TEACHERS' RETIREMENT SYSTEM OF THE STATE OF ILLINOIS

INVESTIGATION OF DEMOGRAPHIC AND ECONOMIC EXPERIENCE

FIVE-YEAR PERIOD FROM JULY 1, 2002 - JUNE 30, 2006

DECEMBER 2007

buckconsultants
an ACS company

December 27, 2007

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, and survivors covered under the Teachers' Retirement System of the State of Illinois for the five-year period July 1, 2002 to June 30, 2006.

This 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 survivors covered under the System.

The results of our review were presented to and adopted by the Board of Trustees at the August 10, 2007 board meeting, and the recommended new assumptions were used in the preparation of the June 30, 2007 actuarial valuation, which determined the funding requirements for fiscal year 2009. We have also prepared the attached report, which describes the actuarial process employed, and identifies the significant results of the investigation. In particular, we are recommending changes in the actuarial assumptions that are used to anticipate:

(1) Termination from active employment.
(2) Disability retirement.
(3) Regular service retirement.
(4) Pre- and post-retirement mortality.
(5) Utilization of the early retirement option (ERO).
(6) Optional service purchases.
(7) Sick leave service credit.
(8) Annual salary increases.
(9) Severance pay at retirement.
(10) New hires for the period of the funding projection.

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The most significant of the recommended changes are that the service retirement rates be increased, that the post-retirement mortality assumption be revised to reflect improved longevity, and that assumptions regarding optional service purchased near retirement and service credit for unused and uncompensated sick leave be revised to reflect recent trends. The recommended changes to other assumptions can be viewed as "fine tuning" based on recent experience.

A summary of our recommendations may be found in Section V beginning on page 32 of the report.

Fiscal Impact - Pension Benefit Obligation

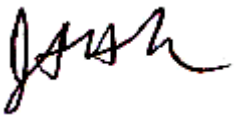
As indicated on page 43 of Section V of the report, the proposed revisions in the above assumptions would increase the pension benefit obligation of the System by approximately $2.4 billion, which represents a percentage increase of 3.8% in the pension benefit obligation of $63.2 billion determined before the assumption change as of June 30, 2007.

Fiscal Impact - Employer Contribution for FY 2009

The proposed revisions would increase the total fiscal year 2009 employer contribution under the funding requirement of Public Act 94-0004 by approximately $97 million, which is 1.1% of the projected fiscal year 2009 membership payroll of $8,817.5 million.

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

Respectfully submitted,



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TEACHERS' RETIREMENT SYSTEM OF THE STATE OF ILLINOIS

ACTUARIAL INVESTIGATION OF THE SYSTEM'S EXPERIENCE FOR THE PERIOD JULY 1, 2002 TO JUNE 30, 2006

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 survivors covered under the System.

The results of our review were presented to and adopted by the Board of Trustees at the August 10, 2007 board meeting, and the recommended new assumptions were used in the preparation of the June 30, 2007 actuarial valuation, which determined the funding requirements for fiscal year 2009. We have also prepared the following report, which presents more detailed results of the experience investigation of the System for the five-year period July 1, 2001 through June 30, 2006.

The objectives of this investigation are to:

(1) Determine assumptions to anticipate the following events among active members:

   (a) Termination from employment;
   (b) Disability retirement;
   (c) Regular service retirement;
   (d) Death during membership;
   (e) Utilization of the early retirement option (ERO);
   (f) Optional service purchases;
   (g) Accumulation of sick leave service credit;
   (h) Salary increases; and
   (i) Severance payments.

(2) Determine appropriate rates to anticipate death after retirement among:
   (a) Service retirees,
   (b) Survivors; and
   (c) Disability retirees.

(3) Determine appropriate assumptions for the funding projection;

(4) Determine appropriate assumptions for the rate of inflation and rate of investment return; and

(5) 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 Based on Employment Type

Since June 30, 1991, when Substitute and Hourly-Paid employees were first reported to the actuary, the Substitute/Hourly group has constituted approximately 16% - 19% of the total active membership, but has accounted for less than 1% of the total active liability. Therefore, we have performed our review of the active member demographic experience solely with regard to members who were part of the Full Time/Part Time group when the event under study occurred. Since the movement of active members from the Substitute/Hourly group to the Full Time/Part Time group affects the salary increase experience, our analysis of the salary experience takes this movement into account. Employment Type was not taken into account in the review of post-retirement mortality.

Sex Distinct versus Unisex Assumptions

The actuarial assumptions for termination from employment, disability, and rates of mortality have been determined on a sex distinct basis, while annual salary increase rates and the assumptions for utilization of ERO, severance pay, optional service credit, and unused and uncompensated sick leave have a unisex basis. The actuarial assumptions for service retirement were previously determined on a sex distinct basis; however, the recommended new assumptions for service retirement are unisex. Separate male and female results are shown only for the events that are (or were) assumed to have a sex distinct basis.

Experience for Active Members

Separation from Service

Using data provided for the annual actuarial valuations, tabulations were compiled that show the distribution by age and sex of active members who were exposed to the events of termination from employment, death, disability and regular service retirement during the five-year period of the study. The assumed rates of occurrence of these events, which are currently used in preparing annual actuarial valuations, were then applied to the number exposed to determine the expected number of separations in each category.

For each category, the number of actual cases of separation was compared to the expected number and the result of the comparison was expressed as a ratio of actual experience over expected experience.

Utilization of the Early Retirement Option (ERO)

Tabulations were also compiled that provide distributions by age and service of members retiring from active service who were assumed eligible to elect ERO during their fiscal year of retirement. The number of actual cases of ERO retirement was compared to the number in the eligible group to determine the actual rates of utilization of ERO.

Optional Service Purchases and Sick Leave Service Credit

For optional service purchases and unused and uncompensated sick leave service credit, information for retirees who retired with an annuity with effective dates between July 1, 2001 and June 30, 2006, inclusive, was reviewed. Files provided by TRS for the annual actuarial valuations provided details on the following types of service credit at retirement: Regular (including repaid refunds), Optional Service (including Leave/Layoff service, Military service, and Out-of-System service), and Unused and Uncompensated Sick Leave. Using this information for 21,985 members who retired from active employment during the period of the study, we could determine the impact that each type of service has on the regular service retirement benefit.

Salary Increases and Severance Pay

Using data provided for the annual actuarial valuations, the expected and actual salaries as of the end of each year were compared to the 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.

For severance pay, information for annuitants with fiscal years of retirement between 2002 and 2006, inclusive, and tabulations that show distributions of severance pay and other pensionable earnings in the last year of employment, were reviewed.

Experience for Annuitants and Survivors

Investigations of the mortality experience for annuitants 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.

Experience for Funding Projection

An analysis of the profile for new entrants was performed 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, 2006 for members of the group. The new member profile is used in the projection completed annually to determine the funding requirements of PA 94-0004.

Experience for Rates of Inflation and Investment Return

The analysis for setting the rates of inflation and investment return included a review of recent past experience, consideration of projections by the System's current investment consultant as well as the System's target asset allocation, a comparison to the current assumptions of other public retirement systems, and a review of long-term past inflation as well as long-term projections of future inflation included in the 2007 OASDI Trustees Report.

Recommendations

Based on the results of our investigation, we are recommending revisions in the actuarial assumptions for (i) termination from employment, (ii) disability retirement, (iii) regular service retirement, (iv) death in active service, (v) death for regular service retirements, (vi) death for survivors, (vii) ERO utilization, (viii) optional service purchases, (ix) sick leave service credit, (x) salary increases, and (xi) severance payments. We are also recommending an updated new member profile for use in the annual funding projection required by PA 94-0004. In addition to affecting the results of the actuarial valuation and the funding projection, the proposed changes in post-retirement mortality assumptions will affect the money purchase and reversionary annuity factors used in determining TRS benefits, and the factors used to determine School District payments under Section 16-158(f) to cover the liability arising from pay increases greater than 6% per annum in the final average salary period.

The most significant of the recommended changes are that the service retirement rates be increased, that the post-retirement mortality assumption be revised to reflect improved longevity, and that assumptions regarding optional service purchased near retirement, and unused sick leave service at retirement be adjusted to reflect recent changes in the patterns of accrual of these types of service. The recommended changes to other assumptions can be viewed as "fine tuning" based on recent experience.

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 rates of utilization of ERO by eligible retirees; (iii) the actual and expected mortality for annuitants and survivors, (iv) optional service credit and unused and uncompensated sick leave, (v) the annual rates of investment return, inflation, and real rates of return on system assets, (vi) the average increases in annual salaries among active members, (vii) severance payments in the last year of employment, and (viii) the new member profile.

For purposes of this experience investigation, the assumptions adopted effective June 30, 2002 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

Separation from Service and Post-Retirement Mortality

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, disability, regular service retirement, and death during the five-year period ended June 30, 2006. Tables 5, 6, and 7, also attached to Section VI, analyze the experience of death after retirement for regular service retirements, survivors, and disability retirements. Separate summaries for males and females are presented for each of these events. The recommended new assumptions for separation from active service on account of regular service retirement have been prepared on a unisex basis, and so the experience of regular service retirement is also presented on that basis.

Table 8 summarizes the utilization of ERO among eligible members retiring from active service, while Table 9 summarizes optional service purchases and sick leave service credit of active members who retired during the period of the study. The assumptions for these types of service are unisex assumptions and so these tables have been prepared on a unisex basis.

The following table presents a summary comparison of actual to expected cases of separation from active service and death after retirement.

SUMMARY COMPARISON OF ACTUAL TO EXPECTED CASES

Event	Ratio of Actual to Expected Experience	
	Males	Females
Termination from Employment		
• Nonvested (< 5 Years Service)	82%	77%
• Vested (> 5 Years Service)	99%	90%
Disability Retirement	70%	67%
Regular Service Retirement	173%	166%
Death in Active Service	77%	68%
Death after Retirement:		
• Regular Service Retirements	89%	104%
• Survivors	93%	101%
• Disability Retirements	87%	103%

For purposes of comparison, the table expresses the ratio of the actual number of cases to the expected number of cases as a percentage. 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 nonvested termination from employment, the table shows an entry of 82% for male members. This means that during the five-year experience period the actual number of male members terminating employment was 18% less than the expected number of terminations.

In addition, the entry for regular service retirement for female members is 166%. This means that during the experience period, the actual number of retirements exceeded the expected number by 66%.

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

The investigation of the experience of termination from employment for reasons other than disability, death, or retirement, was split into two categories, vested and nonvested, which are illustrated in Section VI, Table 1.

Nonvested Termination

Over the last ten years, the rates of termination of nonvested members have trended down. During the period of the study, the actual cases of termination from employment were approximately 82% of the number predicted by the current rates for nonvested males, and 77% of the number predicted for nonvested females. In addition, the current assumptions predicted too many terminations at younger ages and too few terminations at older ages. We recommend adjusting the rates to more closely reflect the actual pattern of terminations, and to bring the combined ratio of actual to expected terminations up to 90% overall.

Vested Termination

Over the last ten years, the rates of termination of vested females have fluctuated up and then down, while the overall rates of termination of vested males have been fairly uniform. During the period of the study, the actual cases of termination from employment were approximately 99% of the number predicted for vested males, and 90% of the number predicted for vested females. We believe that the male rates are sufficient to anticipate future vested terminations and recommend fine tuning rates at individual ages, without changing overall expectations. We recommend adjusting the rates for vested females to bring the actual to expected ratio closer to 95%.

Rates of Disability Retirement

Table 2 shows that the actual experience of disability retirement was lower than expected for both males and females - 70% of expected for males and 67% of expected for females. The number of disability retirements involved is not statistically significant, but during the last ten years, the rates of disability have trended down. We are therefore recommending adjusting the rates of disability to bring the actual to expected ratio closer to 90% for both sexes.

Rates of Regular Service Retirement

Table 3 provides the experience of service retirement on both a sex distinct basis (for comparison to the current assumptions), and a unisex basis (the basis recommended for the new assumptions). During the period of the study the actual cases of regular service retirement were approximately 173% of the number expected for males, 166% of the number expected for females, and 168% of the number expected for males and females combined. In addition, the experience of retirement was very much higher than expected among ERO-eligible retirees, around 129% of expected among retirees age 60 to 64, and lower than expected above age 65.

The high rates of retirement among ERO-eligible retirees are in large part due to the previously expected June 30, 2005 sunset of the entire ERO program, followed by a legislative amendment that continued the old program for the "pipeline" period of July 1, 2005 through July 1, 2007. The Modified ERO program that replaced the former ERO program is more expensive for the member, and we do not believe the recent rates of retirement among ERO-eligible members are necessarily appropriate assumptions for the future. For ERO-eligible members, we recommend adopting rates of retirement equal to 70% of the actual experience for members who have 19 to 30 years of service at the beginning of the fiscal year of retirement; 80% of the actual experience for members with 31 to 33 years of service, and the actual experience of members with 34 years of service.

For members eligible to retire, but not eligible for ERO (that is, retirement-eligible members age 60 or older, or with at least 35 years of service), we recommended adopting new rates based on age and service, and on the smoothed actual experience seen during the period of the study.

Rates of Mortality Among Active Members

Actual occurrences of mortality were approximately 77% of the expected for male members in active service and 68% of expected for female members in active service. Rates of mortality were lower than expected among almost all age groups. The results are presented in Table 4.

Although the experience differed from our expectations, the number of deaths is statistically insignificant. In addition, 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. Therefore, we do not recommend fully adjusting the assumed rates to mark to the actual experience.

However, since the experience was less than expected we recommend lowering the rates of mortality currently used for active members to bring the actual to expected ratio up to 90%.

Rates of Death After Retirement

Separate mortality investigations were performed for regular service retirements, survivors, and disability retirements:

(1) The actual cases of death among regular service-related retirements were 89% of expected for males and 104% of expected for females.

(2) The actual cases of death among survivors were 93% of expected for males and 101% of expected for females.

(3) The actual cases of death among those annuitants who retired on account of disability were 87% of expected for males and 103% of expected for females.

Summaries of the experience of death after retirement are shown in the following tables:

Table 5 - Members retired on regular service retirements.

Table 6 - Survivors.

Table 7 - Members retired on disability retirements.

Rates of mortality for non-disabled individuals have declined fairly consistently over the last century, and this decline is expected to continue for the foreseeable future. It is therefore the national professional standard among actuaries (and standard practice among large public retirement systems) to recommend a mortality table that reflects continued improvements in mortality. We recommend that the current mortality table be updated to bring the ratio of actual to expected deaths for male members and male survivors up to 100%. Further improvements in mortality, totaling 3% for females and 6% for males, should then be phased in through June 30, 2011.

The mortality tables for disabled retirees were adopted ten years ago, but it should be noted that improvements in mortality are not generally anticipated for disabled retirees. The female experience in the current review is 103% of expected, and does not warrant a change in the table, and although the male experience is lower than currently expected, it is higher than the mortality experienced during the last five-year review. In addition, the number of disabled male members exposed to mortality over the five years covered by the study – 1,061 – is not statistically significant. We are therefore not recommending a change in the disabled male mortality table at this time.

Utilization of the Early Retirement Option (ERO)

The investigation shows that 15,875 active members who retired on service retirement during the period of the study were eligible to retire on ERO at some point during the fiscal year in which they retired. Focusing only on this group of actual service retirements, we found that:

- 75.5% of the ERO-eligible (11,987) actually retired on ERO
- 19.0% attained age 60 or 35 years of service prior to the actual retirement date; and
- 5.5% retired while ERO-eligible, but did not elect ERO.

Table 8 presents the actual rates of utilization of ERO that occurred during the period of the study. Because the Modified ERO program is more expensive for members than the ERO program that ends on July 1, 2007, we believe that rates of utilization will decrease after that date, and we are recommending new rates that are approximately 75% of the smoothed actual experience. These rates will only be applied to members who are assumed to have less than 35 years of total service at retirement (including assumed sick leave and optional service purchased at retirement). In addition, ERO utilization rates will not be applied to members whose pension under the ERO program would be less than their money purchase benefit. (It should be noted that based on the sick leave and optional service assumptions, the majority of members with 33 years of service at the beginning of the year of retirement will *not* be assumed to retire on ERO because they will be assumed to have at least 35 years of service at retirement.)

Optional Service Credit and Credit for Unused and Uncompensated Sick Leave

During the five-year period, data provided on 21,985 service retirements among active members who retired with an annuity give details on the following types of service credit at retirement: Regular (including repaid refunds), Optional Service (including Out-of-System, Military, and Leave/Layoff service) and Unused and Uncompensated Sick Leave. Summary information about the different types of service credit at retirement for these 21,985 service retirees is provided in Table 9. Table 9 shows that during the period of the study, and averaged over all retirements from active service, optional service at retirement averaged 0.926 years and credit for unused sick leave averaged 1.092 years. However, as illustrated in Table 9, the pattern of accrual of these two types of service is very different. Taken together, the sum of these two types of service averaged 2.018 years during the study.

Optional Service Credit

Under the current assumptions, the pension benefit obligation for retirement benefits for active members who have not previously purchased optional service credit is increased to cover the employer cost of out-of-system service purchased in the last two years prior to retirement. During the last experience review (conducted in 2002) total optional service credit at retirement averaged 1.035 years of service, but over the period of the current study the amount of optional service credit at retirement has trended downward. We believe this downward trend has occurred both because the cap on credit for unused and uncompensated sick leave was increased from one year to two years during fiscal year 2003 (and sick leave service credit, unlike optional service credit, is provided at no cost to the member), and because less total service is needed at retirement to attain the maximum 75% of final average salary formula benefit under the 2.2% formula than under the old tiered formula. (The 2.2% formula was enacted in late spring of

1998, two years into the last experience review period.) We believe the downward trend will continue in future years as members continue to accumulate greater amounts of unused sick leave.

Unused and Uncompensated Sick Leave

The cap on this type of service was increased from one year to two years during fiscal 2003. The member can receive such credit from TRS employers who have verified creditable teaching service. No payment from the member is required to receive such service credit. In previous studies of this type of service, as well as during the first fiscal year covered by the current study (fiscal 2002), the average amount of unused sick leave service credit at retirement was found to be approximately 0.84 years of service at retirement. However, the amount of this type of service credit has trended upward since the cap was increased to two years during fiscal 2003, and the current assumption is no longer appropriate.

Recommended Assumptions for Optional Service and Unused and Uncompensated Sick Leave

We recommend it be assumed that the total amount of credit for optional service and unused and uncompensated sick leave service will average 2.0 years over all retirements from active service (the average found in the current study); that optional service at retirement will average 0.7 years over all active service retirements; and that unused and uncompensated sick leave at retirement will average 1.3 years over all active service retirements. In addition, we recommend that the patterns of accrual of each type of service following the patterns found during the current study

(and illustrated in Table 9). Other assumptions and methodologies that apply to optional service are as follows:

- Actual optional service credit for each current member is provided by TRS; and
- No additional service purchases will be assumed for members who currently have optional service credit; and
- Members will not purchase service if it does not improve their pension benefit; and
- When optional service is purchased within the last two years prior to retirement, 25% of the cost is covered by member payments and the remaining cost is the responsibility of the employer. (This assumption has been borne out in prior cost studies); and
- The PBO covered by future member payments is not included in the liability on the valuation date, but is brought into projected liabilities as those payments are brought into the assets.

ECONOMIC FACTORS

We have prepared Tables 10 – 12, attached to Section VI, which summarize the actual results for the key economic factors affecting the operation of the System.

Inflation

The inflation assumption is a component of the investment return assumption, the salary increase assumption, and the new hire payroll projection assumption. The current actuarial assumption is that inflation will average 3.5% per annum on a long-term basis. History (the last 40 - 70 years) argues that long-term inflation should be in the 3% - 4% range. The 2007 OASDI Trustees Report projects that over the long-term (the next 75 years) inflation will average somewhere between 1.8% and 3.8%. The 2007 Public Fund Survey of 126 public pension plans shows that 3.5% is the median inflation assumption of survey respondents, and that 40% of the respondents have an inflation assumption that lies between 3.25% and 3.75%. We are therefore comfortable recommending that the current 3.5% long-term inflation assumption be retained.

Rates of Investment Return

The assumption for the rate of investment return is a two-part assumption: it equals the sum of a long-term inflationary assumption plus an assumption for the real rate of return on System assets. The components of the current 8.5% investment return assumption are 3.5% for inflation plus 5.0% for the real rate of return. As already discussed, we are recommending that the Board retain the current 3.5% long-term inflation assumption.

The actuarial rates of investment return, inflation, and real rates of return during the five-year period ended June 30, 2006 are presented in Table 10 of Section VI. This table indicates that the actuarial rates of investment return and real rate of return, measured on a market value of assets basis averaged 8.16%, and 5.46%, respectively during this five-year period. As expected, the returns fluctuated during the period of the study, falling below the expected returns in two years, and exceeding expectations in the remaining three. (The rates of return calculated by the actuary are based on the assumption that contributions and benefit payments are spread uniformly throughout the year, while the rates of return calculated by the System are based on a more precise measurement of cash flow. Therefore the annual rates of return calculated by the actuary may not exactly match the rates of return calculated by TRS.)

However, short-term historical returns on the funds do not provide a solid basis for selecting the investment return assumption used to calculate costs in future years. The reason for this is that in the short-term, actual rates of investment return can be quite volatile, but the assumed rate of investment return is used to fund the present value of benefits payable many years into the future, in some instances for as long as 80 years. (It is obvious that the actual investment return can vary quite drastically from one year to the next, but even short-term averages can be quite volatile. For example, TRS investment returns for the five-year period ended June 30, 2006 averaged 8.16% per annum, 34 basis points shy of the 8.5% assumption, but if we shift the period of investigation just twelve months we find the five-year average is 12.60% for the 5-year period ended June 30, 2007, a rate that is 4.1% greater than the 8.5% long-term assumption.) Therefore, a review of recent past experience can be useful but is by no means the only basis for setting the long-term assumption used for the valuation and for the funding projection.

With regard to setting a long-term expectation it is more instructive to look at how the System's assets will be invested in the future. We have reviewed the Board's current asset allocation policy, and R. V. Kuhn, the TRS investment consultant, estimates that this allocation can support returns of 8.09%, while reducing the investment risk of the previous asset allocation. The current allocation calls for the following investment mix:

- 30.5% U.S. Equities
- 20.0% International Equities
- 8% Private Equity
- 2.5% "Absolute Return Product"
- 15% Fixed Income
- 14% Real Estate
- 10% "Real Return Product"

It is important to note that R. V. Kuhn's 8.09% expected investment return is based on projected inflation of approximately 2.5% - 2.75%. This means that the projected real rates of return for this asset allocation average 5.34% - 5.59%, which compares favorably with the System's current 5.0% assumed real rate of return.

When we compare the System's expectations for a 5.0% real rate of return to that of other public retirement systems we see that the 2007 Public Fund Survey of 126 public pension plans shows that 4.5% is the median assumption for the real rate of return among survey respondents, and that 30% report using an assumption between 5.0% and 5.5%. Although the 4.5% median assumption among survey respondents is lower than the current 5.0% TRS assumption, it is important to remember that this assumption should directly relate to the System's asset allocation, and fully 30% of respondents believe they have an allocation that justifies a real rate of return assumption of 5.0% or more.

In consideration of the above, we recommend that the System retain both the current 5.0% real rate of return assumption, and the 8.5% long-term investment assumption.

Rates of Salary Progression

The growth in average annual salary is presented in Table 11 attached to Section VI.

There was sizable annual migration from Substitute/Hourly to Full Time/Part Time status – approximately 3,600 per year over the period of the study (an increase from the 3,500 per year found in the previous study). This movement to Full Time status creates large average increases in salary, which can be misleading. In order to refine the salary increase study, we performed separate analyses of those who belonged to the Full Time/Part Time group at both the beginning and the end of the year under study, and those who were Substitute/Hourly at the beginning of the year and Full Time/Part Time at the end of the year. Composite results, as well as the results of the separate analyses, are shown in Table 11.

The investigation shows that members who were Full Time throughout the year averaged salary increases of 7.10% per annum during the period of the study compared to the expected average of 6.25% per annum for continuing Full Time members. On the other hand, members who moved from Substitute/Hourly to Full Time/Part Time generally experienced salary increases averaging 362% as a result of the change. Of course this increase reflects both an increase in the amount of time worked during the year as well as a true increase in the rate of pay. The composite results show that salary increases of all members who are Full Time at the end of the year have averaged 8.7% per annum. A portion of the composite increase is also due to the increase in time worked during the year.

In addition to the migration from Substitute/Hourly to Full Time/Part Time, our review disclosed that approximately 1,750 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. (In the last experience review we found that an average of 1,800 Inactive members return to Full Time/Part Time employment annually.)

We believe that an appropriate salary increase assumption should have as a base the experience of those who are continuing Full Time/Part Time members, plus an allowance for changes in employment type and membership status. But the effect of changes in plan provisions should also be taken into account. Under Section 16-158(f), which was enacted in fiscal year 2005, School Districts must make lump sum payments to the System to cover the cost of liability arising from pay increases greater than 6% in the final average salary period. We think that this provision will have a definite dampening effect on future pay increases granted at ages 50 and above, and so we are recommending new salary increase rates that are closer to the smoothed actual experience at ages below 50, and that equal 6% in total at ages 50 and above. Overall, the recommended new rates are equivalent to an average Full Time/Part Time base of 6.75% plus an allowance of 0.25% for employment type and status changes. The recommended total average increase is 7.0%, as compared to the current expected total average of 6.5%.

Components of the Salary Increase Assumption

The components of the salary increase assumption are inflation, real wage growth, and merit or longevity increases. As noted above, we are recommending an inflation assumption of 3.5% per annum. Merit or longevity increases are expected to vary by age and/or service, while the inflation and real wage growth assumptions apply equally to all members. Pay at hire for new members and the total payroll of the entire active group are expected to grow at a rate equal to the sum of the inflation and real wage growth assumptions. Starting pays and total payroll are assumed to grow faster than inflation alone due to increases in productivity in the economy at large, and due to the fact that employers must compete for employees. Real wage growth generally rises when inflation falls, and vice versa, and as mentioned above we are recommending no change in the current 3.5% long-term inflation assumption. Therefore, we are also recommending that the current 1.2% real wage growth component of the salary increase assumption be maintained. As a result, our recommended increase in the starting pay for new hires (which will be used in the funding projection) is 4.7% per annum (3.5% inflation plus 1.2% real wage growth), which is the same as the current assumption.

It is generally accepted in actuarial practice that a reasonable spread between the investment return assumption and the average annual 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.

Severance Pay

The results of the severance pay analysis are shown in Table 12, attached to Section VI.

During the five-year period, data provided on 21,985 service retirements among active members who retired with an annuity give details about pensionable severance payments received at retirement. These payments are included in the calculation of final average salary. Analysis of this data shows that during the five-year period of the study 15,199 retirements from active service – or 69% of regular service retirements – received severance payments totaling $199.3 million. The $199.3 million in severance payments was equal to 15% of other pensionable earnings received by the 15,199 members in their last year of employment. The data clearly indicate that both the percentage of retirees with severance and the amount of severance as a percentage of other earnings increase with the amount of service at retirement.

These percentages are slightly lower than in the 2002 severance pay study. The effect of changes in plan provisions should also be taken into account. Under Section 16-158(f), which was enacted in fiscal year 2005, School Districts must make lump sum payments to the System to cover the cost of liability arising from pay increases greater than 6% in the final average salary period. As noted above, pensionable severance payments are included in the calculation of final average salary, and so we expect that enactment of Section 16-158(f) should result in much lower amounts of severance pay in future years. As a result, we smoothed the severance pay experience that occurred during the period of the study and, based on the advice of TRS staff, we also recommend that the smoothed percentages of people retiring with severance be multiplied by 66.7% in fiscal year 2008, by 50.0% in fiscal year 2009, by 33.3% in fiscal year 2010, and by 10% for retirements assumed to occur in fiscal year 2011 and thereafter.

It should be noted that if the sum of severance pay plus other pensionable earnings at retirement is more than 20% greater than the pensionable earnings received in the prior year, then the provisions of the TRS plan will prevent a portion of the assumed severance payments from being included in the member's final average salary at retirement. When applying the severance pay assumption in the actuarial valuation we take these provisions into account.

FUNDING PROJECTION ASSUMPTIONS

New Member Profile

In order to perform the 50-year projection required by Public Act 94-0004, a profile of the members who will be hired over the next 50 years must be created. We currently use, and continue to recommend, separate profiles for the Full Time/Part Time and Substitute/Hourly active member groups. As part of the current study we analyzed the data for new entrants provided for the last three actuarial valuations and have established new profiles for the two separate groups. The profiles are organized by sex and by age at hire. For each group the profiles specify, for each age and sex category, the percentage of new hires that fall into that category, the average annual service credit that will be earned throughout the member's career, and the average annual full time rate of pay at hire as of June 30, 2007. The recommended new profiles are shown in section V as well as in Table 13.

In addition, since the 50-year projection assumes that new members will be hired each year in the future, we need an assumption that allows a reasonable projection of the rate of pay at hire in years following June 30, 2007. Pay at hire is expected to grow at a rate equal to the sum of the inflation and real wage growth assumptions (which were discussed in the review of the salary increase assumption, above). Our recommendation is to continue the current 4.7% per annum growth rate. As explained in the salary increase section, above, 3.5% of the increase is attributable to inflation, and the remaining 1.2% is attributable to real wage growth.

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 Substitute/Hourly group. We are not

recommending a change in this assumption at this time. (We also note that the System uses the level percentage of payroll amortization method for purposes of disclosure under Governmental Accounting Standards Board Statement No. 25 (GASB 25), and the constant active group size assumption satisfies the GASB 25 parameters for this type of amortization.)

SECTION III - ASSET VALUATION METHOD

Since the June 30, 1997 valuation date, the assets of the System have been valued at market value in accordance with Public Act 90-448.

The financial reporting standards under GASB No. 25 require TRS to report the balance sheet and income statement of TRS on a market-related basis. The use of market value for actuarial valuation purposes is consistent with the asset valuation requirements of GASB No. 25 and will continue to be used for future valuations (as required by state law).

SECTION IV - ACTUARIAL COST METHOD

Currently, as required by Section 16-158(b-3) of the Illinois Pension Code, the actuarial accrued liability (AAL) and normal cost of the System are determined using the projected unit credit actuarial cost method. The AAL is equivalent to the Government Accounting Standards Board (GASB) Statement No. 5 pension benefit obligation (PBO). PBO is a measure of the actuarial present value as of the valuation date of credited projected benefits prorated on service and includes an adjustment for the effects of projected salary increases, estimated to be payable in the future as a result of employee service to the valuation date. The PBO is the measure of liability that is disclosed in the audit report of the System. This approach for measuring the AAL and normal cost is a generally accepted actuarial approach.

SECTION V - SUMMARY OF RECOMMENDATIONS AND FISCAL IMPACT

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

We recommend that the actuarial assumptions should be amended as follows:

(1) The assumed rates of termination from employment for nonvested members should be adjusted to more closely reflect the pattern of terminations by age, and to bring the combined male/female ratio of actual to expected terminations up to 90% overall. The table below shows at sample ages the proposed rates of nonvested termination from employment:

PROPOSED RATES OF TERMINATION FROM EMPLOYMENT

Incidence of Termination from Employment – Nonvested Members		
Age	Male	Female
25	7.0%	8.1%
30	6.5%	9.0%
35	7.5%	8.8%
40	8.0%	6.6%
45	9.4%	6.2%
50	9.4%	6.2%
55	12.0%	8.7%
60	12.6%	11.1%
65	12.6%	11.1%

(2) The assumed rates of termination from employment for vested members should be fine-tuned at individual ages without changing overall expectations for male vested members, and adjusted to bring the actual to expected ratio closer to 95% for female vested members. The table below shows at sample ages the proposed rates of vested termination from employment:

PROPOSED RATES OF TERMINATION FROM EMPLOYMENT

Incidence of Termination from Employment – Vested Members		
Age	Male	Female
25	6.0%	9.0%
30	3.7%	8.0%
35	2.2%	5.1%
40	1.6%	2.4%
45	1.3%	1.5%
50	1.1%	1.3%
55	1.4%	1.7%
60	2.6%	2.9%
65	3.1%	3.0%

(3) The assumed rates of disability should be reduced so that the ratios of actual to expected shown in Table 2 are increased to 90% to more closely reflect recent experience. The table below shows at sample ages the proposed rates of disability.

PROPOSED RATES OF DISABILITY

Incidence of Disability		
Age	Male	Female
25	.034%	.045%
30	.030%	.100%
35	.039%	.110%
40	.060%	.110%
45	.064%	.130%
50	.110%	.190%
55	.130%	.200%
60	.200%	.350%
65	.600%	1.50%

(4) The assumed rates of regular service retirement should be adjusted to better fit the actual age-and-service-related pattern of retirements during the period of the study, but since the Modified ERO program is more expensive than the current ERO program (which ends on July 1, 2007), the rates of retirement of ERO-eligible members should mark to only 70% of the actual experience for members with 19 – 30 years of service at the beginning of the year of retirement, to 80% of the actual experience for members with 31 – 33 years of service at the beginning of the year of retirement, and to 100% of actual experience for members with 34 years of service at the beginning of the year of retirement. The assumed rates of retirement are shown in the table below.

PROPOSED RATES OF REGULAR SERVICE RETIREMENT

Incidence of Regular Service Retirement Among Eligible Active Members					
	Active Service Rounded to Nearest Year on June 30 prior to Retirement				
Age *	5 – 18	19 – 30	31	32 – 33	34+
54		7%	12%	38%	40%
55		12%	20%	38%	40%
56		10%	18%	38%	32%
57		10%	18%	38%	32%
58		10%	18%	38%	32%
59		25%	27%	45%	37%
60	14%	27%	45%	45%	37%
61	13%	24%	45%	45%	37%
62	13%	28%	45%	45%	37%
63	13%	28%	45%	45%	37%
64	18%	33%	45%	45%	37%
65 – 69	23%	33%	45%	45%	30%
70	100%	100%	100%	100%	100%

*Age rounded to nearest year on June 30 prior to retirement

(5) The assumed rates of death in active service should be reduced to more closely reflect recent experience so that the overall ratio of actual to expected deaths is increased to 90% for both sexes. Thereafter, projected annual improvements in mortality should be phased in through June 30, 2011 with Society of Actuaries Mortality Projection Scale AA.

(6) The assumed rates of death among members retired on regular service retirement should continue to be based on the 1995 George B. Buck Mortality Tables, but the rates for males should be updated so that the overall ratio of actual to expected experience is 100%, and additional improvements in mortality totaling 3% for females and 6% for males should be phased in through June 30, 2011. The projected improvements in mortality will be based on Society of Actuaries Mortality Projection Scale AA.

(7) The assumed rates of death among survivors should continue to be based on the 1995 George B. Buck Mortality Tables, but the rates for males should be updated so that the overall ratio of actual to expected experience is 100%, and additional improvements in mortality totaling 3% for females and 6% for males should be phased in through June 30, 2011. The projected improvements in mortality will be based on Society of Actuaries Mortality Projection Scale AA.

(8) 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 forward 5 years for males and back 2 years for females, but not less than the rate at age 65 (after the setforward or setback). We recommend that this mortality table continue to be used.

(9) The rates of utilization of ERO for the Modified ERO program should be set to approximately 75% of the smoothed actual rates experienced during the period of the study. (The Modified ERO program is more expensive for the member than the current ERO program, which ends July 1, 2007.) The recommended rates of utilization of ERO are shown in the following table.

PROPOSED RATES OF UTILIZATION OF ERO

Utilization of ERO among All Active Service Retirees**						
	Age Rounded to Nearest Year on June 30 prior to Retirement					
Service *	54	55	56	57	58	59
19 – 30	63%	70%	69%	65%	63%	25%
31	72%	72%	71%	71%	71%	38%
32	66%	68%	68%	67%	66%	45%
33	66%	68%	68%	67%	66%	45%

* Active member service rounded to nearest year on June 30 prior to retirement

** ERO Utilization Rates are applied only to members who have less than 35 years of total service at the assumed retirement date (including assumed sick leave and optional service purchased at retirement). Based on the sick leave and optional service assumptions, the majority of members with 33 years of service at the beginning of the year of retirement will not be assumed to retire on ERO because they will be assumed to have at least 35 years of service at retirement.

In addition, ERO Utilization Rates are not applied to members whose pension under the ERO program would be less than their money purchase benefit.

(10) The pension benefit obligation for retirement benefits for active members who have not previously purchased optional service – and whose pension benefit would be improved by such a purchase - should continue to be increased to cover the employer cost of optional service purchased in the last two years prior to retirement. No additional optional service purchases will be assumed for active members who already have optional service credit. Representative amounts purchased at retirement are as follows:

PROPOSED AMOUNTS OF OPTIONAL SERVICE PURCHASED AT REGULAR SERVICE RETIREMENT

Regular Service at Retirement	Maximum Service Purchased
10 years	0.388 years
20 years	1.131 years
25 years	1.245 years
30 years	0.886 years
34 or more	None

When optional service is purchased within the last two years prior to retirement, 25% of the cost is borne by member payments and the remaining cost is the responsibility of the employer. The PBO covered by future member payments is not included in the liability on the valuation date, but is brought into projected liabilities as those payments are brought into the assets.

(11) An assumption for unused and uncompensated sick leave service credit at retirement should be retained, and the current assumed rate of accrual of such service should be increased to reflect the experience of the last five years, which was affected by the fiscal year 2003 change in the cap from one year to two years of such service. Representative assumed amounts of unused and uncompensated sick leave service are as follows:

PROPOSED AMOUNTS OF SICK LEAVE SERVICE CREDIT AT REGULAR SERVICE RETIREMENT

Regular Service at Retirement	Sick Leave Service Credit
20 years	1.080 years
25 years	1.224 years
30 years	1.277 years
34 years	1.000 years
35 or more	None

(12) The assumed rate of inflation should be retained at 3.5% per annum.

(13) The 8.5% per annum rate of investment return should be retained. The components will be 3.5% inflation and 5% real rate of return.

(14) The 6.25% Full Time/ Part Time average salary increase assumption should be raised by 0.5% to 6.75% per annum. The additional 0.25% per annum increase used to cover employment type and status changes should be retained, for a total recommended average increase of 7.0% per annum, as compared to the current expected average of 6.5% per annum. The components of the salary increase assumption will be 3.5% inflation; 1.2% real wage growth; and merit/longevity increases that range from 6.4% at age 20 to 1.3% at age 50 and above.

PROPOSED AGE-RELATED SALARY INCREASE ASSUMPTION

Age	Annual Salary Increase
20	11.1 %
25	10.2
30	8.4
35	7.7
40	7.2
45	6.7
50 and above	6.0

(15) The percent of retirees from active service assumed to receive severance payments, and the amount of such severance payments, should be based on the following table:

PROPOSED SEVERANCE PAY AS A PERCENT OF OTHER PENSIONABLE EARNINGS IN THE LAST YEAR OF EMPLOYMENT

Before Adjustment for Section 16-158(f)

Years of Service at Retirement	Percent of Retirees Who Receive Severance Pay	Severance Pay as a Percent of Other Pensionable Earnings
10 – 20	41%	13.81%
20 – 24	52%	13.24%
25 – 29	58%	14.29%
30 or More	75%	15.35%

Adjustment for Section 16-158(f): the percentages in the "Percent Who Receive Severance" column above, are multiplied by 66.7% in fiscal year 2008, 50.0% in fiscal year 2009, 33.3% in fiscal year 2010, and by 10% for retirements assumed to occur in fiscal year 2011 and thereafter, because the percent of members retiring with severance is expected to trend down.

Below is the new member profile for use in the 50-year funding projection:

DISTRIBUTION OF NEW ENTRANTS BY AGE, SEX, AND EMPLOYMENT TYPE

Age Group	Full Time/Part Time			Hourly/Substitute		
	Males	Females	Total	Males	Females	Total
20 – 24	5.3 %	26.7 %	32.0 %	7.0 %	19.8 %	26.8 %
25 – 29	7.1 %	24.4 %	31.5 %	6.9 %	14.0 %	20.9 %
30 – 34	3.6 %	9.6 %	13.2 %	2.6 %	6.1 %	8.7 %
35 – 39	1.9 %	5.5 %	7.4 %	2.5 %	8.1 %	10.6 %
40 – 44	1.4 %	3.8 %	5.2 %	2.4 %	8.8 %	11.2 %
45 – 49	1.0 %	3.7 %	4.7 %	1.8 %	6.4 %	8.2 %
50 – 54	0.8 %	2.4 %	3.2 %	1.9 %	4.1 %	6.0 %
55 – 59	0.8 %	1.4 %	2.2 %	2.0 %	2.5 %	4.5 %
60 – 64	0.3 %	0.3 %	0.6 %	1.0 %	1.0 %	2.0 %
65 – 69	0.0 %	0.0 %	0.0 %	0.5 %	0.3 %	0.8 %
70	0.0 %	0.0 %	0.0 %	0.2 %	0.1 %	0.3 %
Total	22.2 %	77.8 %	100.0 %	28.8 %	71.2 %	100.0 %

SERVICE CREDIT EARNED IN EACH FUTURE YEAR

Age Group	Full Time/Part Time			Hourly/Substitute		
	Males	Females	Total	Males	Females	Total
20–24	0.991	0.987	0.988	0.291	0.331	0.330
25–29	0.991	0.990	0.990	0.303	0.277	0.287
30–34	0.987	0.987	0.987	0.344	0.288	0.304
35–39	0.993	0.978	0.982	0.286	0.308	0.303
40–44	0.989	0.979	0.982	0.304	0.314	0.314
45–49	0.996	0.978	0.982	0.318	0.348	0.345
50–54	0.993	0.978	0.982	0.339	0.355	0.353
55–59	0.986	0.967	0.974	0.362	0.358	0.359
60–64	0.967	0.961	0.963	0.345	0.347	0.346
65–69	-	-	-	0.339	0.325	0.330
70	-	-	-	0.303	0.295	0.297
Average	0.990	0.986	0.987	0.326	0.328	0.329

PROJECTED ANNUAL RATE OF PAY AT 6/30/2007*
(for one year of service credit)

Age Group	Full Time/Part Time			Hourly/Substitute		
	Males	Females	Total	Males	Females	Total
20–24	$37,722	$36,417	$36,633	$15,664	$15,924	$15,856
25–29	40,038	39,835	39,880	15,824	15,249	15,439
30–34	44,837	42,297	42,990	16,846	15,494	15,898
35–39	48,533	43,115	44,506	15,360	14,876	14,990
40–44	51,967	41,885	44,600	15,780	15,000	15,167
45–49	49,573	42,129	43,713	16,401	15,263	15,513
50–54	52,172	46,878	48,201	15,735	15,359	15,478
55–59	65,491	52,793	57,410	15,935	15,340	15,604
60–64	57,423	51,743	54,583	15,964	15,201	15,583
65–69	-	-	-	15,765	14,964	15,465
70	-	-	-	15,038	15,207	15,094
Average	$43,762	$39,903	$40,760	$15,870	$15,393	$15,530

* The rate of pay profile will increase 4.7% per annum. 3.5% of the increase is attributable to inflation and 1.2% to real wage growth.

Fiscal Impact

Exhibits I and II, below, illustrate the estimated fiscal impact of the proposed changes on the cost of benefits provided by the system.

FISCAL IMPACT OF PROPOSED REVISIONS IN ACTUARIAL ASSUMPTIONS

EXHIBIT I

INCREASE (DECREASE) IN PENSION BENEFIT OBLIGATION (PBO)
AS OF JUNE 30, 2007
($ Millions)

Actuarial Assumption Revision	Increase (Decrease) in PBO
1. Rates of Mortality Among Active Members, Annuitants, and Survivors	$ 830.3 Million
2. Rates of Termination from Employment	30.1
3. Rates of Disability	(17.7)
4. Rates of Regular Service Retirement	1,320.5
5. Utilization of ERO	(106.7)
6. Optional Service and Sick Leave Service	421.5
7. Salary and Severance Pay	(67.2)
Net Increase (Decrease) in PBO	$ 2,410.8 Million

The above calculations indicate that the net effect of the revisions in actuarial assumptions would be to increase* the PBO of the System by approximately $2,410.8 million. This represents 3.8% of the current PBO of $63,237.6 million determined as of June 30, 2007 (determined before the change in assumptions).

*This is a correction to a typographical error in the original document.

EXHIBIT II

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

Actuarial Assumption Revision	Increase (Decrease) FY 2009 Employer Contribution	
	Normal Cost	Total Contribution
1. Rates of Mortality:		
– Amount	$ 12.3	$ 24.8
– % Member Payroll	.14%	.28%
2. Rates of Termination from Employment:		
– Amount	$ 5.3	$ 2.8
– % Member Payroll	.06%	.03%
3. Rates of Disability:		
– Amount	$ (0.9)	$ (0.8)
– % Member Payroll	(.01)%	(.01)%
4. Rates of Regular Service Retirement:		
– Amount	$ 44.1	$ 49.0
– % Member Payroll	.50%	.56%
5. Utilization of ERO:		
– Amount	$ (6.2)	$ (4.9)
– % Member Payroll	(.07)%	(.06)%
6. Optional Service and Sick Leave Service		
– Amount	$ 25.6	$ 20.0
– % Member Payroll	.29%	.23%
7. Salary and Severance:		
– Amount	$ 20.3	$ 6.1
– % Member Payroll	.23%	.07%
Net Increase (Decrease) in Employer Contribution Requirement:		
– Amount	$100.5	$ 97.0
– % Member Payroll	1.14%	1.10%

Employer Contribution based upon projected member payroll of $8,817.5 million for fiscal year 2009

The above calculations indicate that the proposed revisions increase the total employer contribution for fiscal year 2009 by approximately $97 million, based on the funding requirements of Public Act 94-0004.

SECTION VI

COMPARISON OF ACTUAL AND EXPECTED EXPERIENCE DURING FIVE-YEAR PERIOD FROM JULY 1, 2002 THROUGH JUNE 30, 2006

TABLE 1

SUMMARY OF EXPERIENCE FOR TERMINATION FROM EMPLOYMENT BEFORE RETIREMENT

CHANGE FROM ACTIVE STATUS TO INACTIVE STATUS OR REFUND TERMINATION

MALES - NONVESTED
FY 2002 - FY 2006

Age	Number of Separations		Number Exposed	Ratio of Actual to Expected	Separations per 100 Participants
	Actual	Expected			
Less than 23	4	4.2	26	96%	15.4
23 - 27	785	1,112.8	12,646	71%	6.2
28 - 32	558	835.5	9,494	67%	5.9
33 - 37	318	382.2	4,343	83%	7.3
38 - 42	222	243.9	2,772	91%	8.0
43 - 47	190	177.4	2,016	107%	9.4
48 - 52	168	157.5	1,790	107%	9.4
53 - 57	181	126.8	1,440	143%	12.6
58 - 62	85	59.6	677	143%	12.6
63 - 67	30	14.4	163	209%	18.4
Over 67	7	3.3	37	214%	18.9
TOTAL	2,548	3,117.5	35,404	82%	7.2

If the ratio of actual to expected is:
in excess of 100%, then the actual number of cases was greater than expected
less than 100%, then the actual number of cases was less than expected

The ratio of actual to exposed provides the actual rates of separation that occurred during the study

TABLE 1
(continued)

SUMMARY OF EXPERIENCE FOR
TERMINATION FROM EMPLOYMENT BEFORE RETIREMENT

CHANGE FROM ACTIVE STATUS TO INACTIVE STATUS
OR REFUND TERMINATION

FEMALES - NONVESTED
FY 2002 - FY 2006

Age	Number of Separations		Number Exposed	Ratio of Actual to Expected	Separations per 100 Participants
	Actual	Expected			
Less than 23	13	30.6	170	42%	7.6
23 - 27	3,579	5,358.5	51,033	67%	7.0
28 - 32	2,303	2,880.0	27,429	80%	8.4
33 - 37	957	1,241.2	11,821	77%	8.1
38 - 42	588	705.5	9,407	83%	6.3
43 - 47	589	636.0	9,784	93%	6.0
48 - 52	501	533.4	8,207	94%	6.1
53 - 57	340	270.0	4,154	126%	8.2
58 - 62	144	79.3	1,221	182%	11.8
63 - 67	45	12.6	195	357%	23.1
Over 67	6	2.0	31	306%	19.4
TOTAL	9,065	11,749.0	123,452	77%	7.3

If the ratio of actual to expected is:
in excess of 100%, then the actual number of cases was greater than expected
less than 100%, then the actual number of cases was less than expected

The ratio of actual to exposed provides the actual rates of separation that occurred during the study

TABLE 1
(continued)

SUMMARY OF EXPERIENCE FOR
TERMINATION FROM EMPLOYMENT BEFORE RETIREMENT

CHANGE FROM ACTIVE STATUS TO INACTIVE STATUS
OR REFUND TERMINATION

MALES - VESTED
FY 2002 - FY 2006

Age	Number of Separations		Number Exposed	Ratio of Actual to Expected	Separations per 100 Participants
	Actual	Expected			
Less than 23	-	0.1	1	0%	-
23 - 27	61	26.1	491	234%	12.4
28 - 32	390	481.5	12,380	81%	3.2
33 - 37	324	398.4	16,343	81%	2.0
38 - 42	222	217.6	13,859	102%	1.6
43 - 47	209	174.7	14,549	120%	1.4
48 - 52	221	237.8	23,429	93%	0.9
53 - 57	161	112.0	9,921	144%	1.6
58 - 62	51	18.9	1,103	270%	4.6
63 - 67	7	-	-	-	-
Over 67	1	-	-	-	-
TOTAL	1,647	1,666.9	92,076	99%	1.8

If the ratio of actual to expected is:
in excess of 100%, then the actual number of cases was greater than expected
less than 100%, then the actual number of cases was less than expected

The ratio of actual to exposed provides the actual rates of separation that occurred during the study

TABLE 1
(continued)

SUMMARY OF EXPERIENCE FOR
TERMINATION FROM EMPLOYMENT BEFORE RETIREMENT

CHANGE FROM ACTIVE STATUS TO INACTIVE STATUS
OR REFUND TERMINATION

FEMALES - VESTED
FY 2002 - FY 2006

Age	Number of Separations		Number Exposed	Ratio of Actual to Expected	Separations per 100 Participants
	Actual	Expected			
Less than 23	-	-	-	-	-
23 - 27	402	244.2	2,713	165%	14.8
28 - 32	2,910	3,089.9	38,624	94%	7.5
33 - 37	1,864	2,221.7	40,395	84%	4.6
38 - 42	857	907.4	36,296	94%	2.4
43 - 47	727	791.1	47,947	92%	1.5
48 - 52	899	1,303.9	79,026	69%	1.1
53 - 57	642	814.4	41,843	79%	1.5
58 - 62	183	129.9	5,955	141%	3.1
63 - 67	16	-	-	-	-
Over 67	6	-	-	-	-
TOTAL	8,506	9,502.5	292,799	90%	2.9

If the ratio of actual to expected is:
in excess of 100%, then the actual number of cases was greater than expected
less than 100%, then the actual number of cases was less than expected

The ratio of actual to exposed provides the actual rates of separation that occurred during the study

TABLE 2

SUMMARY OF EXPERIENCE FOR DISABILITY RETIREMENTS

MALES
FY 2002 - FY 2006

Age	Number of Separations		Number Exposed	Ratio of Actual to Expected	Separations per 100 Participants
	Actual	Expected			
Less than 23	-	-	27	-	-
23 - 27	-	4.6	13,137	0%	-
28 - 32	4	8.4	21,874	48%	0.02
33 - 37	7	9.1	20,686	77%	0.03
38 - 42	10	8.8	16,631	114%	0.06
43 - 47	9	12.4	16,565	73%	0.05
48 - 52	28	28.5	25,219	98%	0.11
53 - 57	29	52.9	29,243	55%	0.10
58 - 62	8	16.7	5,397	48%	0.15
63 - 67	2	0.8	163	238%	1.23
Over 67	3	0.1	15	2727%	20.00
TOTAL	100	142.3	148,957	70%	0.07

If the ratio of actual to expected is:
in excess of 100%, then the actual number of cases was greater than expected
less than 100%, then the actual number of cases was less than expected

The ratio of actual to exposed provides the actual rates of separation that occurred during the study

TABLE 2
(continued)

SUMMARY OF EXPERIENCE FOR
DISABILITY RETIREMENTS

FEMALES
FY 2002 - FY 2006

Age	Number of Separations		Number Exposed	Ratio of Actual to Expected	Separations per 100 Participants
	Actual	Expected			
Less than 23	-	0.1	170	-	-
23 - 27	18	39.2	53,746	46%	0.03
28 - 32	66	53.4	66,053	124%	0.10
33 - 37	67	48.2	52,216	139%	0.13
38 - 42	47	51.2	45,703	92%	0.10
43 - 47	70	91.5	57,731	77%	0.12
48 - 52	139	206.9	87,233	67%	0.16
53 - 57	146	306.2	80,568	48%	0.18
58 - 62	48	101.3	15,693	47%	0.31
63 - 67	4	2.2	195	183%	2.05
Over 67	1	0.2	19	417%	5.26
TOTAL	606	900.3	459,327	67%	0.13

If the ratio of actual to expected is:
in excess of 100%, then the actual number of cases was greater than expected
less than 100%, then the actual number of cases was less than expected

The ratio of actual to exposed provides the actual rates of separation that occurred during the study

TABLE 3

SUMMARY OF EXPERIENCE FOR
REGULAR SERVICE RETIREMENTS
WITH AN ANNUITY OR A SINGLE-SUM BENEFIT

MALES
FY 2002 - FY 2006

Age	Number of Separations		Number Exposed	Ratio of Actual to Expected	Separations per 100 Participants
	Actual	Expected			
Under 55	1,483	493.0	6,162	301%	24
55	1,766	840.3	5,252	210%	34
56	1,128	624.3	3,716	181%	30
57	811	517.4	2,752	157%	29
58	649	425.5	2,096	153%	31
59	604	395.5	1,521	153%	40
60	418	308.1	1,185	136%	35
61	253	210.3	809	120%	31
62	167	159.9	615	104%	27
63	128	100.6	428	127%	30
64	101	105.4	301	96%	34
65	71	75.6	216	94%	33
66	39	46.9	134	83%	29
67	29	32.6	93	89%	31
68	20	24.3	64	82%	31
69	9	13.2	33	68%	27
70 and Over	27	87.0	87	31%	31
TOTAL	7,703	4,459.7	25,464	173%	30

If the ratio of actual to expected is:
in excess of 100%, then the actual number of cases was greater than expected
less than 100%, then the actual number of cases was less than expected

The ratio of actual to exposed provides the actual rates of separation that occurred during the study

TABLE 3
(continued)

SUMMARY OF EXPERIENCE FOR

REGULAR SERVICE RETIREMENTS
WITH AN ANNUITY OR A SINGLE SUM BENEFIT

FEMALES
FY 2002 - FY 2006

Age	Number of Separations		Number Exposed	Ratio of Actual to Expected	Separations per 100 Participants
	Actual	Expected			
Under 55	2,433	837.6	11,965	290%	20
55	2,870	1,331.3	9,861	216%	29
56	1,627	919.5	7,073	177%	23
57	1,297	737.4	5,672	176%	23
58	1,000	675.6	4,659	148%	21
59	1,332	810.2	3,858	164%	35
60	1,100	756.7	4,090	145%	27
61	690	568.0	2,913	121%	24
62	632	445.8	2,286	142%	28
63	409	327.6	1,598	125%	26
64	354	325.8	1,086	109%	33
65	226	223.6	710	101%	32
66	146	156.5	467	93%	31
67	97	110.6	330	88%	29
68	62	78.1	233	79%	27
69	54	62.8	157	86%	34
70 and Over	111	354.0	354	31%	31
TOTAL	14,440	8,720.7	57,312	166%	25

If the ratio of actual to expected is:
in excess of 100%, then the actual number of cases was greater than expected
less than 100%, then the actual number of cases was less than expected

The ratio of actual to exposed provides the actual rates of separation that occurred during the study

TABLE 3
(continued)

SUMMARY OF EXPERIENCE FOR
REGULAR SERVICE RETIREMENTS

ACTUAL RATES OF SERVICE RETIREMENT DURING THE STUDY
WITH AN ANNUITY OR A SINGLE-SUM BENEFIT

MALES AND FEMALES
FY 2002 - FY 2006

Actual Number of Retirements per 100 Eligible Active Members****						
	Service*					
Age**	5-18	19-30	31***	32-33***	34+	Total
54	-	9	15	49	50	22
55	-	17	25	51	40	31
56	-	14	23	48	31	26
57	-	15	23	48	32	25
58	-	14	23	49	35	24
59	-	32	30	52	39	36
60	16	29	-	49	37	29
61	15	24	-	42	35	25
62	15	28	-	48	38	28
63	13	29	-	46	35	27
64	20	37	-	46	39	33
65-69	23	33	-	47	30	31
70+	30	30	-	33	33	31
Total	17	18	21	49	35	27

* Active member service rounded to nearest year on June 30 prior to retirement
** Age rounded to nearest year on June 30 prior to retirement
*** Experience for 31-33 yrs combined for ages 60+
**** Male and Female

TABLE 4

SUMMARY OF EXPERIENCE FOR DEATHS IN ACTIVE SERVICE

MALES
FY 2002 - FY 2006

Age	Number of Separations		Number Exposed	Ratio of Actual to Expected	Separations per 100 Participants
	Actual	Expected			
Less than 23	-	0.0	27	0%	-
23 - 27	3	6.7	13,137	45%	0.02
28 - 32	2	10.6	21,874	19%	0.01
33 - 37	2	11.3	20,686	18%	0.01
38 - 42	11	11.9	16,631	92%	0.07
43 - 47	7	17.4	16,565	40%	0.04
48 - 52	50	41.6	25,219	120%	0.20
53 - 57	67	74.2	29,243	90%	0.23
58 - 62	18	35.7	8,006	50%	0.22
63 - 67	11	11.4	1,335	96%	0.82
Over 67	3	3.8	221	79%	1.36
TOTAL	174	224.7	152,944	77%	0.11

If the ratio of actual to expected is:
in excess of 100%, then the actual number of cases was greater than expected
less than 100%, then the actual number of cases was less than expected

The ratio of actual to exposed provides the actual rates of separation that occurred during the study

TABLE 4
(continued)

SUMMARY OF EXPERIENCE FOR
DEATHS IN ACTIVE SERVICE

FEMALES
FY 2002 - FY 2006

Age	Number of Separations		Number Exposed	Ratio of Actual to Expected	Separations per 100 Participants
	Actual	Expected			
Less than 23	-	0.0	170	0%	-
23 - 27	2	8.1	53,746	25%	0.00
28 - 32	8	13.4	66,053	60%	0.01
33 - 37	11	18.5	52,216	59%	0.02
38 - 42	12	22.4	45,703	54%	0.03
43 - 47	38	44.0	57,731	86%	0.07
48 - 52	74	105.3	87,233	70%	0.08
53 - 57	105	138.0	80,568	76%	0.13
58 - 62	44	63.5	24,982	69%	0.18
63 - 67	6	21.9	4,386	27%	0.14
Over 67	4	9.0	775	44%	0.52
TOTAL	304	444.1	473,563	68%	0.06

If the ratio of actual to expected is:
in excess of 100%, then the actual number of cases was greater than expected
less than 100%, then the actual number of cases was less than expected

The ratio of actual to exposed provides the actual rates of separation that occurred during the study

TABLE 5

SUMMARY OF MORTALITY EXPERIENCE AMONG PENSIONERS

SERVICE RETIREMENTS

MALES
FY 2002 - FY 2006

Age	Number of Deaths		Exposed	Ratio of Actual to Expected
	Actual	Expected		
48 - 52	-	0.04	17	0%
53 - 57	40	37.90	9,837	106%
58 - 62	156	179.33	28,539	87%
63 - 67	241	298.96	25,065	81%
68 - 72	327	454.47	21,282	72%
73 - 77	469	603.41	16,806	78%
78 - 82	527	618.33	10,510	85%
83 - 87	405	428.34	4,607	95%
88 - 92	318	274.72	2,070	116%
93 - 97	172	115.06	647	149%
Over 97	37	22.91	95	162%
Total	2,692	3,033.46	119,475	89%

If the ratio of actual to expected is:
in excess of 100%, then the actual number of cases was greater than expected
less than 100%, then the actual number of cases was less than expected

TABLE 5
(continued)

SUMMARY OF MORTALITY EXPERIENCE
AMONG PENSIONERS

SERVICE RETIREMENTS

FEMALES
FY 2002 - FY 2006

Age	Number of Deaths		Exposed	Ratio of Actual to Expected
	Actual	Expected		
48 - 52	-	0.05	33	0%
53 - 57	24	31.56	13,703	76%
58 - 62	138	127.94	38,388	108%
63 - 67	223	256.77	38,371	87%
68 - 72	331	418.84	30,291	79%
73 - 77	496	625.41	26,777	79%
78 - 82	690	819.58	21,471	84%
83 - 87	1,159	1,126.16	17,875	103%
88 - 92	1,359	1,173.85	11,538	116%
93 - 97	1,106	817.79	5,421	135%
Over 97	377	292.60	1,298	129%
Total	5,903	5,690.55	205,166	104%

If the ratio of actual to expected is:
in excess of 100%, then the actual number of cases was greater than expected
less than 100%, then the actual number of cases was less than expected

TABLE 6

SUMMARY OF MORTALITY EXPERIENCE AMONG PENSIONERS

SURVIVORS OF DECEASED PENSIONERS

MALES
FY 2002 - FY 2006

Age	Number of Deaths		Exposed	Ratio of Actual to Expected
	Actual	Expected		
LT 18	-	0.06	116	0%
18 - 22	-	0.09	134	0%
23 - 27	-	0.00	4	0%
28 - 32	-	0.01	14	0%
33 - 37	-	0.02	19	0%
38 - 42	-	0.03	28	0%
43 - 47	-	0.16	84	0%
48 - 52	1	0.53	176	189%
53 - 57	3	2.20	422	136%
58 - 62	3	7.39	740	41%
63 - 67	15	16.82	928	89%
68 - 72	30	39.21	1,243	77%
73 - 77	62	87.49	1,684	71%
78 - 82	146	183.07	2,161	80%
83 - 87	236	249.91	2,011	94%
88 - 92	266	244.41	1,451	109%
93 - 97	120	119.01	524	101%
Over 97	28	24.72	78	113%
Total	910	975.13	11,817	93%

If the ratio of actual to expected is:
in excess of 100%, then the actual number of cases was greater than expected
less than 100%, then the actual number of cases was less than expected

TABLE 6
(continued)

SUMMARY OF MORTALITY EXPERIENCE
AMONG PENSIONERS

SURVIVORS OF DECEASED PENSIONERS

FEMALES
FY 2002 - FY 2006

Age	Number of Deaths		Exposed	Ratio of Actual to Expected
	Actual	Expected		
LT 18	-	0.03	147	0%
18 - 22	-	0.03	163	0%
23 - 27	-	0.00	2	0%
28 - 32	-	0.00	1	0%
33 - 37	-	0.01	20	0%
38 - 42	-	0.02	32	0%
43 - 47	-	0.10	98	0%
48 - 52	2	0.51	311	389%
53 - 57	7	2.08	896	337%
58 - 62	6	6.13	1,614	98%
63 - 67	23	20.00	2,463	115%
68 - 72	47	53.53	3,352	88%
73 - 77	109	112.12	4,323	97%
78 - 82	144	176.75	4,171	81%
83 - 87	258	288.16	4,102	90%
88 - 92	320	304.35	2,751	105%
93 - 97	236	193.03	1,189	122%
Over 97	67	54.90	229	122%
Total	1,219	1,211.74	25,864	101%

If the ratio of actual to expected is:
in excess of 100%, then the actual number of cases was greater than expected
less than 100%, then the actual number of cases was less than expected

TABLE 7

SUMMARY OF MORTALITY EXPERIENCE AMONG PENSIONERS

DISABILITY RETIREMENTS

MALES
FY 2002 - FY 2006

Age	Number of Deaths		Exposed	Ratio of Actual to Expected
	Actual	Expected		
23 - 27	-	-	-	0%
28 - 32	-	0.19	4	0%
33 - 37	1	0.68	14	147%
38 - 42	2	1.41	29	142%
43 - 47	3	2.33	48	129%
48 - 52	3	6.60	136	45%
53 - 57	13	14.74	304	88%
58 - 62	11	12.37	255	89%
63 - 67	4	4.23	83	95%
68 - 72	9	6.19	84	146%
73 - 77	5	7.19	64	70%
78 - 82	1	4.74	28	21%
83 - 87	3	2.36	10	127%
88 - 92	-	-	-	0%
93 - 97	1	1.18	2	84%
Over 97	-	-	-	0%
Total	56	64.21	1,061	87%

If the ratio of actual to expected is:
in excess of 100%, then the actual number of cases was greater than expected
less than 100%, then the actual number of cases was less than expected

TABLE 7
(continued)

SUMMARY OF MORTALITY EXPERIENCE
AMONG PENSIONERS

DISABILITY RETIREMENTS

FEMALES
FY 2002 - FY 2006

Age	Number of Deaths		Exposed	Ratio of Actual to Expected
	Actual	Expected		
23 - 27	-	0.11	4	0%
28 - 32	3	1.50	55	200%
33 - 37	4	3.08	113	130%
38 - 42	5	3.29	121	152%
43 - 47	5	6.62	243	76%
48 - 52	21	17.48	642	120%
53 - 57	28	31.45	1,155	89%
58 - 62	29	20.12	739	144%
63 - 67	11	10.10	353	109%
68 - 72	7	10.37	254	68%
73 - 77	12	11.27	179	106%
78 - 82	18	15.75	165	114%
83 - 87	7	12.86	91	54%
88 - 92	3	2.70	14	111%
93 - 97	1	1.05	3	95%
Over 97	1	2.53	5	40%
Total	155	150.26	4,136	103%

If the ratio of actual to expected is:
in excess of 100%, then the actual number of cases was greater than expected
less than 100%, then the actual number of cases was less than expected

TABLE 8

SUMMARY OF UTILIZATION OF ERO AMONG ALL ACTIVE SERVICE RETIREES

MALES AND FEMALES
FY 2002 – FY 2006

ERO-ELIGIBLE SERVICE RETIREMENTS**

Number of Actual Service Retirements among Active Members						
	Age Rounded to Nearest Year on June 30 prior to Retirement					
Service *	54	55	56	57	58	59
19 – 30	917	1,369	840	716	525	998
31	496	437	212	144	105	94
32	2,279	1,511	648	357	280	188
33	219	1,262	648	353	192	154
34	5	56	386	256	138	90

UTILIZATION OF ERO AMONG ERO-ELIGIBLE SERVICE RETIREMENTS**

Rates of Utilization of ERO						
	Age Rounded to Nearest Year on June 30 prior to Retirement					
Service *	54	55	56	57	58	59
19 – 30	84%	94%	91%	86%	84%	33%
31	96%	96%	95%	94%	94%	51%
32	88%	91%	91%	89%	88%	61%
33	53%	60%	60%	61%	60%	39%
34	40%	13%	13%	11%	7%	7%

* Active member service rounded to nearest year on June 30 prior to retirement

** Based on beginning of year data and actuarial assumptions about service accruals and service purchases, projected to be eligible for ERO during the fiscal year of retirement

Total Number of ERO-Eligible Retirements: 15,875

- 75.5% of the ERO-Eligible (11,987) actually retired on ERO
- 19.0% attained age 60 or 35 years of service prior to retirement
- 5.5% retired while actually ERO-eligible, but did not elect ERO

TABLE 9

SUMMARY OF OPTIONAL AND SICK LEAVE SERVICE CREDIT AMONG ACTIVE SERVICE RETIREES WHO RETIRED WITH AN ANNUITY

MALES AND FEMALES
FY 2002 – FY 2006

SERVICE CREDIT AT RETIREMENT

Type of Service	Number of Retirees	Years of Service	Average Over All Retirees	As a Percent of Regular
Regular	21,985	652,738	29.690	100.00%
Optional Service	7,953	20,350	0.926	3.12%
Sick Leave	20,989	24,018	1.092	3.68%
Total	21,985	697,105	31.708	106.80%

AVERAGE AMOUNTS OF DIFFERENT TYPES OF SERVICE

	Total Years of Service at Retirement					
Type of Service	Under 20	20-24.999	25-29.999	30-33.999	34 or more	Total
Regular	13.309	20.085	24.882	29.626	33.447	29.690
Optional Service	0.616	1.440	1.720	1.359	0.613	0.926
Sick Leave	0.643	0.881	1.012	1.094	1.177	1.092
Total	14.569	22.406	27.614	32.078	35.237	31.708

AVERAGES BY FISCAL YEAR OF RETIREMENT

Fiscal Year	Optional Service	Sick Leave	Total
2002	1.028	0.840	1.868
2003	0.880	1.030	1.910
2004	0.929	1.106	2.035
2005	0.913	1.212	2.125
2006	0.866	1.269	2.135
Average	0.926	1.092	2.018

TABLE 10

SUMMARY OF ACTUARIAL INVESTMENT RETURN AND INFLATION

FY 2002 – FY 2006

Year Ended June 30	Actuarial Investment Return Based on Market Value of Assets		Inflation		Real Rate of Return Based on Market Value of Assets	
	Actual Investment Return	Actual Minus 8.5% Assumed Return	Actual Change in CPI-U	Actual Minus 3.5% Assumed Inflation	Actual Real Rate of Return	Actual Minus 5.0% Assumed Return
2002	(3.12)%	(11.62)%	1.1%	(2.4)%	(4.22)%	(9.22)%
2003	4.78%	(3.72)%	2.1%	(1.4)%	2.68%	(2.32)%
2004	16.46%	7.96%	3.3%	(0.2)%	13.16%	8.16%
2005	10.69%	2.19%	2.5%	(1.0)%	8.19%	3.19
2006	11.98%	3.48%	4.3%	0.8%	7.68%	2.68%
5-Year Average*	8.16%	(0.34)%	2.7%	(0.8)%	5.46%	0.46%
Current Assumption	8.50%		3.5%		5.00%	

Notes: (1) Actual rates of return were determined exclusive of investment expenses. The rates were calculated by the actuary based on the assumption that contributions and benefit payments were spread uniformly throughout the year.

(2) Investments are based on the market value of assets in accordance with Public Act 90-448.

(3) The real rate of return equals the actuarial investment return minus the change in the CPI-U

* Average over the five-year period July 1, 2001 to June 30, 2006.

TABLE 11

COMPARISON OF ACTUAL AND EXPECTED SALARIES OF ACTIVE MEMBERS
(without the .25% allowance for employment type and status changes)

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

MALES AND FEMALES
FY 2002 - FY 2006

Central Age Group	Salaries At End Of Year ($ in Thousands)			Increases In Salaries	
	Actual Current (A)	Expected Current (B)	Actual Prior (C)	Actual (A) / (C) - 1	Expected (B) / (C) - 1
20	6,364	5,507	5,026	26.61%	9.57%
25	2,442,800	2,419,499	2,224,193	9.83%	8.78%
30	3,713,722	3,690,441	3,435,471	8.10%	7.42%
35	3,566,381	3,538,228	3,318,757	7.46%	6.61%
40	3,337,411	3,307,615	3,114,341	7.16%	6.21%
45	4,197,434	4,168,765	3,940,262	6.53%	5.80%
50	7,012,968	7,001,709	6,627,059	5.82%	5.65%
55	6,574,894	6,494,125	6,146,829	6.96%	5.65%
60	1,788,311	1,757,993	1,663,978	7.47%	5.65%
65	277,936	274,440	259,764	7.00%	5.65%
70	45,304	45,011	42,606	6.33%	5.65%
Total	32,963,525	32,703,335	30,778,287	7.10%	6.25%

TABLE 11
(continued)

COMPARISON OF ACTUAL AND EXPECTED SALARIES OF ACTIVE MEMBERS
(without the .25% allowance for employment type and status changes)

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

MALES AND FEMALES
FY 2002 - FY 2006

Central Age Group	Salaries At End Of Year ($ in Thousands)			Increases In Salaries	
	Actual Current (A)	Expected Current (B)	Actual Prior (C)	Actual (A) / (C) - 1	Expected (B) / (C) - 1
20	18,632	1,042	948	1865%	9.90%
25	263,005	59,558	54,481	383%	9.32%
30	88,724	21,393	19,840	347%	7.82%
35	57,647	12,730	11,904	384%	6.94%
40	61,282	14,856	13,950	339%	6.50%
45	60,781	14,881	14,020	334%	6.14%
50	45,154	12,476	11,776	283%	5.94%
55	24,284	7,091	6,696	263%	5.90%
60	6,688	1,933	1,825	266%	5.90%
65	1,431	399	377	280%	5.90%
70	271	70	66	309%	5.90%
Total	627,900	146,429	135,883	362%	7.76%

TABLE 11
(continued)

COMPARISON OF ACTUAL AND EXPECTED SALARIES OF ACTIVE MEMBERS
(without the .25% allowance for employment type and status changes)

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

MALES AND FEMALES
FY 2002 - FY 2006

Central Age Group	Salaries At End Of Year ($ in Thousands)			Increases In Salaries	
	Actual Current (A)	Expected Current (B)	Actual Prior (C)	Actual (A) / (C) - 1	Expected (B) / (C) - 1
20	24,996	6,562	5,975	318.4%	9.8%
25	2,705,806	2,484,618	2,278,674	18.7%	9.0%
30	3,802,446	3,720,423	3,455,311	10.0%	7.7%
35	3,624,028	3,559,255	3,330,661	8.8%	6.9%
40	3,398,693	3,330,258	3,128,291	8.6%	6.5%
45	4,258,215	4,193,497	3,954,282	7.7%	6.0%
50	7,058,122	7,030,753	6,638,835	6.3%	5.9%
55	6,599,178	6,516,583	6,153,525	7.2%	5.9%
60	1,794,999	1,764,086	1,665,803	7.8%	5.9%
65	279,367	275,489	260,140	7.4%	5.9%
70	45,575	45,188	42,672	6.8%	5.9%
Total	33,591,424	32,926,709	30,914,170	8.7%	6.5%

TABLE 12

SUMMARY OF SEVERANCE PAY EXPERIENCE IN THE YEAR PRECEDING RETIREMENT (MEMBERS WHO RETIRED WITH AN ANNUITY)

MALES AND FEMALES FY 2002 - FY 2006

SEVERANCE PAYMENTS DISTRIBUTED BY SERVICE AT RETIREMENT NUMBER OF RETIREMENTS AND PERCENT RETIRING WITH SEVERANCE

Years of Service at Retirement	Percent of Severance Paid to all Retirees	Total Number			Percent Retiring with Severance
		Retiring	With Severance	Without Severance	
Less than 20	2.5%	1,157	480	677	41%
20 - 24	4.8%	1,841	963	878	52%
25 - 29	8.6%	2,512	1,445	1,067	58%
30 - 34	56.7%	11,492	8,491	3,001	74%
35 or more	27.3%	4,983	3,820	1,163	77%
All Retirees	100.0%	21,985	15,199	6,786	69%

SEVERANCE PAY COMPARED TO OTHER PENSIONABLE EARNINGS (RETIREES WITH SEVERANCE ONLY)

Years of Service at Retirement	Severance Pay (millions)	Other Earnings (millions)	Severance as a Percent of Other Earnings
Less Than 20	$ 5.0	$ 36.4	13.58%
20 - 24	9.7	74.2	13.02%
25 - 29	17.1	120.3	14.21%
30 - 34	113.1	750.9	15.06%
35 or more	54.5	359.1	15.17%
Total	$ 199.3	$ 1,340.9	14.86%

The data shown above were combined and smoothed to produce the proposed assumption shown on page 40, above.

TABLE 13

NEW MEMBER PROFILE

DISTRIBUTION OF NEW ENTRANTS BY AGE, SEX, AND EMPLOYMENT TYPE

Age Group	Full Time/Part Time			Hourly/Substitute		
	Males	Females	Total	Males	Females	Total
20 – 24	5.3 %	26.7 %	32.0 %	7.0 %	19.8 %	26.8 %
25 – 29	7.1 %	24.4 %	31.5 %	6.9 %	14.0 %	20.9 %
30 – 34	3.6 %	9.6 %	13.2 %	2.6 %	6.1 %	8.7 %
35 – 39	1.9 %	5.5 %	7.4 %	2.5 %	8.1 %	10.6 %
40 – 44	1.4 %	3.8 %	5.2 %	2.4 %	8.8 %	11.2 %
45 – 49	1.0 %	3.7 %	4.7 %	1.8 %	6.4 %	8.2 %
50 – 54	0.8 %	2.4 %	3.2 %	1.9 %	4.1 %	6.0 %
55 – 59	0.8 %	1.4 %	2.2 %	2.0 %	2.5 %	4.5 %
60 – 64	0.3 %	0.3 %	0.6 %	1.0 %	1.0 %	2.0 %
65 – 69	0.0 %	0.0 %	0.0 %	0.5 %	0.3 %	0.8 %
70	0.0 %	0.0 %	0.0 %	0.2 %	0.1 %	0.3 %
Total	22.2 %	77.8 %	100.0 %	28.8 %	71.2 %	100.0 %

SERVICE CREDIT EARNED IN EACH FUTURE YEAR

Age Group	Full Time/Part Time			Hourly/Substitute		
	Males	Females	Total	Males	Females	Total
20–24	0.991	0.987	0.988	0.291	0.331	0.330
25–29	0.991	0.990	0.990	0.303	0.277	0.287
30–34	0.987	0.987	0.987	0.344	0.288	0.304
35–39	0.993	0.978	0.982	0.286	0.308	0.303
40–44	0.989	0.979	0.982	0.304	0.314	0.314
45–49	0.996	0.978	0.982	0.318	0.348	0.345
50–54	0.993	0.978	0.982	0.339	0.355	0.353
55–59	0.986	0.967	0.974	0.362	0.358	0.359
60–64	0.967	0.961	0.963	0.345	0.347	0.346
65–69	-	-	-	0.339	0.325	0.330
70	-	-	-	0.303	0.295	0.297
Average	0.990	0.986	0.987	0.326	0.328	0.329

TABLE 13
(continued)

NEW MEMBER PROFILE

PROJECTED ANNUAL FULL TIME RATE OF PAY AT 6/30/2007*

Age Group	Full Time/Part Time			Hourly/Substitute		
	Males	Females	Total	Males	Females	Total
20–24	$37,722	$36,417	$36,633	$15,664	$15,924	$15,856
25–29	40,038	39,835	39,880	15,824	15,249	15,439
30–34	44,837	42,297	42,990	16,846	15,494	15,898
35–39	48,533	43,115	44,506	15,360	14,876	14,990
40–44	51,967	41,885	44,600	15,780	15,000	15,167
45–49	49,573	42,129	43,713	16,401	15,263	15,513
50–54	52,172	46,878	48,201	15,735	15,359	15,478
55–59	65,491	52,793	57,410	15,935	15,340	15,604
60–64	57,423	51,743	54,583	15,964	15,201	15,583
65–69	-	-	-	15,765	14,964	15,465
70	-	-	-	15,038	15,207	15,094
Average	$43,762	$39,903	$40,760	$15,870	$15,393	$15,530

* The rate of pay profile will increase 4.7% per annum. 3.5% of the increase is attributable to inflation and 1.2% to real wage growth