# MUNICIPAL EMPLOYEES' RETIREMENT SYSTEM

ACTUARIAL VALUATION AS OF JUNE 30, 2001

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

Actuarial Services

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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.

Bv:

Gary Curran, F.C.A., A.S.A

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

Valuation Date:		1	June 30, 2001	Jı	ıne 30, 2000
Census Summary:	Active Members Retirees and Beneficiaries Terminated Due a Deferred Benefit Terminated Due a Refund		5,455 2,255 189 2,122		5,558 2,213 187 2,108
Payroll:		\$	125,304,827	\$	124,683,590
Benefits in Paymer	nt:	\$	24,838,273	\$	23,418,404
Frozen Unfunded A	Actuarial Accrued Liability:	\$	66,303,626	` \$	64,907,400
Market Value of A	ssets:	\$	447,796,046	\$	469,525,372
Actuarial Asset Val	lue:	\$	465,259,344	\$ 4	447,557,888
Actuarial Accrued	Liability (as defined by GASB-25)	\$	531,562,970	\$ :	512,465,288
Ratio of Actuarial	Value of Assets to Actuarial Accrued Liability:		87.53%		87.33%
******	************	***	*******	*****	*****
		Fl	SCAL 2002	F	ISCAL 2001
Net Employer Norr	nal Cost (July 1):	\$	8,057,287	. \$	<b>6,9</b> 33,099
Amortization Cost	(July 1):	\$	3,664,548	\$	3,515,154
	tuarially Required Contribution d Administrative Costs):	\$	13,041,549	\$	11,634,277
Contribution as a Pe	er Actuarially Required ercentage of Projected Payroll: ***********************************	***	7.89% *********	****	7.03% *******

Recommended Net Direct Employer Contribution Rate: For Fiscal 2003: 8.00% For Fiscal 2002: 7.00%

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 Age Normal Method, actuarial gains and losses are spread over future normal costs.

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

Valuation Date:		3	fune 30, 2001	J	une 30, 2000
Census Summary:	Active Members Retirees and Beneficiaries Terminated Due a Deferred Benefit Terminated Due a Refund		2,069 700 53 713		2,068 689 52 715
Payroll:		\$	42,572,472	\$	41,586,147
Benefits in Paymen	ıt:	\$	4,855,154	\$	4,579,320
Frozen Unfunded A	Actuarial Accrued Liability:	\$	6,919,636	\$	7,573,794
Market Value of As	ssets:	\$	85,702,933	\$	100,649,110
Actuarial Asset Val	ue:	\$	89,937,940	\$	96,602,212
Actuarial Accrued 1	Liability (as defined by GASB-25)	\$	96,857,576	\$	104,176,006
Ratio of Actuarial \	Value of Assets to Actuarial Accrued Liability:		92.86%		92.73%
******	*************				
		FIS	SCAL 2002	FI	SCAL 2001
Net Employer Norn	nal Cost (July 1):	\$	2,512,850	\$	1,363,123
Amortization Cost (	July 1):	\$	730,917	\$	745,834
Total Employer Act (Including Estimate	uarially Required Contribution d Administrative Costs):	\$	3,663,161	\$	2,450,558
Net Direct Employe Contribution as a Pe	er Actuarially Required ercentage of Projected Payroll:		6.16%		3.68%
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Minimum Recommended Net Direct Employer Contribution Rate: Fiscal 2003: 6.25% Fiscal 2002: 3.75%

Employee Contribution Rate: 5.00% 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: Reduction in DROP entry rate in first year of DROP eligibility.

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

### **COMMENTS ON DATA**

For the valuation, the administrative director of the system furnished a census on 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<sup>st</sup> 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 DROP 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.

		Actuarial Value	Market Value
PLAN A	1992	11.7%	13.4%
	1993	11.0%	10.7%
v.	1994	5.6%	1.0%
	1995	10.0%	13.2%
	, 1996	12.0%	10.6%
	1997	9.1% *	14.1%
	1998	10.0% **	16.4%
	1999	12.1%	8.2%
	2000	11.0%	9.1%
	2001	4.5%	-4.2%
		Actuarial Value	Market Value
PLAN B	1992	13.2%	15.6%
	1993.	10.8%	10.8%
	1994	5.7%	-0.3%
	1995	9.8%	13.6%
	1996	11.6%	10.5%
	1997.	9.2% *	14.7%
,	1998	9.7% **	16.2%
	1999	11.7%	7.007

2000	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 three-year 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 reflect 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 - DEMOGRAPHICS 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	5.8038%
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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%
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.

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 Assumption Change	-0.2991% -0.2624%
Normal Cost Accrual Rate - Fiscal 2001	6.2336%

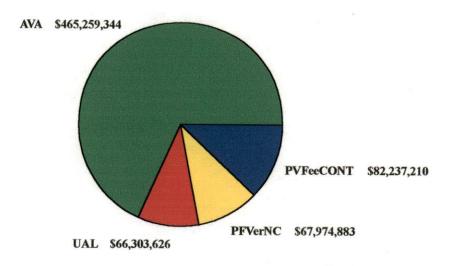
In addition to the above factors, payroll growth affects plan costs to the extent that payments on the system's unfunded liability are on a schedule that varies from actual trends in payroll growth or decline. If payroll changes at rates not consistent with the amortization schedule the result will be 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 30th of the initial year of such increase. The provisions of this subpart do not repeal provisions relative to cost of living adjustments contained within the individual laws governing systems; however, they are to be controlling in cases of conflict. All of the above provisions require that the system earn sufficient excess interest earnings to fund the increases. In addition, the ratio of the plan's assets to benefit obligations must meet the criteria established in R.S. 11:242. This section sets forth a minimum "target ratio" of the actuarial value of assets to the Pension Benefit Obligation. We have determined that for fiscal 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.

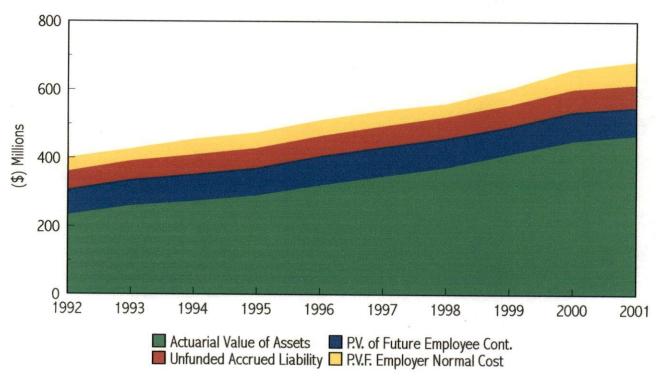
Plan A - Components of Present Value of Future Benefits
June 30, 2001



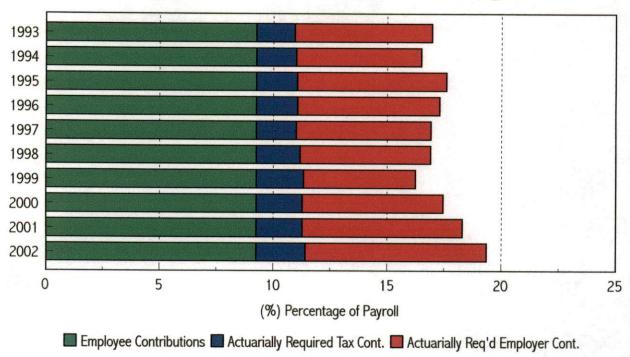
AVA - Actuarial Value of Assets UAL - Unfunded Accrued Liability

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

Plan A
Components of Present Value of Future Benefits

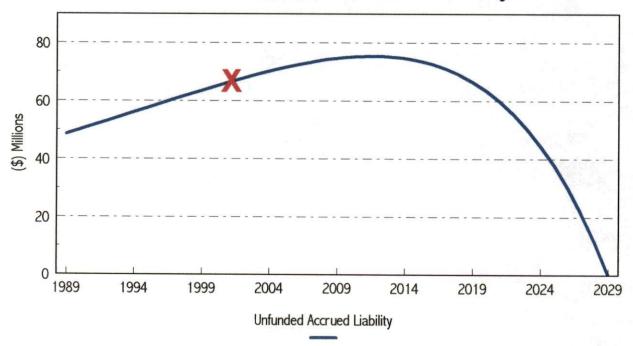


Plan A
Components of Actuarial Funding



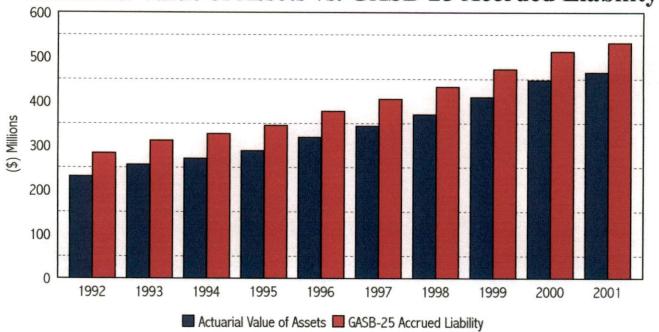
Projected Tax Contributions consist of the Projected Ad Valorem and Revenue Sharing Funds as a percent of payroll.

Plan A
Frozen Unfunded Accrued Liability

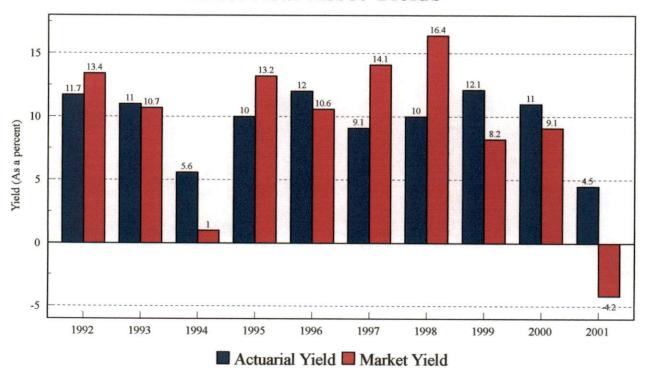


- 14 -G. S. CURRAN & COMPANY, LTD.

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

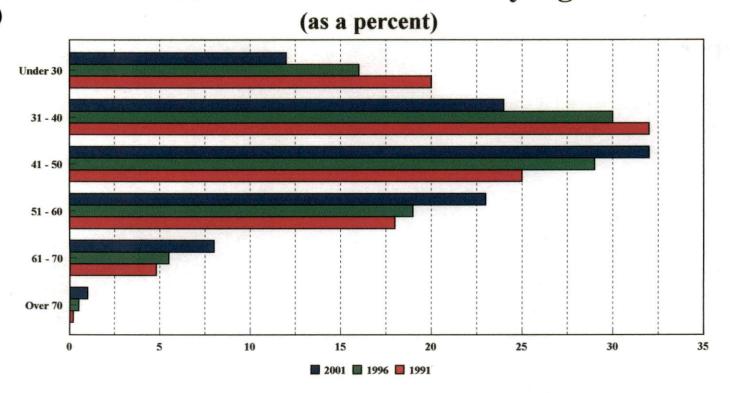


Plan A
Historical Asset Yields



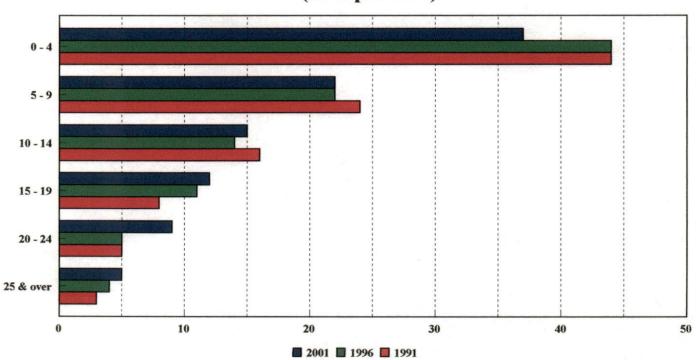
- 15 -G. S. CURRAN & COMPANY, LTD.

Plan A: Active - Census by Age



Plan A: Active - Census by Service

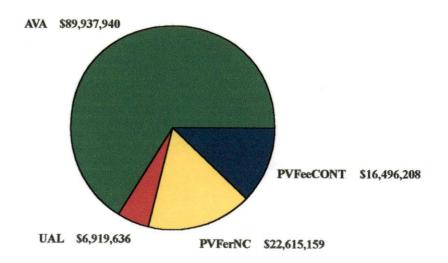
(as a percent)



G. S. CURRAN & COMPANY, LTD.

Plan B - Components of Present Value of Future Benefits

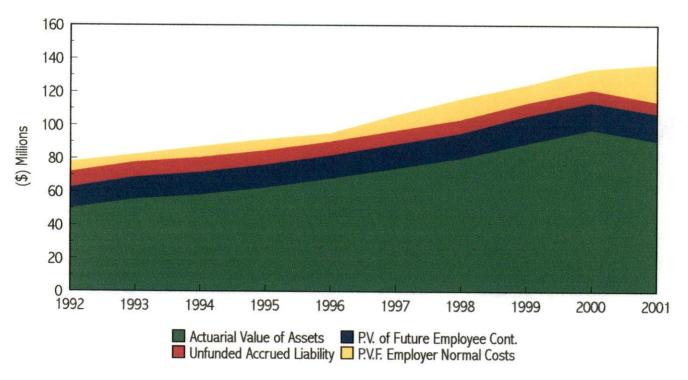
June 30, 2001



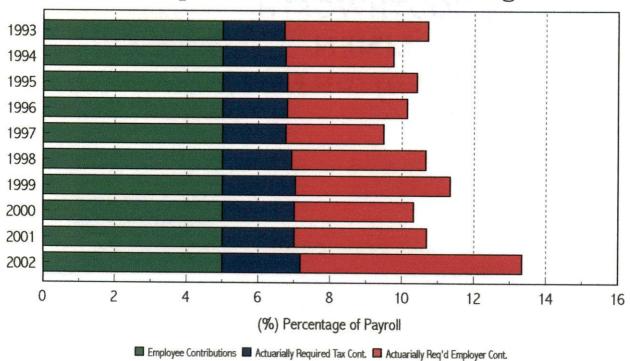
AVA - Actuarial Value of Assets UAL - Unfunded Accrued Liability

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

Plan B
Components of Present Value of Future Benefits

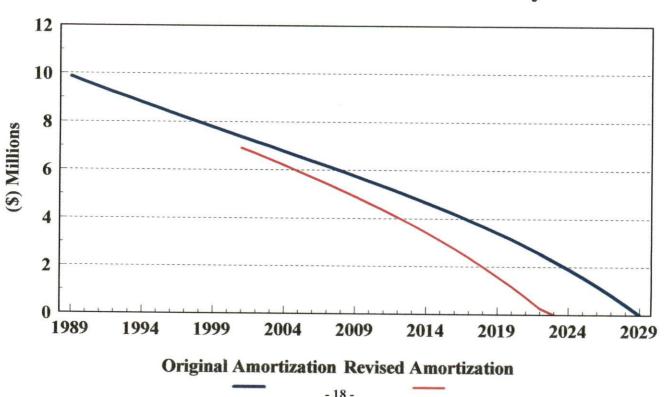


Plan B
Components of Actuarial Funding



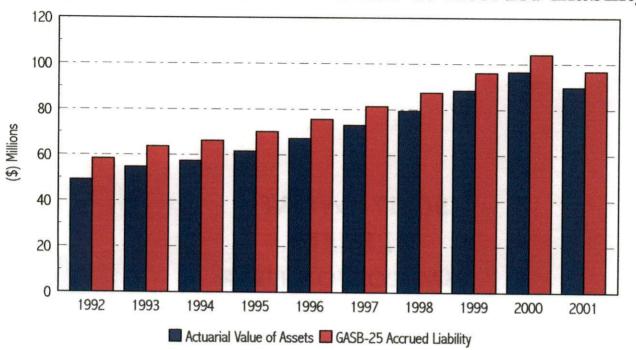
Projected Tax Contributions consist of the Projected Ad Valorem and Revenue Sharing Funds as a percent of payroll.

Plan B
Frozen Unfunded Accrued Liability

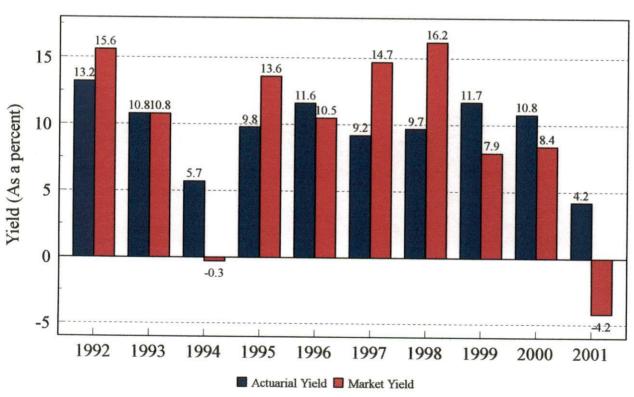


G. S. CURRAN & COMPANY, LTD.

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

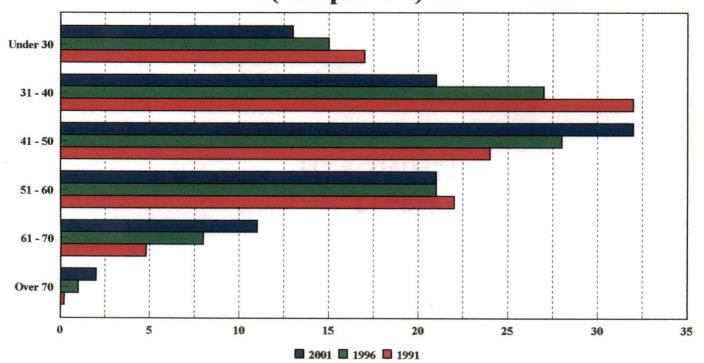


Plan B
Historical Asset Yields

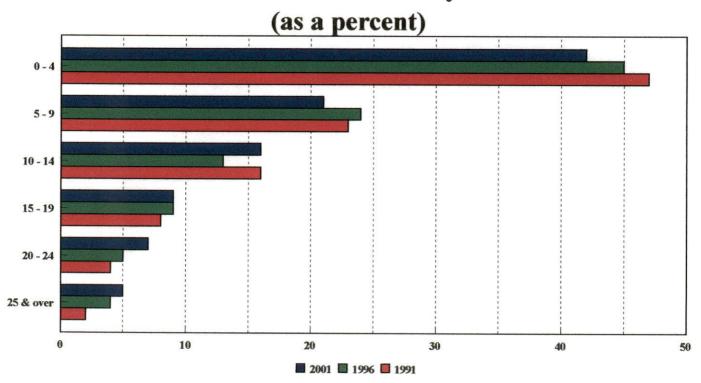


- 19 -G. S. CURRAN & COMPANY, LTD.

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



Plan B: Active - Census by Service



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

## Plan A Exhibits

# EXHIBIT I PLAN A: ANALYSIS OF ACTUARIALLY REQUIRED CONTRIBUTIONS

1. 2. 3. 4. 5.	Present Value of Future Benefits	\$ \$ \$	681,775,063 66,303,626 465,259,344 82,237,210 67,974,883
6.	Present Value of Future Salaries	\$ 1	,010,889,735
7.	Employer Normal Cost Accrual Rate (5 ÷ 6)		6.724263%
8.	Projected Fiscal 2002 Salary for Current Membership	\$	119,824,097
9.	Employer Normal Cost as of July 1, 2001 (7 x 8)	\$	8,057,287
10.	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
.11.	Total Employer Normal Cost & Amortization Payment (9 + 10)	\$	11,721,835
12.	Employer Normal Cost and Amortization Payment Interest Adjusted for Midyear Payment	\$	12,181,688
13.	Estimated Administrative Cost for Fiscal 2002.	\$	859,861
14.	Gross Employer Actuarially Required Contribution for Fiscal 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
<b>17.</b>	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 ÷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       \$ 405,373,95         Survivor Benefits       13,479,22         Disability Benefits       15,871,40         Vested Deferred Termination Benefits       17,099,91         Contribution Refunds       12,566,05	3 3 7
TOTAL Present Value of Future Benefits for Active Members	\$ 464,390,549
Present Value of Future Benefits for Terminated Members:	
Terminated Vested Members Due Benefits at Retirement \$ 5,730,30 Terminated Members with Reciprocals	7 .
Due Benefits at Retirement	
TOTAL Present Value of Future Benefits for Terminated Members	\$ 8,153,131
Present Value of Future Benefits for Retirees:	
Regular Retirees	5
Disability Retirees	9
Survivors & Widows	7 ,
Reserve for Accrued Retiree DROP Account Balances 2,283,502	2
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		,
TOTAL CURRENT ASSETS	9	26,051,428
Allocated Share of the Expense Fund	\$	1,701,239
Property Plant & Equipment	\$	590,398
Investments:		
Common Stock\$ 193,621,245Corporate Bonds116,141,739Federal National Mortgage Corporation49,641,749Federal Home Loan Mortgage Corporation34,308,748Government National Mortgage Association14,142,307U.S. Treasury Notes, Bonds and Bills10,812,063Cash Equivalents5,849,201Deferred Capital Loses on Common stock19,276,560	•	
TOTAL INVESTMENTS	\$	443,793,612
TOTAL ASSETS	\$	472,136,677
Current Liabilities:		ν.
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 LIABILITY

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 L	IAI	BILITY	\$ 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 \$ 11,240,839 Employer Contributions 8,031,004 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 \$ 17,596,515 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	· <b>\$</b>	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 PLAN A: FUND BALANCE

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(1.35)%	(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

		Terminated			
		with Funds			
	Active	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					
Initial membership	596	87			683
Death of another member	(2)			2	
Omitted in error last year					
Change in Status during Year					
Actives terminating service	(121)	121	ŕ		
Actives who retired	(78)			78	
Actives entering DROP	(84)		84		:
Term. members rehired	14	(14)			
Term. members who retire		(12)		12	
Retirees who are rehired	1			(1)	
Refunded who are rehired	21			, ,	21
DROP participants retiring	1		(28)	28	-
DROP returned to work	28		(28)		
Omitted in error last year			`	1	1
Eliminated from Census					
Refund of contributions	(489)	(161)			(650)
Deaths	(13)	(2)		(78)	(93)
Included in error last year	(3)	(3)	,	` /	(6)
Adjustment for multiple records	(1)			:	(1)
Number of members as of					
June 30, 2001	5,234	2,311	221	. 2,255	10,021

PLAN A - ACTIVES CENSUS BY AGE:

	Number	Number	Tota1	Average	Total
Age	<i>Male</i>	Female	Number	Salary	Salary
16 - 20	3 <i>9</i>	3	42	13,009	546,363
21 - 25	160	<i>73</i>	233	15,462	3,602,558
26 - 30	253	113	3 <i>66</i>	19,560	7,158,897
31 - 35	371	175	<i>546</i>	20,910	11,416,836
36 - 40	486	264	750	22,655	16,991,480
41 - 45	<i>593</i>	318	911	24,152	22,002,480
46 - 50	59 <b>3</b>	267	860	25,436	21,874,916
51 <b>-</b> 55	469	221	690	25,133	17;342,059
<i>56 - 60</i>	<i>391</i>	158	5 <b>49</b>	23,329	12,807,410
<i>61 - 65</i>	<i>253</i>	80	333	24,452	8,142,456
66 - 70	84	28	112	20,885	2,339,134
71 <b>-</b> 75	28	10	38	16,770	637,266
76 - 80	17	3	20	17,231	344,629
81 - 85	3	0	<i>3</i>	25,246	75,739
86 - 90	2	0	2	11,302	22,604
TOTAL	3,742	1,713	5,455	22,971	125,304,827

THE ACTIVE CENSUS INCLUDES 2,215 ACTIVES WITH VESTED BENEFITS, INCLUDING 221 DROP PARTICIPANTS AND 73 ACTIVE FORMER DROP PARTICIPANTS.

PLAN A - TERMINATED MEMBERS DUE A DEFERRED RETIREMENT BENEFIT:

	Number	Number	<i>Total</i>	Average	Total
Age	<i>M</i> ale	<b>Female</b>	Number	Benefit	Benefit
31 - 35	4	4	8	6,529	52,229
<i>36 - 40</i>	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
<b>51</b> - <b>55</b>	34	12	46	8,484	390,285
56 <b>-</b> 60	40	10	50	6,904	345,182
61 - 65	11	2	13	4,204	54,653
66 - 70	o	1	1	1,437	1,437
TOTAL.	122	67	189	8,015	1,514,840

PLAN A - TERMINATED MEMBERS DUE A REFUND OF CONTRIBUTIONS:

Contribu	tio	ns Ranging		Total
From		To	Number	Contributions
0	-	99	1,526	37,587
100	-	499	<i>339</i>	75,982
500	-	999	69	49,963
1000	-	1999	68	94,410
2000	-	4999	<i>57</i>	182,938
5000	-	9999	<i>36</i>	241,227
10000	-	19999	24	301,034
20000	-	99999	<i>3</i>	96,467
-	2	TOTAL	2,122	1,079,608

PLAN A - REGULAR RETIREES:

	Number	Number	Total	Average	<b>Total</b>
Age	Male	<i>Female</i>	Number	Benefit	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	<i>39</i>	6	45	21,550	969,757
56 <b>-</b> 60	<i>62</i>	18	80	21,040	1,683,225
<i>61 - 65</i>	210	58	268	15,032	4,028,684
66 - 70	275	69	344	13,312	4,579,309
71 <i>- 75</i>	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
<i>86 - 90</i>	5 <i>6</i>	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:

	Number	Number	<b>Total</b>	Average	<b>Total</b>
Age	<i>Male</i>	Female	Number	Benefit	Benefit
<i>26 - 30</i>	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	<i>35</i>	8,907	311,751
51 - 55	31	4	35	10,580	370,295
<i>56 - 60</i>	3 <i>2</i>	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 <b>- 8</b> 5	2	0	2	8,411	16,822
91 - 99	0	1	1	1,437	1,437
TOTAL	167	<i>35</i>	202	8,285	1,673,486

#### PLAN A - SURVIVORS:

	Number ·	Number	Total	Average	Total
Age	Male	<i>Female</i>	Number	Benefit	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
<i>56 - 60</i>	2	<i>36</i>	38	8,595	326,607
<i>61 - 65</i>	2	<i>52</i>	54	8,258	445,924
66 - 70	2	60	62	6,761	419,162
71 <b>-</b> 75	1	81	82	9,240	757,702
76 - 80	8	<i>63</i>	71	7,047	500,305
<b>81 - 85</b>	1	69	70	5,152	360,607
86 - 90	O	40	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

Attained Ages	0	1	2	3	4	5- 9	10-14	15-19	20-24	25-29	30&Over	Total
0 - 20 21 - 25 26 - 30	32 113 75		2 38 40	12	12 31		11					42 233
31 - 35 36 - 40 41 - 45 ' 46 - 50	95 83 73 59	53 78 53	52 48 64	45 35 50	35 42 47	179 190 200	81 130 155	6 117 127	27 133	9		366 546 750 911
51 - 55 56 - 60 61 - 65	40 37 10	50 33 29 11	53 36 24	32 18 23	47 42 25	172 134 112	137 130 99	120 104 84	125 82 57	62 55 41	3 16 18	860 690 549
66 - 70 71 & Over	3 3	9	12 6 3	12 2	16 5 4	77 26 20	66 24 5	46 14 7	36 9 5	25 9 7	22 5 5	333 112 63
Totals	623	444	378	269	30 <i>6</i>	1221	838	625	474	208	69	5455

PLAN A - AVERAGE ANNUAL SALARY OF ACTIVE MEMBERS:

#### Completed Years of Service

Attained Ages		1		3	4	5- 9	10-14	15-19	20-24		30&Over	Average Salary
0 - 20	12,611	14,315	14,142									
21 - 25	14,335	15,024	16,235	17,745	20,038	20,143						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	25,744	02 644				19,560
36 - 40	15,211	18,613	19,258	19,257	18,802	22,664	25,716	23,644				20,910
41 - 45	18,022	16,805	19,598	20,429	20,808	23,214	26,428	28,410	30,492			22,655
46 - 50	16,410	19,074	20,817	21,205	21,951	22,295	24,806	29,755	29,580	37,967		24,152
<b>51 - 55</b>	19,256	20,650	22,210	20,398	20,400	21,704	27,036	28,045	33,300	32,085	27,872	25,436
56 - 60	19,203	16,973	19,263	20,640	19,266	20,286	25,482	28,165	29,882	31,335	33,933	25,133
<b>61 - 65</b>	18,150	23,320	24,633	27,811	23,972	19,543	22,961	26,296	29,485	28,976	31,290	23,329
66 70	11,587	18,168	27,291	12,844	12,596	18,210	24,154	26,678	27,646	28,904	29,433	24,452
71 & Over	12,180	11,763	14,843	-2,011	11,267	14,116	18,601	24,424	26,854	30,994	21,196	20,885
	•	•	, 0		,,	14,110	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	30,677	29,454	22,971

PLAN A - TERMINATED MEMBERS DUE A DEFERRED RETIREMENT BENEFIT:

Years Until Retirement Eligibility	Years	Until	Retirement	Eliaibilies
------------------------------------	-------	-------	------------	-------------

Attained Ages	0	1	2	3	4	5- 9	10-14	15-19	20-24	25-29	30&Over	Total
0 - 30								<del></del> _				
<b>31 - 35</b>												0
36 - 40						1				8		8
41 - 45						1			16			17
46 - 50								28				28
51 - 55							26					26
56 - 60	8	9	8	12	••	46						46
61 - 65	13	_		12	12	1						50
66 - 70	1											13
71 & Over	-											1
• · · · · ·												o
Totals	22	9	8	12	12	48	26	28	16	8	o	189

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

### Years Until Retirement Eligibility

Attained Ages	<u> </u>	1	2	3	4	5- 9	10-14	15-19	20-24	25-29 -	30&Over	Average Benefit
0 - 30												
31 - 35										c ===		0
36 - 40						1,480				6,529		6,529
41 - 45						1,400			8,491			8,079
46 - 50								8,556				8,556
51 - 55						0.404	11,313					11,313
5 <b>6</b> - 60	7,006	3,074	5,079	7,122	0 462	8,484						8,484
61 - 65	4,204	3,0,4	3,073	1,122	8,462	33,827			•			6,904
66 - 70	1,437											4,204
71 & Over	1,43,											1,437
/1 a Over												0
<b>Average</b>	5,097	3,074	5,079	7,122	8,462	8,866	11,313	8,556	8,491	6.529	0	R. 015

PLAN A - SERVICE RETIREES:

Attained Ages	0	1	2	3	4	5- 9	10-14	15-19	20-24	25-29	30&Over	Total
0 ÷ 50	4	12	•	1				<del></del>				
<b>51 - 55</b>	14	16	3	7	7	2						17
56 - 60	15	12	- 9	14	7	18	2					45
61 - 65	41	32	39	28	25	66	5	_	_			80
66 – 7Ò	19	26	27	16	27		34	.2	1			268
71 - 75	4	10	11	11	3	147	62	17	3			344
76 - 80	2	2	3	2	_	106	124	43	8			320
81 - 85	2	-	3	2	4	26	99	87	21			246
86 - 90	-		•			1	20	5 <i>6</i>	5 <i>6</i>	2		138
91 & Over			1	1		3	8	8	3 <i>5</i>	8		64
0/61							1	3	3	11	2	20
<b>Totals</b>	101	110	94	80	67	369	355	216	127	21	2	1542

PLAN A - AVERAGE ANNUAL BENEFITS PAYABLE TO SERVICE RETIREES:

Attained Ages		<u> </u>	2	3	4	5- <i>9</i>	10-14	15-19	20-24	25-29	30&Over	Average Benefit
0 - 50 51 - 55 56 - 60 61 - 65 66 - 70 71 - 75 76 - 80 81 - 85 86 - 90 91 & Over	13,323 18,084 21,402 12,552 8,675 7,878 7,407 9,871	18,693 23,967 17,897 10,743 11,019 7,257 7,474	29,776 18,955 14,012 10,858 9,326 5,778 7,126 23,837	5,287 25,536 26,004 15,065 11,337 10,885 5,847	23,185 18,782 12,182 13,491 13,219 7,467	15,139 22,497 18,375 12,409 11,409 10,482 15,768 4,309	5,782 15,272 19,755 17,850 11,263 10,974 10,536 8,007 7,343	2,894 19,683 16,199 8,825 9,227 3,975 2,915	7,222 7,946 16,307 11,420 7,669 8,182 3,263	7,759 4,038 3,254	743	16,641 21,550 21,040 15,032 13,312 11,872 9,980 8,805 7,214 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 RETIREES:

Attained Ages	0	1	2	3	4	5~ 9	10-14	15-19	20-24	25~29	30&Over	Total
0 70												
0 - 30		1										_
31 - 35			1		1							
36 40			1		-	_						
41 - 45	2	-	:	_		6						
46 - 50	4	2	1	1	1	5	1					13
	4	.2	3	7	2	10	6	1				
51 - 55	5	3	5		1	14	5	_	_			35
56 - 60	6	5	4		2	14	, [	_	2			35
61 - 65		7	_		~		3	4	2			40
66 - 70		_		_		13	1	5	3	1		24
71 - 75				1	1	5	6	4		7		18
				1		7		3	2			
76 - 80		1	1			,			-	2		15
81 <b>-</b> 85	•					-		- 1	1	. 3		8
86 - 90								1	1			2
91 & Over												C
JI & OVEL	•								•		1	1
Totals	17	15	16	••	_						_	_
	~/		7.0	10	9	75	22	19	11	7	1	202

#### PLAN A - AVERAGE ANNUAL BENEFITS PAYABLE TO DISABILITY RETIREES:

#### Completed Years Since Retirement

Attained Ages		1	2	<i>3</i>	4	5- 9	10-14	15-19	20-24	25-29	30&Over	Average Benefit
0 - 30 31 - 35 36 - 40 41 - 45 46 - 50 51 - 55 56 - 60 61 - 65 66 - 70 71 - 75 76 - 80 81 - 85 86 - 90	8,030 10,460 9,894 9,842	8,208 12,250 5,440 10,459 6,166 9,081 3,054	14,175 5,878 6,837 10,295 11,660 7,955	7,983 8,594 4,188 4,582	12,062 7,614 9,167 11,226 22,681 7,403 5,174	7,934 8,880 8,599 12,305 11,395 7,601 5,674 4,187 5,206	6,110 8,914 6,016 7,611 5,186 6,783	6,060 6,894 8,511 9,395 4,593 8,458 10,027	3,062 5,717 4,913 4,732 2,014 6,795	5,611 5,220 3,332 3,925		8,208 13,118 7,637 8,851 8,907 10,580 8,947 7,333 6,735 4,254 5,460 8,411
91 & Over	6 500										1,437	0 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 BENEFICIARIES OF FORMER MEMBERS:

Completed	Years	Since	Retirement
-----------	-------	-------	------------

Attained Ages	0					`			<del></del> -			
<del></del> -				<b>.</b>		5- 9	10-1 <b>4</b>	15-19	20-24	25-29	30&Over	Total
0 - 20		2						<del></del>	<del></del>			
21 - 25						2						4
26 - 30						_						
31 - 35			1			1						3
36 - 40		1	4		_		1		2			4
41 - 45		-	1	1	1	4			2			10
46 - 50		1	2	_	1	8	2	2				15
51 - 55		4	1	3		5	5	2				17
56 ~ 60	2	-	1	6	3	9	6	3				28
61 - 65	2	2	1	4	3	16	5	4	1			38
66 - 70		1	2	4	2	16	18	8	3			
71 - 75	1		2	1	2	16	20	13	5			54
76 - 80			2			9	33	20	17	<u> </u>	-	62
81 - 85			2			3	10	25	23	-	-	82
						4	· 5	10	40	0	4	71
86 - 90							7	-0	12	8	3	70
91 & Over							7	1		22	2	40
							-	1	3	6	4	15
Totals	. 3	7	15	19	12	93	107	91	108	44	12	511

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

			<u></u>									
Attained Ages		1	2	3	4	5- 9	10-14	15-19	20-24	25-29	30&Over	Average Benefit
0 - 20												
21 - 25		4,443	•			11,546					••	7,995
26 - 30		•				•						0
31 - 35			4,554			7,042	_					7,042
36 - 40		20,823	7,286	15,682	8,215	7 405	6,416		<i>797</i>			3,141
41 - 45		,	11,230	25,002	15,810	7,025 6,043	2 100	4 **	1,533			8,317
46 - 50		20,220	16,057	8,486	15,010	9,811	3,199 7,000	4,752				6,834
51 - 55			4,554	8,412	10,937	4,665	5,576	9,826 7,147			ı.	9,732
56 - 60	8,083	7,149	13,935	8,044	10,902	9,982	4,901	6,232	8,180			6,597
61 - 65 66`- 70	0.015	13,176	11,065	12,711	13,092	5,693	9,771	5,796	6,748			8,595
71 - 75	8,013		6,715	2,586	8,951	7,444	7,591	6,870	2,947	2,008	257	8,258 6,761
76 - 80			6,142			8,081	10,981	10,064	6,367	787	237	9,240
81 - 85			11,732			8,824	11,693	7,561	5,515	2,639	871	7,047
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 PLAN A: YEAR TO YEAR COMPARISON

Number of Active Members Number of Retirees and Survivors Number Terminated Due Deferred Benefits Number Terminated Due Refund		Fiscal 2001 5,455 2,255 189 2,122		Fiscal 2000 5,558 2,213 187 2,108		Fiscal 1999 5,706 2,130 150 2,010		Fiscal 1998 5,740 2,081 152 1,942
Active Lives Payroll	\$	125,304,827	\$	124,683,590	\$	120,568,583 <sup>.</sup>	\$	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
**************************************	***	******	***	*****	k**	, ********	***	*****
- -	1	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 5,880 2,045 163 1,882 '	Fiscal 1996 5,820 2,022 158 1,888	Fiscal 1995 - 5,668 1,951 135 1,827	Fiscal 1994 5,655 1,923 124 1,755	Fiscal 1993 5,639 1,832 126 1,700	Fiscal 1992 5,503 1,756 136 1,716
\$	115,687,749	\$ 112,212,88	0 \$ 105,755,181	\$ 102,250,546	\$ 98,361,409	\$ 94,452,028
\$	18,865,469	\$ 17,947,96	1 \$ 16,540,168	\$ 15,975,744	\$ 14,436,698	\$ 13,094,424
\$	358,812,541	\$ 317,277,29	1 \$ 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	0 \$ 345,626,503	\$ 326,696,611	\$ 311,303,558	\$ 283,259,835
\$	344,213,563	\$ 318,271,740	0 \$ 288,135,401	\$ 270,725,765	\$ 256,851,992	\$ 230,322,094
\$	60,513,740	\$ 59,007,290	0 \$ 57,491,102	\$ 55,970,846	\$ 54,451,566	\$ 52,937,741
\$	45,413,959	\$ 46,384,507	7 \$ 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	5 \$ 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

# EXHIBIT XII PLAN B: ANALYSIS OF ACTUARIALLY REQUIRED CONTRIBUTIONS

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

Retirement Benefits	·	80,775,827 3,749,476 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 Terminated Members with Reciprocals	\$	761,516	
Due Benefits at Retirement		177,086	
Terminated Members Due a Refund		151,255	
TOTAL Present Value of Future Benefits for Terminated Member	rs		\$ 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 & Survivor	S	••••••	\$ 38,847,959
TOTAL Present Value of Future Benefits	••••	••••••	\$ 135,968,943

# EXHIBIT XIV PLAN B: ACTUARIAL VALUE OF ASSETS

### Current Assets:

Cash \$ 532,062		
Contributions Receivable from Members		
Contributions Receivable from Employers		
Accrued Interest on Investments	7	,
Dividends Receivable		
Investments Receivable	I	
TOTAL CURRENT ASSETS	\$	3,722,356
Allocated Share of the Expense Fund	\$	577,998
Property, Plant & Equipment	\$	182,615
Investments:		
investments.		
Common Stock \$ 42,782,232		
Corporate Bonds		
Federal National Mortgage Corporation		
Federal Home Loan Mortgage Corporation	_	
Government National Mortgage Association		
Cash Equivalents		
US Treasury Bonds and Notes		
Deferred Capital Loses on Common Stock		
TOTAL INVESTMENTS	s	96.115.142
		•
TOTAL ASSETS	\$1	00,598,111
Current Liabilities:		
Investments Payable \$ 1,392,555		
Accounts Payable 52 186		
Refunds Payable	•	
Refunds Payable to Plan A		
TOTAL CURRENT LIABILITIES	.e. ·	10 660 171
	Φ.	ιο,υυυ,1/1 \
ACTUARIAL VALUE OF ASSETS	\$ 5	R9 937 040
	Ψ (	,

## 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 Expenses 7,105	
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\$ 2,072,674Employer Contributions1,925,087Ad Valorem Taxes845,189Revenue Sharing Funds39,935Irregular Contributions46,871Funds Transferred to Plan A(9,309,600)Total Contribution Income(9,309,600)	\$ (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	\$ 6,319,520
Not Income for Fires 1 2001 (Taxana Pa	
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 PLAN B: FUND BALANCE

### Present Assets of the System Creditable to:

Annuity Savings Fund	\$	14,249,959
Annuity Reserve Fund		38,534,761
Pension Accumulation Fund		31,066,486
Deferred Retirement Option Plan Account		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		(543,722)
ALLOCATION OF EXPENSE FUND		572,481
ACTUARIAL VALUE OF ASSETS	\$	89,937,940
EXHIBIT XIX 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

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

2. Amortization of Unfunded Balance over 30 years:	18.28%
·	
Adjustments in Product Data Data Data Characteristics	
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	
Changes for Fiscal 2000 (2.29)%	
Changes for Fiscal 2001	
3. TOTAL Adjustments	(10.39)%
	,
Amortization of Adjustments in Funded Ratio over 30 years:	
<i>y</i>	
Changes for Fiscal 1988(1.04)%	
Changes for Fiscal 1989 1.18%	
Changes for Fiscal 1995	
Changes for Fiscal 1997 0.51%	,
Changes for Fiscal 1998	
Changes for Fiscal 2000	
Changes for Fiscal 2001 0.00%	
4. TOTAL Amortization of Adjustments	1.34%
5 Thomas A.D. C. C. A.D. A.T. G. C. A.D. A.D. A.D. A.D. A.D. A.D. A.D.	
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

		Terminated with Funds			· ·
	Active	on Deposit	DROP	Retired	Total
Number of members as of	- India	on Deposit	DROI	Ketireu	Total
June 30, 2000	2,023	767	45	689	3,524
Additions to Census					
Initial membership	263	28			291
Death of another member	(2)			2	
Omitted in error last year				_	
Change in Status during Year					
Actives terminating service	(37)	37			·
Actives who retired	(27)			27	
Actives entering DROP	(18)		18		
Term. members rehired	3	(3)			
Term. members who retire		(3)		3	
Retirees who are rehired				_	
Refunded who are rehired	7				7
DROP participants retiring			(7)	. 7	
DROP returned to work	7		(7)	Ť	
Omitted in error last year				1	1
Eliminated from Census					
Refund of contributions	(186)	(60)			(246)
Deaths	(7)			(28)	(35)
Included in error last year	(6)			(=0)	(6)
Adjustment for multiple records			]	(1)	(1)
Normalian of a surface of C		_			
Number of members as of					
June 30, 2001	2,020	766	49	700	3,535

PLAN B - ACTIVES CENSUS BY AGE:

	Number	Number	Tota1	Average	Total
Age	Male	Female	Number	Salary	Salary
16 - 20	9	6	<b>1</b> 5	11,951	179,261
21 - 25	<i>89</i>	24	113	14,330	1,619,253
26 - 30	105	43	148	16,536	2,447,363
31 - 35	145	<i>53</i>	198	17,947	3,553,461
<i>36 - 40</i>	163	78	241	20,592	4,962,617
41 - 45	241	108	34 <i>9</i>	21,279	7,426,458
46 - 50	<i>232</i>	<b>79</b> .	311	21,807	6,781,986
<i>51 - 55</i>	<i>176</i>	77	<i>253</i>	22,206	5,618,163
56 <b>-</b> 60	142	47	189	22,324	4,219,308
61 <b>-</b> 65	123	33	<i>156</i>	23,567	3,676,412
66 - 70	49	14	<i>63</i>	25,793	1,624,962
71 - 75	21	3	24	15,148	363,552
76 - 80	7	0	7	9,467	66,269
<b>81 - 85</b>	1	1	· <b>2</b>	16,704	33,407
TOTAL	1,503	566	2,069	20,576	42,572,472

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:

Age	Number Male	Number Female	Total Number	Average Benefit	Total Benefit
21 - 25	o	· <b>1</b>	1	729	729
31 - 35	0	1`	1	4,962	4,962
36 - 40	2	o	2	5,296	10,591
41 - 45	7	4	11	4,482	49,300
46 - 50	4	3	7	4,401	30,808
51 - 55	7	2	9	6,128	55,155
56 <b>-</b> 60	12	2	14	2,771	38,791
61 <b>-</b> 65	3	2	5	633	3,163
71 - 75	0	3	3	1,393	4,178
TOTAL	35	18	53	3,730	197,677

PLAN B - TERMINATED MEMBERS DUE A REFUND OF CONTRIBUTIONS:

Contribu	tio	ns Ranging		Total
From		To	Number	Contributions
0	_	99	597	13,499
100	-	499	69	14,553
50 <i>0</i>	-	999	16	10,947
1000	-	1999	10	15,885
20,00	-	4999	. 15	48,071
5000	-	9999	5	32,666
10000	-	19999	1	11,747
	•	TOTAL	713	147,368

PLAN B - REGULAR RETIREES:

	Number	Number	Tota1	Average	Total
Age	Male	<b>Female</b>	Number	Benefit	Benefit
46 - 50	1	0	1	8,629	8,629
<i>51 - 55</i>	1	0	1	9,571	9,571
56 <b>-</b> 60	8	2	10	13,735	137,349
61 <b>-</b> 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	5 <i>5</i>	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	<i>509</i>	7,483	3,809,069

#### PLAN B - DISABILITY RETIREES:

Age	Number Male	Number Female	Total Number	Average Benefit	Total Benefit
-		r Canality			
41 - 45	3	1	4	4,683	18,732
46 - 50	6	1	7	4,540	31,780
51 <b>- 5</b> 5	6	2	8	6,288	50,307
56 <b>- 6</b> 0	3	2	5	6,006	30,031
61 <b>-</b> 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:

	Number	Number	Total	Average .	Total
Age	Male	<b>Female</b>	Number	Benefit	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
<i>56 - 60</i>	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	o	37	37	4,670	172,791
81 - 85	1	23	24	4,707	112,961
86 ~ 90	, <b>o</b>	7	7	2,652	18,563
91 - 99	1	<i>3</i>	4	2,055	8,221
TOTAL	6	148	154	5,445	838,513

PLAN B - ACTIVE MEMBERS:

Completed Years of Service

Attained Ages	0	1	2	3	4	5- 9	10-14	15-19	20-24	25-29	30&Over	Total
	<del></del>											
0 - 20	12	3										
21 - 25	50	24	. 17	14	5							15
26 - 30	42	24 20	22	10	8	42	4					113
31 - 35	3 <i>9</i>	30	25	21	14	46	21	_				148
36 - 40	28	30	34	24	16	47		2				198
41 - 45	. 38	25	26	26	16	69	29	23	10			241
46 - 50	27	18	18	11	16		, 72	44	32	1		349
51 - 55	20	14	11	6		62	7 <i>2</i>	34	3 <i>6</i>	16	1	311
56 - 60	11	12	8	4	11	55	57	27	20	24	8	253
61 - 65		7		_	6	48	41	17	18	18	6	189
66 - 70	3	,	4	11	6	30	37	21	15	10	12	156
71 & Over	2	1	1	7	2	13	16	8	'6	. 1	6	63
/I & Over	2				2	11	7	5	5	1	-	33
<b>Țotals</b>	274	184	166	134	102	426	<u>356</u>	181	142	71	33	2069

PLAN B - AVERAGE ANNUAL SALARY OF ACTIVE MEMBERS:

#### Completed Years of Service

				_								
Attained Ages	<u> </u>	1	2	3	4	5- 9	10-14	15-19	20-24	25-29	30&Over	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	25 204				16,536
36 - 40	18,194	19,382	19,637	17,897	17,677	21,486	22,934	25,994	24 500			17,947
41 - 45	15,486	16,901	18,178	18,921	14,661	20,381	23,955	24,847	24,532			20,592
46 - 50	15,877	20,734	17,801	18,780	15,946	16,660	24,353	26,659	27,611	28,750		21,279
51 ~ 55	16,656	17,838	16,200	18,906	21,272	18,164	22,334	25,115	27,310	33,758	34,401	21,807
56 - 60	20,518	20,731	22,873	16,553	17,341	20,237	=	25,903	29,153	30,789	27,030	22,206
61 - 65	25,881	13,431	18,715	21,417	16,388	16,897	19,489	21,615	24,643	33,368	34,923	22,324
66 - 70	18,203	29,304	8,000	25,409	14,846	18,357	23,230	24,123	30,598	29,380	39,184	23,567
71 & Over	34,091	<b>,-</b>	-,	25,005	10,477	-	27,019	27,559	34,022	43,263	34,148	25,793
					20,477	9,989	16,082	16,741	7,351	31,175		14,037
Average	15,099	17,255	18,395	18,441	17,432	18,762	22,997	25,016	27,032	32,066	34,402	20,576

PLAN B - TERMINATED MEMBERS DUE A DEFERRED RETIREMENT BENEFIT:

Years Until Retirement Eligi
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	.———											
Attained												
Ages	0	1	2	3	4	5- <i>9</i>	10-14	15-19	20-24	25-29	30&Over	Total
									<del></del>		<del></del>	
0 - 20												
21 - 25												0
<i>26 - 30</i>											1	1
<i>31 - 35</i>				•								0
36 - 40									2	1		1
41 - 45							2	9	2			2
46 - 50							7	•				11
51 - 55	•		1			8	•					7
56 - 60	3	2	6	3		J						9
61 - 65	5	<del>-</del>	_	•								14
66 - 70	_											5
71 - 75	3											o
76 & Over	_											3 0
Totals	11	2	7	3	o	8	9	9	2	1	1	53

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

#### Years Until Retirement Eligibility

Attained Ages		1		<u> </u>	4	5- <b>9</b>	10-14	15-19	20-24	25-29 	30&Over	Average Benefit
0 - 20 21 - 25				·							729	0 729
26 - 30 31 - 35 36 - 40									5,295	4,962		4,962
41 - 45 46 - 50							4,409 4,401	4,498	3,295			5,295 4,482 4,401
51 - 55 56 - 60	2,413	3 507	5,203			6,244						6,128
61 - 65 66 - 70	633	3,527	3,018	2,130							•	2,771 633
71 - 75 76 & Over	1,393											0 1,393 0
Average	1,326	3,527	3,330	2,130	o	6,244	4,403	4,498	5,295	4,962	729	3,730

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PLAN B - SERVICE RETIREES:

Attained Ages	0	1	2	3	4	5- 9	10-14	15-19	20-24	25-29	30&Over	Total
0 ~ 50	7											
51 - 55	1											1
56 - 60	3			1	5	1						1
<b>61 - 65</b>	17	17	20	8	4	9	2				-	10
66 - 70	8	15	18	14	13	49	9	7				77
<b>71 - 75</b>	3	2	2	1	3	44	54	<u>.</u>				127
76 - 80	1	2	1		1	و	40	42	5		`	115 101
81 - 85				· 1	1	2	5	28	18			55
86 - 90							•	2	10	5		17
91 & Over							1		2	2		5
Totals	34	36	41	25	27	114	111	79	35	7	o	509

PLAN B - AVERAGE ANNUAL BENEFITS PAYABLE TO SERVICE RETIREES:

Attained Ages	<i>o</i>	1 '		3	4	5- 9	10-14	15-19	20-24	25-29	30&Over	Average Benefit
0 - 50	8,629											
51 - 55	9,571											8,629
<i>56 - 60</i>	17,518			18,145	11,130	11,002						9,571
61 <i>- 65</i>	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	12 200				9,664
71 - 75	5,120	7,166	6,774	9,631	5,843	7,762	-	13,308			·	7,511
76 - 80	7,340	6,459	3,452	2,031	3,954	-	7,554	6,865				7,487
81 - 85	,,,	0,-55	3,432	2 200	-	5,962	7,587	7,066	7,744			7,132
86 - 90				2,300	4,394	9,883	6,708	6,248	3,181			5,313
								7,716	3,541	1,918		3,555
91 & Over							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	o	7.483

PLAN B - DISABILITY RETIREES:

Attained Ages	0	1	2	3	4	5- 9	10-14	15-19	20-24	25-29	30&Over	Total
0 - 40												
41 - 45		1				-						0
46 - 50	2	1	1	7 .		3						4
51 <b>-</b> 55		4	1	-		2						7
56 <sub>.</sub> - 60		-	î		•	3						8
61 - 65			7		7	- 4	_	_	1			5
66 - 70			•			3	1	1				7
71 - 75						1	1					2
76 - 80								_				0
81 & Over								2	2			4
												0
Totals	2	6	4	1	2	14	2	3	3	<u>o</u>	0	37

PLAN B - AVERAGE ANNUAL BENEFITS PAYABLE TO DISABILITY RETIREES:

Attained Ages	<u> </u>	1	2	3	4	5- 9	10-14	15-19	20-24	25-29	30£Over	Average Benefit
0 - 40					•						<del>-</del>	
41 - 45		5,625				4,369						0
46 ~ 50	4,845	2,069	4,282	8,476		3,631						4,683
51 - 55		4,732	7,169	,5,2,0		8,070						4,540
56 - 60		-,	12,789		3,928	3,656						6,288
<b>61 - 65</b>			9,969		5,883	6,465	4 212	9 450	6,002			6,006
66 - 70			-,-02		5,005	6,725	4,212	3,453				6,130
71 - 75						0,723	10,023					8,374
76 - 80												0
81 & Over						•		5,571	2,959			4,265
												0
Average	4,845	4,437	8,552	8,476	4,905	5,572	7,118	4,865	3,974	О	o	5,610

PLAN B ~ SURVIVING BENEFICIARIES OF FORMER MEMBERS:

Completed	Years	Since	Retirement

Attained												
Ages	<i>•</i>	1	<b>2</b>	3	4	5- 9	10-14	15-19	20-24	25-29	30&Over	Total
0 - 25												
26 - 30												O
31 - 35					1							1
36 - 40												0
41 - 45							_					0
46 - 50		1		7	4	_	2					2
<b>51 - 55</b>		_	1	-	1		1	_				4
56 ~ 60	2	1	-		2	1		1				4
61 <b>-</b> 65		. 1	1	7	7		<u> </u>	_	•			10
66 - 70	1		2	-	-	7	6	1	1			20
71 - 75			_			,	0	4	_			20
76 - 80		1				4	7	<i>5</i> 13	5	_		21
81 - 85						~	,		11	1		37
86 - 90						7	3	7	10	3	1	24
91 & Over						-		1		5		7
									1	1	2	4
Totals	3	4	4	2	6	27	35	3 <i>2</i>	28	10	3	154

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

_							·									
Attained Ages	<i>o</i>	1	2	3	4	5- 9	10-14	15-19	20-24	25-29	30&Over	Average Benefit				
											<del></del>					
0 - 25			•													
26 - 30					4,143				F			0				
31 - 35												4,143				
36 - 40												o				
41 - 45							3,888					0				
46 - 50		3,531		6,965	3,954		6,687					3,888				
5 <b>1 -</b> 55		•	3,312	*,,,,,	4,866	5,324	0,007	2 242				5,284				
<i>56 - 60</i>	6,490	4,649	- 7		8,143	9,634	6 000	3,818				4,330				
61 - 65		2,980	12,992	3,840	6,586	-	6,200					7,865				
66 - 70		_,_,	6,411	3,040	0,566	6,879	5,986	5,778	953			6,204				
71 - 75			-/			7,577	7,088	6,856				6,791				
76 - 80		2,022				10,150	8,000	3,943	5,009			6,527				
81 - 85		27022				7,442	5,837	5,006	2,961	2,489		4,670				
86 - 90							12,585	5,742	2,950	1,085	2,255	4,707				
91 & Over						4,552		9,611		880		2,652				
2 0,02									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	1,179	1,708	5,445				

## EXHIBIT XXII PLAN B: YEAR TO YEAR COMPARISON

Number of Active Members Number of Retirees and Survivors Number Terminated Due Deferred Benefits Number Terminated Due Refund		Fiscal 2001 2,069 700 53 713		Fiscal 2000 2,068 689 52 715		Fiscal 1999 2,152 664 58 702		Fiscal 1998 2,102 653 63 680
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 (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 1997		Fiscal 1996		Fiscal 1995		Fiscal 1994	)	Fiscal 1993	•	Fiscal 1992
	2,056		2,012		1,998	•	1,984		1,979	·	1,934
	651		646		628		614		604		598
	61		68		80 .						
							78		73		76
	664		632		701		690		700		702
\$	36,584,814	\$	34,234,222	\$	33,750,064	\$	32,721,647	\$	32,274,879	\$	30,402,650
. \$	3,713,381	\$	3,502,189	\$	3,279,414	\$	3,129,478	\$	2,879,766	\$	2,704,572
\$	76,245,708	\$	66,737,143	\$	`61,752,808	\$	55,524,052	\$	56,062,732	\$	50,664,032
	89.95%		88.92%		87.77%		86.73%		85.88%		84.22%
\$	81,392,511	\$	75,655,433	\$	70,206,923	\$	66,254,195	\$	63,722,611	\$	58,356,436
								)		•	
\$	73,216,211	\$	67,276,177	\$	61,623,243	\$	57,464,395	\$	54,724,776	\$	49,148,443
\$	8,176,300	\$	8,379,256	\$	8,583,680	\$	8,789,800	\$	8,997,835	, \$	9,207,993
\$	9,440,170	\$	4,991,127	\$	6,659,816	.\$	6,623,442	\$	4,621,051	\$	6,287,558
\$	14,674,371	\$	13,851,727	\$	13,965,323	\$	13,584,705	\$	13,342,706	\$	12,661,651
\$	105,507,052	\$	94,498,287	\$	90,832,062	\$	86,462,342	\$	81,686,368	\$	77,305,645
***	********	***	******	***	******	***	******	***	******	***	*****
	Fiscal 1998	F	iscal 1997	F	iscal 1996	F	iscal 1995	F	iscal 1994	F	iscal 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%

#### 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:

- 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 "X×(A&B)" where "A" is equal to the number of years of credited service accrued as retirement or death of the member or retiree and "B" is equal to the number of years since death of the member or retiree to June 30 of the initial year of increase and "X" is equal to any amount available for funding such increase up to a maximum of \$1.00.

#### **ACTUARIAL ASSUMPTIONS**

In determining actuarial costs, certain assumptions must be made regarding future experience under the plan. These assumptions include the rate of investment return, mortality of plan members, rates of salary increase, rates of retirement, rates of termination, rates of disability, and various other factors 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 Increase in Factor Results in

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

ACTUARIAL COST METHOD: Frozen Attained Age Normal Actuarial Cost

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

method.

ACTUARIAL ASSET VALUES: Fixed income investments are carried at

amortized cost based on information provided by the system's auditors. Stocks are carried at market value adjusted to smooth all realized and unrealized capital gains or losses over a three-year period. The smoothing is accomplished by releasing into income one third of current year capital gains or losses, one third of prior year capital gains or losses, and one third of capital gains or losses from two years ago. In addition, expense fund assets were allocated to each plan in

proportion to covered payroll.

VALUATION INTEREST RATE: 8% (Net of Investment Expense)

ANNUAL SALARY INCREASE RATE: 6% (3.25% Inflation / 2.75% Merit)

ANNUITANT MORTALITY: 110% of 1971 Group Annuity Mortality Table

(Set back 6 years for females)

RETIREE COST OF LIVING INCREASES:

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

RATES OF RETIREMENT:

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

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:

All DROP participants are assumed to participate for 3 years and retire at the end of this participation period.

RETIREMENT RATES FOR ACTIVE FORMER DROP PARTICIPANTS:

Retirement rates for active former DROP participants are as follows:

Ages	Retirement Rates
Below 81	0.30
81-89	0.90
90	1.00

DISABILITY RATES:

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	% With	Number of	Average
Death	Children	Children	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 Rates	Plan A Retirement Rates	Plan B Retirement Rates	Plan A DROP Entry Rates	Plan B DROP Entry Rates	Withdrawal Rates	Base Disability Rates	Remarriage Rates
18	0.00052	0.00000	0.00000	0.00000	0.00000	0.04000	0.00105	0.05665
19	0.00053	0.00000	0.00000	0.00000	0.00000	0.04000	0.00105	0.05665
20	0.00055	0.00000	0.00000	0.00000	0.00000	0.04000	0.00105	0.05665
21	0.00057	0.00000	0.00000	0.00000	0.00000	0.03950	0.00105	0.05213
22	0.00060	0.00000	0.00000	0.00000	0.00000	0.03900	0.00105	0.04834
23	0.00062	0.00000	0.00000	0.00000	0.00000	0.03850	0.00105	0.04522
24	0.00065	0.00000	0.00000	0.00000	0.00000	0.03800	0.00105	0.04270
25	0.00068	0.00000	0.00000	0.00000	0.00000	0.03750	0.00105	0.04070
26	0.00071	0.00000	0.00000	0.00000	0.00000	0.03700	0.00105	0.03915
27	0.00075	0.00000	0.00000	0.00000	0.00000	0.03650	0.00105	0.03799
28	0.00079	0.00000	0.00000	0.00000	0.00000	0.03600	0.00109	0.03714
29	0.00084	0.00000	0.00000	0.00000	0.00000	0.03550	0.00115	0.03654
30	0.00089	0.00000	0.00000	0.00000	0.00000	0.03500	0.00123	0.03611
31	0.00095	0.00000	0.00000	0.00000	0.00000	0.03450	0.00133	0.03578
32	0.00101	0.00000	0.00000	0.00000	0.00000	0.03400	0.00145	0.03549
33	0.00108	0.00000	0.00000	0.00000	0.00000	0.03350	0.00158	0.03515
34	0.00115	0.00000	0.00000	0.00000	0.00000	0.03300	0.00173	0.03471
35	0.00123	0.00000	0.00000	0.00000	0.00000	0.03250	0.00189	0.03409
36	0.00132	0.00000	0.00000	0.00000	0.00000	0.03200	0.00206	0.03286
37	0.00142	0.00000	0.00000	0.00000	0.00000	0.03150	0.00225	0.03139
38	0.00154	0.00000	0.00000	0.00000	0.00000	0.03100	0.00244	0.02973
39	0.00166	0.00000	0.00000	0.00000	0.00000	0.03050	0.00264	0.02787
40	0.00180	0.00000	0.00000	0.00000	0.00000	0.03000	0.00284	0.02585
41	0.00197	0.15000	0.00000	0.17000		- 0.02950	0.00304	0.02352
42	0.00220	0.15000	0.00000	0.17000	0.00000	0.02900	0.00325	0.02111
43	0.00249	0.15000	0.00000	0.17000	0.00000	0.02850	0.00344	0.01868
44	0.00283	0.15000	0.00000	0.17000	0.00000	0.02800	0.00363	0.01629
45	0.00321	0.15000	0.00000	0.17000	0.00000	0.02750	0.00383	0.01400
46	0.00365	0.15000	0.18000	0.17000	0.25000	0.02700	0.00403	0.01208
47	0.00413	0.15000	0.18000	0.17000	0.25000	0.02650	0.00425	0.01034
48	0.00465	0.15000	0.18000	0.17000	0.25000	0.02600	0.00614	0.00879
49	0.00521	0.15000	0.18000	0.17000	0.25000	0.02550	0.00803	0.00744
50	0.00581	0.15000	0.18000	0.17000	0.25000	0.02500	0.00992	0.00629
51 52	0.00645	0.15000	0.18000	0.17000	0.25000	0.02450	0.01052	0.00551
52 53	0.00713	0.15000	0.18000	0.17000	0.25000	0.02400	0.01120	0.00493
53	0.00784	0.15000	0.18000	0.17000	0.25000	0.02350	0.01192	0.00451
54	0.00859	0.15000	0.18000	0:17000	0.25000	0.02300	0.01276	0.00423
55 56	0.00937	0.15000	0.15000	0.17000	0.20000	0.02250	0.01123	0.00406
50 57	0.01019	0.15000	0.15000	0.17000	0.20000	0.02200	0.00970	0.00000
58	0.01104 0.01198	0.15000	0.15000	0.17000	0.20000	0.02150	0.00815	0.00000
59	0.01198	0.15000 0.15000	0.15000	0.17000	0.20000	0.02100	0.00896	0.00000
60	0.01312		0.15000	0.17000	0.20000	0.02050	0.00991	0.00000
61	0.01443	0.15000 0.15000	0.20000	0.17000	0.30000	0.02000	0.01100	0.00000
62	0.01388	0.15000	0.15000 0.15000	0.17000 0.17000	0.20000	0.02000	0.01226	0.00000
63	0.01745	0.15000	0.15000		0.20000	0.02000	0.01370	0.00000
64	0.01313	0.15000	0.15000	0.17000 0.17000	0.20000 0.20000	0.02000	0.01482	0.00000
65	0.02110	0.15000	0.15000	0.17000	0.20000	0.02000 0.02000	0.01596	0.00000
55	V.V2333	5.15000	0.15000	0.17000	0.20000	0.02000	0.01710	0.00000

#### 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.