as listed below:

| Age at <br> Death | \% With <br> Children | Number of <br> Children | Average <br> Age |
| :---: | :---: | :---: | :---: |
| 25 | $55 \%$ | 2.2 | 7 |
| 35 | $80 \%$ | 2.7 | 11 |
| 45 | $60 \%$ | 1.9 | 13 |
| 55 | $20 \%$ | 1.5 | 14 |
| 65 | $2 \%$ | 1.0 | 17 |

DISABLED LIVES MORTALITY: $175 \%$ of 1971 Group Annuity Table (set back 6 years for females.)

VESTING ELECTING PERCENTAGE: $65 \%$ of those vested elect deferred benefits in lieu of contribution refunds.

## ACTUARIAL TABLES AND RATES

| Age | Mortality <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 | Withdrawal <br> Rates | Base <br> Disability | Remarriage <br> Rates |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |
| Rates |  |  |  |  |  |  |  |  |

## 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 probability of payments. For example: if $\$ 600$ invested today will be worth $\$ 1,000$ in 10 years and there is a $50 \%$ probability that a person will live 10 years, then the actuarial present value of $\$ 1,000$ payable to that person if he should survive 10 years is $\$ 300$.

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

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.

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

Pension Benefit Obligation - The actuarial present value of benefits earned or credited to date based on the 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 which the members are entitled to even if they withdraw from service.

