TEACHERS' RETIREMENT SYSTEM OF THE STATE OF ILLINOIS

INVESTIGATION OF DEMOGRAPHIC AND ECONOMIC EXPERIENCE

> FOUR YEAR PERIOD FROM JULY 1, 1991 - JUNE 30, 1996 OCTOBER, 1997





October 25, 1997

Board of Trustees Teachers' Retirement System of the State of Illinois 2815 West Washington Street Springfield, Illinois 62702

Ladies and Gentlemen:

We are submitting herewith our report on the results of an actuarial investigation of the demographic and economic experience of the active members, annuitants, beneficiaries, and survivors covered under the Teachers' Retirement System of the State of Illinois for the five year period July 1, 1991 to June 30, 1996.

It should be noted that the actuarial investigation period excludes the most current fiscal year ended June 30, 1997, since the inclusion of such year's experience would delay the completion of the report and, as a result, the recommendations of the report could not be included in the current year's actuarial valuation as of June 30, 1997. The review period of the investment returns of TRS are an exception to this in that the returns for fiscal year 1997 are currently available and therefore for investment return purposes the review period is July 1, 1992 to June 30, 1997.

This actuarial experience investigation was prepared in accordance with Article 16, Section 176 of the Pension Code governing the System, which requires that at least once in each five year period, the actuary of the System is to make an actuarial investigation into the mortality, service, and compensation experience of the members, annuitants, and beneficiaries covered under the System.

The attached report describes the actuarial process employed, and identifies the significant results of the investigation. In particular, we are recommending changes in the following actuarial assumptions:

- (1) Rates of mortality among active members, annuitants, beneficiaries and survivors.
- (2) Rates of termination from employment among vested members.
- (3) Rates of increase in annual salaries among active members.
- (4) The rate of return on the actuarial value of assets.

A summary of our recommendations may be found in Section V on page 19 of the report.

Board of Trustees Teachers' Retirement System of the State of Illinois October 25, 1997 Page 2

Fiscal Impact - Pension Benefit Obligation

As indicated on page 21 of Section V of the report, the proposed revisions in the above assumptions would decrease the pension benefit obligation of the System by approximately \$933 million which represents a percentage reduction of 3.5% in the current pension benefit obligation of \$27.0 billion determined as of June 30, 1997.

Fiscal Impact - Employer Contribution for F/Y 1999

The proposed revisions would decrease the total fiscal year 1999 employer contribution under the funding requirement of Public Act 88-0593 by .06% of the projected fiscal year 1999 membership payroll of \$5,558 million, or approximately \$3.3 million.

The Table of Contents, which immediately follows, outlines the material contained in the report.

Respectfully submitted,

John W. Thompson Consulting Actuary



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TEACHERS' RETIREMENT SYSTEM OF THE STATE OF ILLINOIS

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TEACHERS' RETIREMENT SYSTEM OF THE STATE OF ILLINOIS

ACTUARIAL INVESTIGATION OF THE SYSTEM'S EXPERIENCE FOR THE PERIOD JULY 1, 1991 TO JUNE 30, 1996

SECTION I - INTRODUCTION

Article 16, Section 176 of the Pension Code of the Teachers' Retirement System of the State of Illinois provides that at least once in each five year period, the actuary of the System is to make an actuarial investigation into the mortality, service, and compensation experience of the members, annuitants, and beneficiaries covered under the System.

We have prepared the following report which presents the results of the experience investigation of the System for the five year period July 1, 1991 through June 30, 1996. It should be noted that the actuarial investigation period excludes the most current fiscal year ended June 30, 1997, since the inclusion of such year's experience would delay the completion of the report and, as a result, the recommendations of the report could not be included in the current year's actuarial valuation as of June 30, 1997. The review period of the investment returns of TRS are an exception to this in that the returns for fiscal year 1997 are currently available and therefore for investment return purposes the review period is July 1, 1992 to June 30, 1997.



The objectives of this investigation are to:

- (1) Determine appropriate rates to anticipate the following events among active members:
 - (a) termination from employment;
 - (b) mortality during membership;
 - (c) disability retirement;
 - (d) regular service retirement; and
 - (e) salary increases
- (2) Determine appropriate rates to anticipate mortality among service retirees, beneficiaries, survivors, and disability retirees.
- (3) Make recommendations regarding the adoption of refinements to the actuarial basis of the System, which are deemed appropriate by the actuary for adoption by the Board.

Experience for Active Members

Tabulations showing the distribution by age of the number of cases in each group who were exposed to the events of termination from employment, mortality, disability and regular service retirement during the five year period were compiled. The assumed rates of occurrence of these events, which are currently used in preparing annual actuarial valuations, were then applied to the number of cases exposed to determine the expected cases of separation in each category.

The number of cases expected to be separated from active employment on account of termination from employment, death, disability, and regular service retirement were then compared to the corresponding number of actual cases of separation in each category. The results of the



comparison between expected and actual cases were then expressed as a ratio of actual experience over expected experience.

The expected and actual salaries as of the end of each year were also compared to the expected and actual salaries as of the end of each previous year. The comparisons yield an average annual total increase in both expected and actual salaries for the five year period.

Currently, the actuarial assumptions for termination from employment, disability, and regular service retirement have been determined on a sex distinct basis, while rates of mortality in active service and annual salary increase rates are unisex. Separate male and female results are shown only for the events which are assumed to have a sex distinct basis.

Experience for Annuitants, Beneficiaries, and Survivors

Investigations of the mortality experience for annuitants, beneficiaries and survivors were prepared separately by cause of retirement. The expected deaths were determined by applying the assumed rates of mortality used for valuation purposes to the number of persons exposed in each retirement category. A comparison was then made between the expected and actual deaths in each retirement category, and the results expressed as the ratio of actual experience over expected experience.



New Entrants

An analysis of the profile for new entrants was done on the data provided for the last three actuarial valuations. For each group – full time/regular part time members, and members who are hourly paid or substitute teachers – we reviewed the percentage of new hires who will fall into that group, the average annual service credit earned by members of the group, and the average annual full time rate of pay at June 30, 1996 for members of the group. The new member profile is used in the 50-year projection completed annually to determine the funding requirements of PA 88-0593.

Recommendations

Based on the results of our investigation, we are recommending revisions in the rates of (i) death in active service, (ii) death for regular service retirements, (iii) death for beneficiaries and survivors, (iv) death for disability retirements, (v) termination from employment among vested members, (vi) salary increase, and (vii) return on investments. We are also recommending an updated new member profile for use in the annual 50-year projection required by PA 88-0593.

Summaries of Experience

The summaries attached to this report under Section VI show the comparisons and results of the experience investigation for (i) the actual and expected cases of separation from active service, (ii) the actual and expected mortality among annuitants, beneficiaries, and survivors, (iii) the annual rates of return on investments, (iv) the average increases in annual salaries among active members, and (v) the new member profile.



For purposes of this experience investigation, the current assumptions were used in determining expected results for the entire five year period, in order to accurately reflect the emerging trends during that period.



SECTION II - DISCUSSION OF INVESTIGATION RESULTS DEMOGRAPHIC FACTORS

We have prepared Tables 1 through 4 attached to Section VI, which summarize the actual and expected separations from active service on account of termination from employment, death, disability, and regular service retirement during the five year period ended June 30, 1996. Separate summaries for males and females are presented for termination from employment, disability, and regular service retirement. Unisex results are presented for mortality. In addition, Tables 5, 6, and 7 attached to Section VI analyze unisex experience for mortality among annuitants, beneficiaries, and survivors.

The following table presents a summary comparison of actual to expected cases of separation from active service and mortality among annuitants, beneficiaries, and survivors.

Event	Ratio of Actual to Expected Experience
Termination from Employment	50.8%
Death in Active Service	44.4%
Disability Retirement	72.3%
Regular Service Retirement	57.0%
Death after Retirement:	
Regular Service Retirements	91.3%
Beneficiaries and Survivors	109.4%
Disability Retirements	134.3%

SUMMARY COMPARISON OF ACTUAL TO EXPECTED CASES



For purposes of the comparison, the table shows the ratio of the actual number of cases to the expected number of cases expressed as a percentage for each type of separation and mortality. A percentage in excess of 100% indicates that the actual number of cases was greater than the expected number of cases, whereas a percentage of less than 100% indicates that the actual number of cases was less than the expected number of cases.

For example, in regard to termination from employment, Table 1 on page 33 shows an entry of 50.8% for all members. This means that during the five year experience period the actual number of total members terminating employment was less than the expected number of terminations from employment by a percentage equal to 100% minus 50.8% or 49.2%.

In addition, the entry for death after retirement for beneficiaries, shown in Table 6, is 109.4% This means that during the experience period, the actual number of beneficiary and/or survivor deaths exceeded the expected number by 9.4%.

The comments presented below under each category set forth the facts indicated by this experience study with respect to the demographic factors, along with our recommendations for future valuations.



Rates of Termination from Employment

During the five year period, the experience investigation indicates that the actual cases of termination from employment were generally less than expected among both males and females. The investigation of the experience was split into two categories, vested and nonvested, which are illustrated in Section VI, Table 1.

The investigation indicates that the actual cases of terminations from employment were approximately 102.6% of the number expected by the current rates for nonvested males, and 68.0% of the number expected by the current rates for nonvested females, resulting in a combined percentage equal to 73.6% of actual to expected for nonvested members. Although the experience was less than expected, we believe that the current assumed rates are sufficient to anticipate future terminations from employment for the nonvested members and, therefore, we do not recommend any changes in these rates as they are applied to the nonvested members.

The investigation indicates that the actual cases of terminations from employment were approximately 36.2% of the number expected by the current rates for vested males, and 41.4% of the number expected by the current rates for vested females, resulting in a combined percentage equal to 40.3% of actual to expected for vested members.

We believe that the 1993-1995 Early Retirement Incentive programs, and recent proposals to increase the regular service retirement benefit from a tiered formula to the more generous "2.2% formula" have created expectations of potential future improvements in the pension benefits



provided by the System thus encouraging members with vested benefits to remain employed within the System. We therefore believe that the current assumed rates for vested members are insufficient to anticipate future terminations from employment and we recommend adjusting the rates of vested terminations from employment to more accurately reflect recent experience.

Rates of Mortality Among Active Members

The investigation indicates that actual occurrences of mortality were approximately 44.4% of the expected among employees in active service. Rates of mortality were lower than expected among all age groups. The results are presented in Table 2.

Although the experience was substantially different from our expectations, the mortality assumption for active employees is not particularly significant. The assumed rates of mortality are so much smaller than the termination and retirement rates which apply at the same ages that they have little effect on the financial results.

However, since the experience was considerably less than expected we are recommending that consideration be given to adjusting the rates of mortality currently used for active members to bring them more in line with the combined actual experience during the investigation period.

Rates of Disability Retirement

Currently, the actuarial assumptions include rates of disability retirement for ages 20-69.



Table 3 shows that the actual experience of disability retirement was lower than expected in all age groups for both males and females with the exception of the group of males ages 33-37. However, the number of disability retirements involved is not statistically significant. In addition, the prior experience study did not reflect the same low rates as the experience in the current period. We are therefore recommending no change in the rates at this time.

Rates of Regular Service Retirement

In measuring the regular service retirement experience of the System, 11,966 retirements which occurred under the provisions of the 1993-1995 Early Retirement Incentive (ERI) programs were not included. Limiting the review to members who retired outside these programs resulted in a total number of regular service retirements during the period of the study of 57.0% of the number expected by the current rates. However, these results are skewed due to the impact of the Early Retirement Incentive programs, and as a result, no conclusions can be drawn from the retirement experience presented in Table 4.

We are recommending that no adjustment be made to the current regular service retirement rates, as we believe these rates reflect a reasonable expectation of the retirement experience of TRS over the long-term.

Rates of Death After Retirement

The experience study for the five year period ended June 30, 1996 revealed the following facts concerning annuitants, beneficiaries, and survivors:



- The actual cases of death among regular service-related retirements were 91.3% of expected.
- (2) The actual cases of death among dependent beneficiaries and survivors were 109.4% of expected.
- (3) The actual cases of death among those annuitants who retired on account of disability were higher than expected, though not at all ages. In total, for the five year period ended June 30, 1996, actual cases of disabled death were 134.3% of expected.

Summaries of the mortality experience among annuitants, beneficiaries, and survivors are shown in the following tables:

- (1) Table 5 Annuitants who retired on account of service.
- (2) Table 6 Dependent beneficiaries and survivors of deceased active members and annuitants.
- (3) Table 7 Annuitants who retired on account of disability.

The experience of mortality in the current study was less than expected for service retired members, and greater than expected for beneficiaries. We are recommending a change in these rates at this time to a more modern mortality table which is based on sex distinct, rather than unisex, rates, and which more closely models the experience of these groups, but with an allowance for mortality improvements through the year 2000.



Since the pattern of disabled mortality has been consistent over the last two experience studies, we recommend adjusting the rates of disabled mortality to more accurately reflect the experience.

New Member Profile

In order to perform the 50 year projection required by Public Act 88-0593, it is necessary to establish a profile of the members who will be hired over the next 50 years. Three years ago, two separate profiles were established for full time/regular part time members and members who are hourly paid or substitute teachers. This year we have analyzed the data for new entrants provided for the last three actuarial valuations and have established new profiles for the two separate groups. For each group, the profiles specify the percentage of new hires who will fall into that group, the average annual service credit earned by the members of the group, and the average annual full time rate of pay at June 30, 1996, for members of the group. The recommended new profiles are shown in Table 10.

In addition, as part of the 50-year projection we assume that the June 30 rate of pay profile will increase by 5% per annum. Of this annual increase, 4% is attributable to inflation, and the remaining 1% is attributable to real wage growth. Also, we assume the active membership of the System will remain constant in number, with no change in the size of either the full time/part time group or the hourly/substitute group. We are not recommending changes in these assumptions at this time.



ECONOMIC FACTORS

We have prepared Tables 8 and 9, attached to Section VI, which summarize the actual results for the key economic factors affecting the operation of the System.

Rates of Investment Return

The rates of investment return during the five year period ended June 30, 1997 are presented in Table 8 of Section VI. This table indicates that the historic investment rates of return, measured on an actuarial asset value (book value) basis, have generally exceeded the assumed annual rate of 8% over the five years ended June 30, 1997, except for the fiscal year ended June 30, 1995 where the actual rate of return was 6.61%, or 1.39% below the 8% assumption. The excess of the actual rate of return over the assumed interest rate was equal to 3.69% during fiscal 1993, 2.41% during fiscal 1994, 4.64% during fiscal 1996, and 6.09% during fiscal 1997, as indicated in the table.

The mean rate of return on investments based on book value during the five year period was equal to 11.09%.

As a comparison and because under PA 90-448 the System must use a market value measure of the actuarial value of assets beginning June 30, 1997, we also show the rates of investment return based on the market value of assets. The actual rate of return based on market value exceeded the assumed interest rate by 3.34% during fiscal 1993, 4.36% during fiscal 1995,



7.97% during fiscal 1996, and 9.93% during fiscal 1997, and was 3.60% below the 8% assumption during fiscal 1994.

The mean rate of return on investments based on market value during the five year experience period was equal to 12.40%.

It should be pointed out that the historical returns on the funds do not provide a solid basis for selecting the interest rate for calculating costs in future years. The reason for this is that the interest rate is an assumption that is used to find the present value of benefits payable many years into the future, in some instances for as long as 80 years. A review of past experience is useful and indicates that the actual rate of investment return over the past five years was generally in excess of the assumed rate of 8%.

The 8.0% assumption was also based on an allocation of assets with 50% attributed to equity investments. Today the percentage of assets that are held in equities is closer to 55%, which increases over the long term the expected real return of the assets of TRS.

In consideration of the above, we recommend that the net investment return assumption be changed from 8.0% to 8.5% per annum.



Rates of Salary Progression

The growth in average annual salary is presented in Table 9 attached to Section VI.

Prior to the June 30, 1992 actuarial valuation, the active membership reported to the actuary included only Full Time and regularly scheduled Part Time employees. Commencing with the 1992 valuation, the number of actives was increased by approximately 18% when Substitute Teachers and Hourly-paid Employees were granted membership in the System. Although the Substitute/Hourly group is large in numbers, its impact on the liability is small, and we have performed our demographic review of termination, disability, mortality and retirement with regard to members who were part of the Full Time/Part Time group when the event under study occurred.

However, as part of our experience review we found that there is sizable annual migration from Substitute/Hourly to Full Time/Part Time status – approximately 3,200 per year over the period of the study. This movement to Full Time status creates large average increases in salary. In order to refine the salary increase study, we divided the membership into those who belonged to the Full Time/Part Time group at both the beginning and the end of the year under study (Table 9, page 45), and those who were Substitute/Hourly at the beginning of the year, and Full Time/Part Time at the end of the year (Table 9, page 46). Composite results are shown in Table 9, page 47.



As these tables show, members who are Full Time throughout the year have averaged salary increases of 6.7% per annum during the period of the study. When the movement from Substitute to Full Time is included, salary increases of members who are Full Time at the end of the year have averaged 8.0% per annum.

In addition to the migration from Substitute/Hourly to Full Time/Part Time, our review disclosed that approximately 1,800 members who are Inactive at the beginning of the year – probably on a period of leave, but in any case not currently accruing benefits – return to Full Time/Part Time employment annually.

As a result, we are recommending a basic salary increase that averages 6.75% per annum plus an additional 0.25% per annum to cover the employment type and status changes described above, for a total recommended average increase of 7.0% per annum, as compared to the current average of 7.4% per annum.

It is generally accepted in actuarial practice that a reasonable spread between the investment return assumption and the salary increase assumption falls in the range of 0% to 3%. The 1.5% spread between the recommended interest rate assumption (8.5%) and the salary increase assumption (7.0%) represents a proper balance between a realistic assessment of future annual pay increases and the long-term investment return on the assets of the fund.



SECTION III - ASSET VALUATION METHOD

For actuarial valuation purposes, the assets of the System were valued in prior years at cost or book value. As of the June 30, 1997 valuation date, the assets of the System will be valued at market value in accordance with Public Act 90-448.

It should be noted that the new financial reporting standards under GASB No. 25 require TRS to report the balance sheet and income statement of TRS on a market value basis. Thus, the change to the use of market value for actuarial valuation purposes is consistent with the asset valuation requirements of GASB No. 25.



SECTION IV - ACTUARIAL COST METHOD

Currently, the past service liability of the System is determined using the projected unit credit cost method. This produces a past service liability which is that disclosed for the audit report of the System.

This approach for measuring the past service liability is a generally accepted actuarial approach and we do not recommend any change in it.

For determining the normal cost of the System, the projected unit credit method is also used.

It is preferable and general practice to have the methodology used to determine the normal cost and the past service liability of a System consistent unless there are compelling reasons not to do so.

Consequently, we recommend that the actuarial cost method for determining the normal cost of the System be retained to be consistent with the method used to determine the past service liability of the System, namely, the projected unit credit cost method.



SECTION V - SUMMARY OF FINDINGS

Based on our analysis of the results of the experience investigation, it is recommended that certain changes in the actuarial basis of the System be evaluated.

We therefore propose that consideration be given to amending the actuarial assumptions:

- (1) The assumed rates for death in active service and death among regular service retirements based on the 1995 Buck Mortality Table be adopted to replace the current assumed rates based on the UP-1984 Mortality Table rated back 6 years.
- (2) The assumed rates for death among beneficiaries and survivors based on the 1995 Buck Mortality Table rated forward 1 year be adopted to replace the current assumed rates based on the UP-1984 Mortality Table rated back 6 years.
- (3) The assumed rates for death in disabled retirement are currently based on the Pension Benefit Guaranty Corporation rates for male disabled lives not necessarily receiving Social Security, rated back 3 years, with mortality rates for ages below 65 the same as the mortality for a 65 year old. We recommend that this mortality table continue to be used with the provision that the male rates are rated forward 5 years and the female rates are rated back 2 years. The mortality rates for ages below 65 will remain the same as the mortality for a 65 year old within the male and female tables, respectively.



(4) The assumed rates of termination from employment for vested members be reduced so that the overall ratios of actual to expected shown on Table 1, pages 28 and 29 are increased from 36.2% and 41.4% to 80.0% to more closely reflect recent experience. The table below shows at sample ages the proposed revised rates of termination from employment:

Incidence of Termination from Employment - Vested Members					
Age	Male	Female			
25	.06109	.08797			
30	.04118	.06986			
35	.02444	.04657			
40	.01584	.02846			
45	.01222	.02070			
50	.01041	.01889			
55	.01222	.01966			
60	.01855	.02277			
65	.02715	.03105			

PROPOSED RATES OF TERMINATION FROM EMPLOYMENT

- (5) The assumed rate of net investment return be increased by .5% to 8.5%.
- (6) The assumed rates of annual average increases in salaries among active members be reduced by .4 percentage points. The average annual increase will be 7.00% which includes a .25% allowance for those who change employment type or status during the year.

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Fiscal Impact

In order to estimate the potential fiscal impact of the proposed changes, we have completed actuarial calculations based on the data prepared as of June 30, 1997 for active members, annuitants, beneficiaries and survivors, which was submitted to our office by the System. The results of the calculations are summarized in the following Exhibits I and II.

FISCAL IMPACT OF PROPOSED REVISIONS IN ACTUARIAL ASSUMPTIONS

EXHIBIT I

INCREASE (DECREASE) IN PENSION BENEFIT OBLIGATION AS OF JUNE 30 1997 (\$ Millions)

Actuarial Assumption Revi	ision Increase (Decrease) in PBO
1. Rates of Mortality Among Active Annuitants, Beneficiaries and Su	
2. Rates of Termination from Empl	oyment 411
3. Rates of Average Annual Increas Among Active Members	ses in Salary (453)
4. Rate of Net Investment Return	_(1,502)
Net Increase (Decrease) in PBO	\$ (933) Million

The above calculations indicate that the net effect of the proposed revisions in actuarial assumptions would be to decrease the pension benefit obligation of the System by approximately \$933 million. This represents 3.5% of the current pension benefit obligation of \$27.0 billion determined as of June 30, 1997.



FISCAL IMPACT OF PROPOSED REVISIONS IN ACTUARIAL ASSUMPTIONS (Continued)

EXHIBIT II

INCREASE (DECREASE) IN EMPLOYER CONTRIBUTION REQUIREMENT (\$ Millions)

	Actuarial Assumption Revision	Increase (Decrease) FY 1999 Employer Contribution		Increase (Decrease) FY 2010 Employer Contribution	
		Normal Cost	Total Contribution	Normal Cost	Total Contribution
1.	Rates of Mortality Among Active Members Annuitants, Beneficiaries and Survivors: – Amount – % Member Payroll	\$ 47.8 .86%	\$ 7.2 .13%	\$ 74.9 .86%	\$ 139.1 1.60%
2.	Rates of Termination from Employment: – Amount – % Member Payroll	\$ 38.4 .69%	\$ 5.6 .10%	\$ 60.1 .69%	\$ 105.3 1.21%
3.	 Rates of Average Annual Increases in Salary Among Active Members: Amount % Member Payroll 	\$ (36.7) (.66)%	\$ (5.0) (.09)%	\$ (57.5) (.66)%	\$ (95.8) (1.10)%
4.	Rate of Net Investment Return: – Amount – % Member Payroll	<mark>\$ (88.4) (1.59</mark>)%	\$ (11.1) (.20)%	\$(134.1) (<u>1.54</u>)%	\$(208.1) (2.39)%
	Net Increase (Decrease) in Employer Contribution Requirement: – Amount – % Member Payroll	\$ (38.9) (.7)%	\$ (3.3) (.06)%	\$ (56.6) (.65)%	\$ (59.2) (.68)%

Employer Contribution based upon the following projections of membership payroll:

- FY 1999 \$ 5,558.3 Million
- FY 2010 \$8,705.9 Million

The above calculations indicate that the proposed revisions would decrease the total employer contribution for fiscal year 1999 by approximately \$3.3 million, based on the funding requirement of Public Act 88-0593.



In addition to the decrease in the employer contribution on account of the proposed revisions in actuarial assumptions, there are two further factors which serve to reduce the employer contribution for fiscal year 1999, namely, the net experience gain of the TRS fund during fiscal year 1997 and the change to the use of market value for measuring the value of TRS assets. The fiscal impact of these two factors are discussed in the actuarial valuation report as of June 30, 1997.



SECTION VI

COMPARISON OF ACTUAL AND EXPECTED EXPERIENCE DURING FIVE YEAR PERIOD FROM JULY 1, 1991 THROUGH JUNE 30, 1996



TABLE 1

SUMMARY OF EXPERIENCE FOR TERMINATION FROM EMPLOYMENT BEFORE RETIREMENT (CHANGE FROM ACTIVE STATUS TO INACTIVE STATUS OR REFUND TERMINATION)

	Number of	Separations		Ratio of Actual to
Age	Actual	Expected	Exposed	Expected Experience
Less than 23	20	32.57	210	0.614 0.617
23 - 27	574	930.18	6,980	0.914
28 - 32	291	318.35	3,452	
33 - 37	194	111.47	2,057	1.740
38 - 42	161	60.63	1,756	2.655
43 - 47	144	38.45	1,439	3.745
48 - 52	95	16.38	718	5.800
53 - 57	50	7.65	279	6.536
58 - 62	23	4.96	123	4.637
63 - 67	7	1.54	26	4.545
Over 67				0.000
TOTAL	1,562	1,522.18	17,040	1.026

MALES - NONVESTED 1992 - 1996



TABLE 1 (continued)

SUMMARY OF EXPERIENCE FOR TERMINATION FROM EMPLOYMENT BEFORE RETIREMENT (CHANGE FROM ACTIVE STATUS TO INACTIVE STATUS OR REFUND TERMINATION)

FEMALES - NONVESTED 1992 - 1996

A = 2	Number of S	Separations	Exposed	Ratio of Actual to Expected
Age	Actual	Expected	Lxposed	Experience
Less than 23	128	293.18	1,628	0.437
23 - 27	2,174	<mark>4,614.4</mark> 3	26,973	0.471
28 - 32	889	1,233.66	8,996	0.721
33 - 37	566	613.55	7,064	0.923
38 - 42	674	586.39	10,796	1.149
43 - 47	531	355.40	8,765	1.494
48 - 52	250	120.01	3,286	2.083
53 - 57	86	31.85	841	2.700
58 - 62	30	10.62	243	2.825
63 - 67	10	2.85	50	3.509
Over 67	5	-		0.000
TOTAL	5,343	7,861.94	68,642	0.680

TABLE 1 (continued)

SUMMARY OF EXPERIENCE FOR TERMINATION FROM EMPLOYMENT BEFORE RETIREMENT (CHANGE FROM ACTIVE STATUS TO INACTIVE STATUS OR REFUND TERMINATION)

MALES AND FEMALES - NONVESTED 1992 - 1996

	Number of	Separations		Ratio of Actual to
Age	Actual	Expected	Exposed	Expected Experience
Less than 23	<mark>148</mark>	325.75	<mark>1,83</mark> 8	0.454
23 - 27	2,748	5,544.61	33,953	0.496
28 - 32	1,180	1,552.01	12,448	0.760
33 - 37	760	725.02	9,121	1.048
38 - 42	835	647.02	12,552	1.291
43 - 47	675	393.85	10,204	1.714
48 - 52	345	136.39	4,004	2.530
53 - 57	136	39.50	1,120	3.443
58 - 62	53	15.58	366	3.402
63 - 67	17	4.39	76	3.872
Over 67	8		-	0.000
TOTAL	6,905	9,384.12	85,682	0.736

TABLE 1 (continued)

SUMMARY OF EXPERIENCE FOR TERMINATION FROM EMPLOYMENT BEFORE RETIREMENT (CHANGE FROM ACTIVE STATUS TO INACTIVE STATUS OR REFUND TERMINATION)

MALES - VESTED 1992 - 1996

	Number of S	Separations		Ratio of Actual to
Age	Actual	Expected	Exposed	Expected Experience
Less than 23	-		-	0.000
23 - 27	148	215.62	1,773	0.686
28 - 32	278	678.32	7,738	0.410
33 - 37	222	626.39	11,931	0.354
38 - 42	306	770.40	22,753	0.397
43 - 47	287	988.41	37,220	0.290
48 - 52	159	688.24	30,229	0.231
53 - 57	58	111.12	4,653	0.522
58 - 62	11	6.40	173	1.719
63 - 67	9			0.000
Over 67	2			0.000
TOTAL	1,480	<mark>4</mark> ,084.90	116,470	0.362

TABLE 1 (continued)

SUMMARY OF EXPERIENCE FOR TERMINATION FROM EMPLOYMENT BEFORE RETIREMENT (CHANGE FROM ACTIVE STATUS TO INACTIVE STATUS OR REFUND TERMINATION)

FEMALES - VESTED 1992 - 1996

	Number of	Separations		Ratio of Actual to
Age	Actual	Expected	Exposed	Expected Experience
Less than 23	-		-	0.000
23 - 27	927	1,500.39	9,008	0.618
28 - 32	1,925	3,573.92	26,799	0.539
33 - 37	1,263	2,827.60	32,698	0.447
38 - 42	1,035	3,204.68	59,518	0.323
43 - 47	902	2,967.17	73,820	0.304
48 - 52	548	1,847.41	50,666	0.297
53 - 57	139	454.78	12,152	0.306
58 - 62	41	38.60	925	1.062
63 - 67	8	-		0.000
Over 67	2			0.000
TOTAL	6,790	16,414.55	265,586	0.414

TABLE 1 (continued)

SUMMARY OF EXPERIENCE FOR TERMINATION FROM EMPLOYMENT BEFORE RETIREMENT (CHANGE FROM ACTIVE STATUS TO INACTIVE STATUS OR REFUND TERMINATION)

MALES AND FEMALES - VESTED 1992 - 1996

	Number of	Separations		Ratio of Actual to
Age	Actual	Expected	Exposed	Expected Experience
Less than 23 23 - 27 28 - 32 33 - 37 38 - 42 43 - 47 48 - 52 53 - 57	- 1,075 2,203 1,485 1,341 1,189 707 197	- 1,716.01 4,252.24 3,453.99 3,975.08 3,955.58 2,535.65 565.90	- 10,781 34,537 44,629 82,271 111,040 80,895 16,805	0.000 0.626 0.518 0.430 0.337 0.301 0.279 0.348
58 - 62 63 - 67 Over 67	52 17 4	45.00 - -	1,098 - -	1.156 0.000 0.000
TOTAL	8,270	20,499.45	382,056	0.403

TABLE 1 (continued)

SUMMARY OF EXPERIENCE FOR TERMINATION FROM EMPLOYMENT BEFORE RETIREMENT (CHANGE FROM ACTIVE STATUS TO INACTIVE STATUS OR REFUND TERMINATION)

	Number of	Separations		Ratio of Actual to
Age	Actual	Expected	Exposed	Expected Experience
Less than 23	20	32.57	210	0.614
23 - 27	722	1,145.80	<mark>8</mark> ,753	0.630
28 - 32	569	996.67	11,190	0.571
33 - 37	416	737.86	13,988	0.564
38 - 42	467	831.03	24,509	0.562
43 - 47	431	1,026.86	38,659	0.420
48 - 52	254	704.62	30,947	0.360
53 - 57	108	118.77	4,932	0.909
58 - 62	34	11.36	296	2.993
63 - 67	16	1.54	26	10.390
Over 67	5			0.000
TOTAL	3,042	5,607.08	133,510	0.543

MALES - TOTAL 1992 - 1996



TABLE 1 (continued)

SUMMARY OF EXPERIENCE FOR TERMINATION FROM EMPLOYMENT BEFORE RETIREMENT (CHANGE FROM ACTIVE STATUS TO INACTIVE STATUS OR REFUND TERMINATION)

	Number of Separations			Ratio of Actual to
Age	Actual	Expected	Exposed	Expected Experience
Less than 23 23 - 27 28 - 32 33 - 37 38 - 42 43 - 47 48 - 52 53 - 57	128 3,101 2,814 1,829 1,709 1,433 798 225	293.18 6,114.82 4,807.58 3,441.15 3,791.07 3,322.57 1,967.42 486.63	1,628 35,981 35,795 39,762 70,314 82,585 53,952 12,993	0.437 0.507 0.585 0.532 0.451 0.431 0.406 0.462
58 - 62 63 - 67 Over 67	71 18 7	49.22 2.85	1,168 50	1.443 6.316 0.000
TOTAL	12,133	24,276.49	334,228	0.500

FEMALES - TOTAL 1992 - 1996


TABLE 1 (continued)

SUMMARY OF EXPERIENCE FOR TERMINATION FROM EMPLOYMENT BEFORE RETIREMENT (CHANGE FROM ACTIVE STATUS TO INACTIVE STATUS OR REFUND TERMINATION)

MALES AND FEMALES - TOTAL 1992 - 1996

	Number of	Separations		Ratio of Actual to
Age	Actual	Expected	Exposed	Expected Experience
Less than 23	148	325.75	<mark>1,838</mark>	0.454
23 - 27	3,823	7,260.62	44,73 <mark>4</mark>	0.527
28 - 32	3,383	5,804.25	46,985	0.583
33 - 37	2,245	4,179.01	53,750	0.537
38 - 42	2,176	4,622.10	94,823	0.471
43 - 47	1,864	4,349.43	121,244	0.429
48 - 52	1,052	2,672.04	84,899	0.394
53 - 57	333	605.40	17,925	0.550
58 - 62	105	60.58	1,464	1.733
63 - 67	34	4.39	76	7.745
Over 67	12			0.000
TOTAL	15,175	29,883.57	467,738	0.508

TABLE 2

SUMMARY OF EXPERIENCE FOR DEATHS IN ACTIVE SERVICE

	Number of Separations			Ratio of Actual to
Age	Actual	Expected	Exposed	Expected Experience
Less than 23		2.64	1,838	0.000
23 - 27	9	59.85	44,734	0.150
28 - 32	11	54.29	46,985	0.203
33 - 37	11	59.04	53,750	0.186
38 - 42	56	126.82	94,823	0.442
43 - 47	97	237.45	121,244	0.409
48 - 52	142	259.71	84,899	0.547
53 - 57	107	200.79	40,358	0.533
58 - 62	56	125.72	15,775	0.445
63 - 67	30	45.42	3,719	0.661
Over 67	7	13.37	656	0.524
TOTAL	526	1,185.10	508,781	0.444



TABLE 3

SUMMARY OF EXPERIENCE FOR DISABILITY RETIREMENTS

	Number of Separations		Ratio of Actual to	
Age	Actual	Expected	Exposed	Expected Experience
Less than 23	_	0.08	210	0.000
23 - 27	1	3.31	8,753	0.302
28 - 32	2	4.70	11,190	0.426
33 - 37	8	6.76	13,988	1.183
38 - 42	9	14.37	24,509	0.626
43 - 47	30	31.58	38,659	0.950
48 - 52	37	36.91	30,947	1.002
53 - 57	11	28.40	14,394	0.387
58 - 62	10	18.87	5,057	0.530
63 - 67	-	4.79	842	0.000
Over 67		0.53	72	0.000
TOTAL	108	150.30	148,621	0.719

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MALES 1992 - 1996

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TABLE 3 (continued)

SUMMARY OF EXPERIENCE FOR DISABILITY RETIREMENTS

	Number of Separations			Ratio of Actual to
Age	Actual	Expected	Exposed	Expected Experience
				0.000
Less than 23	-	1.17	1,628	0.000
23 - 27	19	27.13	35,981	0.700
28 - 32	54	30.02	35,795	1.799
33 - 37	34	38.47	<mark>39,76</mark> 2	0.884
<u> 38 - 42</u>	82	82.30	70,314	0.996
43 - 47	122	133.15	82,585	0.916
48 - 52	94	128.79	53,952	0.730
53 - 57	42	102.77	25,964	0.409
58 - 62	20	81.20	10,718	0.246
63 - 67	10	32.87	2,877	0.304
Over 67	2	4.09	281	0.489
TOTAL	479	661.96	359,857	0.724

FEMALES 1992 - 1996



TABLE 3 (continued)

SUMMARY OF EXPERIENCE FOR DISABILITY RETIREMENTS

MALES AND FEMALES 1992 - 1996

	Number of	Separations		Ratio of Actual to
Age	Actual	Expected	Exposed	Expected Experience
Less than 23	-	1.25	1,838	0.000
23 - 27	20	30.44	44,734	0.657
28 - 32	56	34.72	46,985	1.613
33 - 37	42	45.23	53,750	0.929
38 - 42	91	96.67	94,823	0.941
43 - 47	152	164.73	121,244	0.923
48 - 52	131	165.70	84,899	0.791
53 - 57	53	131.17	40,358	0.404
58 - 62	30	100.07	15,775	0.300
63 - 67	10	37.66	3,719	0.266
Over 67	2	4.62	353	0.433
TOTAL	587	812.26	508,478	0.723



TABLE 4

SUMMARY OF EXPERIENCE FOR REGULAR SERVICE RETIREMENTS

	Number of Separations		Furnand	Ratio of Actual to
Age	Actual	Expected	Exposed	Expected Experience
55	381	543.39	5,602	0.701
56	163	272.87	2,099	0.597
57	172	250.06	1,761	0.688
58	218	225.21	1,453	<mark>0.968</mark>
59	197	292.08	1,217	0.674
60	183	244.89	907	0.747
61	148	166.61	709	0.888
62	115	118.33	483	0.972
63	72	83.50	334	0.862
64	50	62.31	201	0.802
65	27	48.54	133	0.556
66	25	36.00	90	0.694
67	16	26.00	65	0.615
68	9	15.60	39	0.577
69	6	11.60	29	0.517
70 and over	10	45.00	45	0.222
			45.407	0.704
TOTAL	1,792	2,441.99	15,167	0.734

MALES 1992 - 1996



TABLE 4 (continued)

1

SUMMARY OF EXPERIENCE FOR REGULAR SERVICE RETIREMENTS

				Ratio of
	Number of Separations			Actual to
Age			Exposed	Expected
	Actual	Expected		Experience
55	362	714.31	7,364	0.507
56	104	329.34	2,994	0.316
57	116	287.43	2,613	0.404
58	184	278.76	2,323	0.660
59	237	429.84	2,388	0.551
60	169	342.00	1,900	0.494
61	156	306.36	1,656	0.509
62	118	253.50	1,300	0.465
63	120	203.80	1,019	0.589
64	132	230.70	769	<mark>0.572</mark>
65	75	165.99	503	0.452
66	50	128.40	321	0.389
67	31	91.60	229	0.338
68	25	63.20	158	0.396
69	23	47.20	118	0.487
70 and over	49	249.00	249	0.197
TOTAL	1,951	4,121.43	25,904	0.473

FEMALES 1992 - 1996

TABLE 4 (continued)

SUMMARY OF EXPERIENCE FOR REGULAR SERVICE RETIREMENTS

				Ratio of	
	Number of Separations			Actual to	
Age			Exposed	Expected	
	Actual	Expected		Experience	
55	743	1,257.70	12,966	0.591	
56	267	602.21	5,093	0.443	
57	288	537.49	4,374	0.536	
58	402	503.97	3,776	0.798	
59	434	721.92	3,605	0.601	
60	352	586.89	2,807	0.600	
61	304	472.97	2,365	0.643	
62	233	371.83	1,783	0.627	
63	192	287.30	1,353	0.668	
64	182	293.01	970	0.621	
65	102	214.53	636	0.475	
66	75	164.40	411	0.456	
67	47	117.60	294	0.400	
68	34	78.80	197	0.431	
69	29	58.80	147	0.493	
70 and over	59	294.00	294	0.201	
TOTAL	3,743	6,563.42	41,071	0.570	



TABLE 5

SUMMARY OF MORTALITY EXPERIENCE AMONG PENSIONERS

REGULAR SERVICE RETIREMENTS

	Number of Deaths			Ratio of Actual to
Age	Actual	Expected	Exposed	Expected Experience
48 - 52	3	9.29	2,586	0.323
53 - 57	43	92.50	17,174	0.465
58 - 62	190	287. <mark>5</mark> 1	33,950	0.661
63 - 67	368	580.81	44,422	0.634
68 - 72	649	819.15	39,698	0.792
73 - 77	812	1,085.52	33,834	0.748
78 - 82	1,246	1,420.33	29,192	0.877
83 - 87	1,712	1,769.70	23,787	0.967
88 - 92	1,539	1,359.60	12,349	1.132
93 - 97	690	564.52	3,512	1.222
Over 97	179	147.50	598	1.214
Total	7,431	8,136.44	241,101	0.913



TABLE 6

SUMMARY OF MORTALITY EXPERIENCE AMONG PENSIONERS

BENEFICIARIES OF DECEASED MEMBERS AND PENSIONERS

	Number	of Deaths		Ratio of Actual to
Age			Exposed	Expected
, igo	Actual	Expected		Experience
LT 18	-	0.27	179	0.000
18 - 22		0.06	40	0.000
23 - 27	-	0.05	39	0.000
28 - 32	-	0.16	137	0.000
33 - 37	-	0.24	218	0.000
38 - 42	-	0.19	137	0.000
43 - 47	1	0.52	261	1.921
48 - 52	3	1.76	530	1.704
53 - 57	3	5.69	1,088	0.528
58 - 62	8	15.66	1,839	0.511
63 - 67	32	40.36	3,048	0.793
68 - 72	65	76.92	3,695	0.845
73 - 77	162	156.10	4,802	1.038
78 - 82	246	262.32	5,343	0.938
83 - 87	445	364.67	4,915	<mark>1.220</mark>
88 - 92	318	261.77	2,377	1.215
93 - 97	132	96.50	607	<mark>1.368</mark>
Over 97	29	36.57	156	0.793
Total	1,444	1,319.79	29,412	1.094



TABLE 7

SUMMARY OF MORTALITY EXPERIENCE AMONG PENSIONERS

DISABILITY RETIREMENTS

				Ratio of	
	Number of Deaths			Actual to	
Age			Exposed	Expected	
	Actual	Expected		Experience	
23 - 27	-	0.28	11	0.000	
28 - 32	1	1.82	73	0.549	
33 - 37	3	2.54	102	1.181	
38 - 42	13	8.36	336	1.556	
43 - 47	25	13.68	551	1.827	
48 - 52	32	16.89	680	1.894	
53 - 57	26	19.09	768	1.362	
58 - 62	26	17.27	695	1.506	
63 - 67	26	14.44	553	1.800	
68 - 72	14	15.44	409	0.906	
73 - 77	10	13.47	239	0.743	
78 - 82	12	9.10	105	1.318	
83 - 87	12	6.65	51	1.805	
88 - 92	4	9.82	47	0.407	
93 - 97	6	7.12	25	0.843	
	0		25	0.000	
Over 97		0.38		0.000	
		150.00	4.040	4.040	
Total	210	156.36	4,646	1.343	



TABLE 8

SUMMARY OF ANNUAL INVESTMENT RETURN RESULTS

1993 - 1997

	Based on Cost Value of Assets		Based on Mar	ket Value of Assets
Year Ended June 30	Actual Rate of Return	Excess of Actual Over Assumed Rate of Return	Actual Rate of Return	Excess of Actual Over Assumed Rate of Return
1993	11.69%	3.69%	11.34%	3.34%
1994	10.41%	2.41%	4.40%	(3.60)%
1995	6.61%	(1.39)%	12.36%	4.36%
1996	12.64%	4.64%	15.97%	7.97%
1997	14.09%	6.09%	17.93%	9.93%
5 - Year Average	<mark>11.09% *</mark>	3.09%	12.40% *	4.40%

- Notes: (1) The assumed rate of return was 8% for the fiscal years ended June 30, 1993 through June 30, 1997.
 - (2) The actual rates of return were determined exclusive of investment expenses.
 - (3) For fiscal years ended June 30, 1993 through June 30, 1996 investments were based on cost value of assets. Starting with the June 30, 1997 valuation and going forward, investments will be based on market value of assets in accordance with Public Act 90-448.
 - * Mean investment rate of return over the five year period July 1, 1992 to June 30, 1997.



TABLE 9

3

COMPARISON OF ACTUAL AND EXPECTED SALARIES OF ACTIVE MEMBERS

FULL TIME / PART TIME MEMBERS AT THE BEGINNING AND END OF THE YEAR

MALES AND FEMALES 1992 - 1996

						Ratio of
Central	Se	Salaries At End Of Year	ar	Ratio of Increases In Salaries	ses In Salaries	Actual to
Age	Actual Current	Expected Current	Actual Prior	Actual	Expected	Expected
Group	(A)	(B)	(C)	(A) / (C)	(B) / (C)	Experience
20	38,411,452	37,025,922	33,812,901	1.136	1.095	1.0374
25	1,059,798,561	1,053,418,793	964,947,102	1.098	1.092	1.0061
30	1,321,633,345	1,328,429,766	1,223,494,865	1.080	1.086	0.9949
35	1,772,069,164	1,777,334,932	1,647,017,650	1.076	1.079	0.9970
40	3,603,168,887	3,615,636,139	3,364,268,032	1.071	1.075	0.9966
45	5,255,255,994	5,303,290,520	4,949,906,185	1.062	1.071	0.9909
50	3,839,899,552	3,886,664,846	3,634,176,745	1.057	1.069	0.9880
55	1,625,092,884	1,637,886,964	1,533,049,551	1.060	1.068	0.9922
60	555,300,445	558,406,011	523,464,834	1.061	1.067	0.9944
65	113,965,252	114,672,973	107,610,109	1.059	1.066	0.9938
70	19,314,919	18,934,190	18,305,959	1.055	1.034	1.0201
Total	19,203,910,455	19,331,701,056	18,000,053,933	1.067	1.074	0.9934

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COMPARISON OF ACTUAL AND EXPECTED SALARIES OF ACTIVE MEMBERS

SUBSTITUTE / HOURLY AT THE BEGINNING OF THE YEAR AND FULL TIME / PART TIME AT THE END OF THE YEAR

MALES AND FEMALES

1992 - 1996

						Ratio of
Central	ŝ	Salaries At End Of Year	ar	Ratio of Increases In Salaries	ses In Salaries	Actual to
Age	Actual Current	Expected Current	Actual Prior	Actual	Expected	Expected
Group	(A)	(B)	(C)	(A) / (C)	(B) / (C)	Experience
20	27,579,269	4,087,323	3,732,457	7.389	1.095	6.7475
25	102,629,994	21,084,379	19,298,046	5.318	1.093	4.8676
30	32,483,444	8,029,871	7,394,125	4.393	1.086	4.0453
35	33,284,532	8,282,692	7,675,101	4.337	1.079	4.0186
40	50,630,677	13,018,902	12,112,533	4.180	1.075	3.8890
45	42,880,464	12,418,829	11,589,263	3.700	1.072	3.4529
50	14,374,034	4,650,885	4,348,769	3.305	1.069	3.0906
55	4,378,887	1,603,171	1,500,493	2.918	1.068	2.7314
60	1,130,976	444,252	416,426	2.716	1.067	2.5458
65	157,239	77,329	72,581	2.166	1.065	2.0334
70	24.918	28,833	27,904	0.893	1.033	0.8642
Total	309,554,434	73,726,466	68,167,699	4.541	1.082	4.1987

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TABLE 9 (continued)

COMPARISON OF ACTUAL AND EXPECTED SALARIES OF ACTIVE MEMBERS

FULL TIME / PART TIME AT THE END OF THE YEAR

MALES AND FEMALES 1992 - 1996

						Ratio of
Central	S	Salaries At End Of Year	ar	Ratio of Increases In Salaries	ses In Salaries	Actual to
Age	Actual Current	Expected Current	Actual Prior	Actual	Expected	Expected
Group	(A)	(B)	(C)	(A) / (C)	(B) / (C)	Experience
20	65,990,721	41,113,245	37,545,358	1.758	1.095	1.6051
25	1,162,428,555	1,074,503,172	984,245,148	1.181	1.092	1.0818
30	1,354,116,789	1,336,459,637	1,230,888,990	1.100	1.086	1.0132
35	1,805,353,696	1,785,617,624	1,654,692,751	1.091	1.079	1.0111
40	3,653,799,564	3,628,655,041	3,376,380,565	1.082	1.075	1.0069
45	5,298,136,458	5,315,709,349	4,961,495,448	1.068	1.071	0.9967
50	3,854,273,586	3,891,315,731	3,638,525,514	1.059	1.069	0.9905
55	1,629,471,771	1,639,490,135	1,534,550,044	1.062	1.068	0.9939
60	556,431,421	558,850,263	523,881,260	1.062	1.067	0.9957
65	114,122,491	114,750,302	107,682,690	1.060	1.066	0.9945
20	19,339,837	18,963,023	18,333,863	1.055	1.034	1.0199
Total	19,513,464,889	19,405,427,522	18,068,221,632	1.080	1.074	1.0056

TABLE 10

NEW MEMBER PROFILE

Distribution of New Entrants is as follows:

Age	Full	Time/Part Time		Hourly/Substitute					
Group	Males	Females	Total	Males	Females	Total			
20 - 24	8.7 %	33.8 %	42.5 %	5.2 %	16.8 %	22.0 %			
25 - 29	7.7 %	19.6 %	27.3 %	7.1 %	15.0 %	22.1 %			
30 - 34	3.3 %	6.6 %	9.9 %	2.8 %	6.6 %	9.4 %			
35 - 39	1.9 %	4.5 %	6.4 %	2.7 %	10.9 %	13.6 %			
40 - 44	1.7 %	5.0 %	6.7 %	2.7 %	11.1 %	13.8 %			
45 - 49	1.2 %	3.1 %	4.3 %	2.5 %	8.0 %	10.5 %			
50 - 54	0.6 %	1.2 %	1.8 %	1.4 %	3.2 %	4.6 %			
55 - 59	0.3 %	0.4 %	0.7 %	0.9 %	1.4 %	2.3 %			
60 - 64	0.1 %	0.3 %	0.4 %	0.4 %	0.6 %	1.0 %			
65 - 69	0.0 %	0.0 %	0.0 %	0.2 %	0.3 %	0.5 %			
70	0.0 %	0.0 %	0.0 %	0.1 %	0.1 %	0.2 %			
Total	25.5 %	74.5 %	100.0 %	26.0 %	74.0 %	100.0 %			

Service Credit Earned in Each Future Year:

Age	Ful	I Time/Part Tin	ne	Hourly/Substitute					
Group	Males	Females	Total	Males	Females	Total			
20 - 24	0.994	0.988	0.989	0.232	0.229	0.229			
25 - 29	0.993	0.990	0.991	0.221	0.223	0.222			
30 - 34	0.991	0.976	0.981	0.199	0.212	0.208			
35 - 39	0.993	0.962	0.971	0.159	0.177	0.173			
40 - 44	0.991	0.959	0.967	0.188	0.211	0.206			
45 - 49	0.984	0.973	0.976	0.184	0.199	0.196			
50 - 54	0.988	0.957	0.967	0.170	0.170	0.170			
55 - 59	0.974	0.948	0.959	0.171	0.148	0.157			
60 - 64	0.984	1.000	0.996	0.152	0.131	0.139			
65 - 69		-	-	0.147	0.118	0.130			
70				0.166	0.055	0.111			
Average	0.992	0.982	0.985	0.201	0.207	0.205			

NEW MEMBER PROFILE (continued):

Projected Annual Full Time Rate of Pay at 6/30/97*

Age		Fu	ll Tin	ne/Part Tin	ne		Hourly/Substitute					
Group	i della	Males	F	emales	10	Total		Males	F	emales		Total
20 - 24	\$	27,160	\$	25,568	\$	25,890	\$	11,340	\$	11,032	\$	11,104
25 - 29		29,354	1	28,082		28,440		11,380		10,974		11,105
30 - 34		32,340		28,553		29,810		11,690	_	10,754		11,033
35 - 39		38,311		28,027		30,645		11,077		10,386		10,526
40 - 44		39,376		30,408		32,440		11,026		10,446		10,557
45 - 49		43,329		32,700		35,391		10,930		10,557		10,646
50 - 54		47,106		32,689		37,701		11,196		10,504		10,715
55 - 59		47,023		35,674		40,484		11,348		10,304		10,714
60 - 64		49,769		35,916		42,665		10,640		9,730		10,110
65 - 69		-		-		-		10,303		10,457		10,384
70		-		-		-		10,301		10,718		10,499
Average	\$	33,025	\$	28,016	\$	29,291	\$	11,256	\$	10,711	\$	10,853

