

**THE STATE TEACHERS
RETIREMENT SYSTEM OF OHIO**

**EXPERIENCE REVIEW FOR THE PERIOD
JULY 1, 2003 TO JUNE 30, 2007**

April 7, 2008

The Retirement Board
The State Teachers Retirement System of Ohio
275 East Broad Street
Columbus, OH 43215

Ladies and Gentlemen:

This report presents the results of the actuarial review of the demographic and economic experience of the active members, retirees, beneficiaries and survivors covered under the State Teachers Retirement System of Ohio for the four-year period July 1, 2003 to June 30, 2007.

This experience review was prepared in accordance with Section 3307.51(B) of the Retirement Code, which requires the actuary for STRS to make an actuarial investigation into the mortality, service and compensation experience of the members and beneficiaries covered under the System at least once in each five-year period.

The attached report describes the actuarial process employed and identifies the significant results of the study.

Summary of Recommendations

The results of the experience review show that for many of the assumptions the actual experience of the System has deviated from expected based on the current assumption set. In particular, we have recommended the following changes to the actuarial assumptions:

- Modify rates of mortality among active members, retirees, beneficiaries and survivors.
- Introduce separate retirement rates for members with 35 or more years of service.
- Modify rates of termination, disability and retirement from employment among active members to reflect experience.

A detailed analysis is included in the report. The financial impact of adopting the recommended assumptions is shown in the table below.

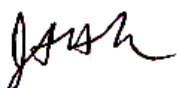
The State Teachers Retirement System of Ohio
Estimated Financial Impact on the Pension Plan of Adopting Recommended Assumptions
Based on June 30, 2007 Actuarial Valuation

Item	Unfunded Accrued Liability	Normal Rate	Funding Period
1. Current Assumptions	\$ 14,455 Mil	14.81%	26.1 Years
2. Impact of Change in Assumptions			
a) Demographic Assumptions			
i) Retirement Rates	147	(.03)	0.3
ii) Termination Rates	2	.07	0.3
iii) Mortality Rates	1,026	.11	3.9
b) Salary Increase and Payroll Growth Assumptions			
i) Salary Increase (No Change)	0	0	0
ii) Payroll Growth	0	0	4.0
c) Total	1,175	.15	8.5
3. Revised Assumptions	\$ 15,630 Mil	14.96%	34.6 Years

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

We would be pleased to discuss the report in detail upon request.

Respectfully submitted,



Janet Cranna, FSA
Principal, Consulting Actuary

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JULY 1, 2003 TO JUNE 30, 2007**

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**THE STATE TEACHERS
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**EXPERIENCE REVIEW FOR THE PERIOD
JULY 1, 2003 TO JUNE 30, 2007**

SECTION I - INTRODUCTION

Section 3307.51(B) of the Retirement Code provides that in every five-year period, the actuary of the System is to make an actuarial investigation of the mortality, service, and other experience of the members, retirees and beneficiaries covered under the System. This report presents the results of the experience review of the System for the four-year period July 1, 2003 through June 30, 2007.

The objectives of the investigation are to:

- Determine appropriate rates to anticipate the following events among active members:
 - termination from employment;
 - mortality during active service;
 - disability retirement;
 - service retirement; and
 - salary increases
- Determine appropriate rates to anticipate mortality among retirees, survivors, beneficiaries and disability retirees.
- 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.

Methodology

Data is supplied annually to the actuary by the System for purposes of the actuarial valuation report. This data includes demographic characteristics of the current and past membership, including any changes in the members' status or relationship with the System. The data also includes a salary history for active members. These demographic changes and salary history are the basis for the experience review.

Tabulations were compiled which show the distribution by age of the number of members who were **exposed** during the four-year period to the events of termination from employment, retirement, death and disability. A member is considered exposed to an event if the member meets the age and service requirements for that event. The assumed rates of occurrence for each event, which are currently used in the annual actuarial valuations, were then applied to the number of members exposed to determine the number of members **expected** to separate from service for each category.

The **actual** number of members who separated from service due to termination from employment, retirement, death or disability was then compared to the expected number. The results were then expressed as a ratio of actual experience over expected experience. In some instances a high ratio is favorable for the financial experience of the System and in others, a high ratio is unfavorable. Data is generally grouped by age in five-year increments to provide statistically significant results.

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

The results of the experience review are the basis for the actuary's recommendation of assumption changes. In recommending assumptions the actuary must also take into account special plan benefits and past economic factors.

In addition to comparing actual to expected experience and adjusting the results for special plan benefits and economic conditions, the actuary must consider future expectations of experience due to future plan changes or changes in the economy.

To summarize, the actuary's recommendation of assumptions is based on the following:

- comparison of actual to expected experience,
- adjustment for special plan benefits and past economic conditions, and
- adjustment for future plan changes and economic conditions.

Generally, actuarial assumptions are selected with a slight margin for adverse experience so that the financial strength of the System can be maintained.

Summary of Experience Review

The summaries included in Section VI show the comparisons and results of the experience investigation for:

- the actual and expected cases of separation from active service,
- the actual and expected mortality among service and disability retirees,
- the average annual increases in salaries among active members, and
- the annual rates of return on assets.

Recommendations

Based on the results of our investigation, we recommend revisions to the rates of:

- termination,
- death in active service,
- service retirement, and
- death after retirement.

Financial Impact

We have determined the financial impact on the System of adopting the recommended set of assumptions. The calculations are based on the results of the June 30, 2007 actuarial valuation and are shown in the table below.

The State Teachers Retirement System of Ohio
Estimated Financial Impact on the Pension Plan of Adopting Recommended Assumptions
Based on June 30, 2007 Actuarial Valuation

Item	Unfunded Accrued Liability	Normal Rate	Funding Period
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3. Revised Assumptions	\$ 15,630 Mil	14.96%	34.6 Years

SECTION II - DISCUSSION OF EXPERIENCE REVIEW
DEMOGRAPHIC ASSUMPTIONS FOR ACTIVE MEMBERS

Tables 1 through 7 included in Section VI summarize the actual and expected separations from active service due to termination from employment, death, disability, and service retirement during the four-year period ended June 30, 2007. Separate summaries for males and females are presented for all of these categories. In addition, Tables 8 and 9 included in Section VI summarize mortality experience for service retirees and disability retirees. The tables also show ratio of actual to expected experience and our recommended change to each of the assumptions.

The following table summarizes the ratio of actual to expected cases of separation from active service and mortality among retirees.

Summary of Ratio of Actual to Expected Experience
Demographic Assumptions

Event	Males	Females	Total
• Termination from Employment			
— Non-Vested	85%	94%	91%
— Vested	116	93	98
• Death in Active Service	84	84	84
• Disability Retirement	88	103	98
• Service Retirement			
— Age 60 with 5 Years of Service	75	82	80
— Age 55 with 25 Years of Service	89	85	86
— 30 – 34.99 Years of Service	56	69	64
— 35 Years of Service	192	180	185
• Death after Retirement:			
— Service Retirees	91	97	95
— Disability Retirees	106	93	98

For purposes of the comparison, the ratio of the actual to expected experience is expressed as a percentage for each type of event. A percentage in excess of 100% indicates that the actual experience was greater than the expected experience, whereas a percentage of less than 100% indicates that the actual experience was less than expected.

For example, in regard to termination from employment for all vested members, Table 1(b) on Page 20 shows an entry of 97.9%. This means that during the four-year experience review period, the actual number of vested members who terminated from employment was less than the expected number of vested terminations by a percentage equal to -2.1% (i.e., 97.9% minus 100%).

The comments presented below under each category discuss the results of the experience study with respect to the demographic factors, along with our recommendations for modifying the assumptions.

Rates of Termination from Employment

We examined the actual experience of terminations separately for non-vested members (i.e., those with less than five years of service) and vested members (i.e., those with five or more years of service).

Table 1(a) shows that during the four-year period, the actual rate of termination of non-vested members was less than expected. Among males, the ratio of actual experience to expected was 84.6% . Among females, the ratio was 94.4% . Overall, the ratio of actual experience to expected experience was 90.7% . We recommend adjusting the pattern of the rates to reflect the experience.

Table 1(b) shows that during the four-year period, the actual rates of termination of vested members was more than expected for males and less than expected for females. Among males, the ratio of actual to expected experience was 115.7% . Among females, the ratio was 93.0% . Overall, the ratio of actual to expected experience was 97.9% . In addition, the ratio of actual to expected experience varies by age. Therefore, we recommend adjusting the pattern of the rates to reflect the experience.

Rates of Mortality Among Active Members

Table 2 shows the actual incidence of deaths in active service was less than expected for both males and females.

For males, the ratio of actual to expected experience was 83.6% . Among females, the ratio was 84.2% . Overall, the ratio of actual to expected experience was 83.9% . The low rates of mortality reflect the increases in life expectancies for people in the United States that have occurred. We expect that future advances in medical technology will continue to improve life expectancies. Therefore, we recommend adjusting the mortality table to reflect the experience.

Disability Retirement

Table 3 shows the summary of experience for disability retirements. The four-year study shows that there were fewer disability retirements than expected among males and more disability retirements than expected for females.

For males, the ratio of actual to expected experience was 88.3%. For females, the ratio was 102.6%. Overall, the ratio of actual to expected experience was 98.4%. We recommend making no change to the disability rates for all members.

Service Retirement

Age 60 with 5 Years of Service

Table 4 shows the summary of experience for service retirement for members age 60 with 5 years of service. Overall, the actual experience was fewer retirements than expected. For males, the ratio of actual to expected experience was 75.2%. For females, the ratio was 82.1%. Overall, the ratio of actual to expected experience was 80.2%. Therefore, we recommend lowering these rates of service retirement to reflect experience.

Age 55 with 25 Years of Service

Table 5 shows the summary of experience for service retirement for members age 55 with 25 years of service. Overall, the actual number of retirements were lower than expected. Among males, the ratio of actual to expected experience was 88.9%. Among females, the ratio was 85.2%. Overall, the ratio of actual to expected experience was 86.0%. We recommend modifying the rates to reflect experience.

30 to 34.99 Years of Service

Table 6 shows a summary of experience for service retirement for members with 30 to 34.99 years of service. Overall, the actual experience was much fewer retirements than expected. For males, the ratio of actual to expected experience was 56.2%. For females, the ratio of actual to expected experience was 68.6%. Overall, the ratio of actual to expected experience was 64.1%. We believe that the decrease in retirements is due to the benefit formula change that provides a higher accrual for members with 35 years of service as well as increasing health care costs. Therefore, we recommend decreasing the rates for members retiring with 30 years of service and modifying the pattern of the rates to reflect experience.

35 Years of Service

Table 7 shows a summary of experience for service retirement for members with 35 years of service. Overall, the actual experience was much greater retirements than expected. For males, the ratio of actual to expected experience was 192.3%. For females, the ratio of actual to expected experience was 180.0%. Overall, the ratio of actual to expected experience was 185.2%. Since retirement experience has been very different for those with less than 35 years of service compared to those with more than 35 years of service due to the additional benefit accrued upon attainment of 35 years of service, we believe the two groups should be valued with separate retirement assumptions. Therefore, we recommend implementing separate rates for members retiring with 35 years of service.

SECTION III – DISCUSSION OF EXPERIENCE REVIEW
MORTALITY EXPERIENCE AMONG RETIREES

Tables 8 and 9 included in Section VI summarize the mortality experience among service and disability retirements during the four-year period ended June 30, 2007. The mortality experience is shown separately for males and females.

A summary of the results is shown in the table below:

Overall Ratios of Actual to Expected Mortality Experience
Service and Disability Retirees

Death After	Males	Females	Total
Service Retirement	91%	97%	95%
Disability Retirement	106%	93%	98%

The experience study revealed the following facts concerning service and disability retirees:

- The actual cases of death among male and female service retirees were less than or close to expected on the basis of the current mortality tables (Uninsured Pensioners Year 1994 Projection 2002 – Scale AA). For males and females age 85 and older, the actual mortality rates were greater than expected. Mortality has improved over the last decade and is expected to continue improving at a rate of 2% per year.
- The actual cases of death among disability retirees were greater than expected for males and less than expected for females.

Recommendations

On the basis of actual experience among service retirees during the four-year period and in anticipation of future expected increases in life expectancy, we recommend that the mortality table for males and females be updated to the RP 2000 Mortality Table projected to 2010 and set back 3 years for males and 2 years for females. For disability retirees, we recommend the female disability mortality rates be set back 5 years to reflect actual experience.

SECTION IV – DISCUSSION OF EXPERIENCE REVIEW **ECONOMIC FACTORS**

Tables 10, 11 and 12 in Section VI summarize the actual results for the key economic factors affecting the operation of the System during the four-year period ended June 30, 2007. Table 10 shows a summary of annual investment rate returns and average annual increase in the CPI-U (inflation). Table 11 shows a comparison of actual and expected salaries of active full-time members. Table 12 shows a history of payroll growth.

Rate of Inflation

The assumed rate of inflation is a component of the investment return assumption, the salary increase assumption, and the payroll growth assumption. The current actuarial assumption is that inflation will average 3.5% per annum on a long-term basis.

Actuarial Standard of Practice No. 27 (ASOP 27) entitled “Selection of Economic Assumptions for Measuring Pension Obligations”, addresses acceptable methodologies for setting the rate of inflation assumption and sets forward the following two matters for consideration:

1. Data. The actuary should review appropriate inflation data. These data may include consumer price indexes, the implicit price deflator, forecasts of inflation, and yields on government securities of various maturities.
2. The actuary may assume select and ultimate inflation rates in lieu of a single inflation rate. Select and ultimate inflation rates vary by period from the measurement date. (An example of a select and ultimate assumption is inflation of 3% for the first 5 years following the measurement date, and 4% thereafter).

Our analysis included a review of historical changes in the CPI-U, and of forecasts of inflation. Over the past 50 years, long-term inflation averaged approximately 3.8%. In addition, the 75-year intermediate cost projection of inflation contained in the 2007 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Disability Insurance Trust Funds, prepared by the Office of the Actuary for the Social Security Administration predicts the long-term inflation rate will average between 1.8% and 3.8% per annum.

As a result, we are recommending that the long-term inflation assumption for the actuarial valuation remain unchanged at 3.5% per annum. We are recommending a single long-term inflation assumption rather than select and ultimate inflation rates, due to the simplicity of the former, and due to the minimal impact that a short select period would have on the results of the actuarial valuation.

Rates of Investment Return

ASOP 27 addresses acceptable methodologies for setting the interest rate assumption. One of the acceptable methodologies described in ASOP 27 is the “Building-Block Method.”

Under the Building-Block Method, (i) a best-estimate range of expected future return is developed for each asset class, (ii) an average, weighted real-return range reflecting the plan’s expected asset class mix is developed, and (iii) the best-estimate real-return range is combined with the best-estimate range of expected inflation. Stochastic simulation models that take into account correlations among returns of different asset classes and inflation are frequently used to obtain the final result.

Sources of Investment Data

ASOP 27 encourages the actuary to review appropriate investment data, including

1. current yields to maturity of fixed income securities such as government securities and corporate bonds;
2. forecasts of inflation and of total returns for each asset class;
3. historical investment data, including real risk-free returns, the inflation component of the return, and the real return or risk premium for each asset class;
4. historical plan performance; and
5. historical data showing standard deviations, correlations, and other statistical measures related to historical returns of each asset class and to inflation.

Other Factors to be Considered

ASOP 27 also advises the actuary to take into account the following factors.

1. investment policy
2. reinvestment risk
3. investment volatility
4. investment manager performance
5. investment expenses
6. cash flow timing
7. benefit volatility
8. other issues unique to the plan

The current interest rate assumption is 8.0% which includes an inflation component of 3.5%. The rates of investment return during the four-year period ended June 30, 2007 are shown below. The actual returns on the actuarial value and market value of assets exceeded the expected return of 8.0% for fiscal years ended June 30, 2004, June 30, 2006 and June 30, 2007. For fiscal year ended June 30, 2005, the actual returns on the actuarial value were less than expected. The market value of assets were more than expected.

Fiscal Year Ended June 30	Return on Assets	
	Actuarial Value	Market Value
2007	18.4%	20.6%
2006	11.0	13.5
2005	5.7	11.9
2004	<u>9.4</u>	<u>17.2</u>
Average	11.1%	15.8%

The table above shows that the historic investment rates of return, measured on an actuarial asset value basis, were greater than the assumed return of 8.0% over the four years ended June 30, 2007. The arithmetic average rate of return on investments based on the actuarial value of assets during the four-year period was equal to 11.1%.

As a comparison, also shown are the rates of investment return based on the market value of assets. The actual rate of return based on the market value of assets was greater than the assumed return during the four-year period. The arithmetic average rate of return on the market value of assets during the four-year experience period was equal to 15.8%.

Using the Systems' target asset allocation and historical indexes (including inflation) since the inception of each index for each asset class produces a hypothetical average historical rate of return of 10.4%, as shown below.

Asset Class	Target Allocation	Historical Index	Historical Average
Domestic Equity	42%	S&P 500	10.4%
International Equity	25%	MSCI EAFE	11.4%
Fixed Income	20%	LB Agg.	8.7%
Real Estate	10%	NCREIF	9.9%
Alternative Investments	3%	S&P + 5%	15.4%
Cash	0%	0%	4.5%
Total (weighted average by allocation)	100%		10.4%

As a point of comparison, we have reviewed the actuarial interest rate assumption used by other public pension systems. The 2006 Public Fund Survey shows an average investment return assumption of 8.0% consisting of 3.5% inflation and 4.5% real return.

The historical returns on the funds should not be used as the sole 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 fund the present value of benefits payable many years into the future, in some instances, for as long as 80 years. Thus, while a review of past experience is useful and indicates that the actual rate of investment return over the past five years was greater than the assumed rate of 8.0%, we believe that the current investment climate supports maintaining the long-term earnings prospects of the System, and consequently, no change from the current 8.0% assumption is recommended.

Rates of Salary Increase

Salary is a factor in determining the majority of the benefits provided by the System, and an assumption for how an individual participant's salary will change over the long term is necessary for a proper valuation. Generally, the components of the salary increase assumption are inflation, productivity growth, and merit or seniority. The rates of salary increase used in the valuation are rates that vary by a participant's age.

The growth in average annual salary is presented in Table 11 in Section VI. The assumed salary increase assumption is an effective average of 5.5%. Table 11 shows that the actual average annual salary increase over the period for all age groups is 5.6%.

The salary increase assumption should be selected with an eye towards past experience and with considerable emphasis placed on judgment concerning future expectations. The salary increase assumption should be consistent with the interest rate assumption as both assumptions are based on a long-term inflation assumption. The recommended long-term inflation assumption is 3.5%.

We recommend maintaining the current 5.5% salary increase assumption.

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 2% to 3%. We believe the recommended use of a salary scale averaging 5.5%, along with a gross investment return assumption of 8.0%, represents a proper balance between a realistic assessment of future annual pay increases and the long-term investment returns on the assets of the fund.

Payroll Growth

The current payroll growth assumption is 4.5% consisting of inflation of 3.5% and real wage growth of 1.0%. Table 12 in Section VI shows the payroll growth adjusted for the negative population growth, over the four-year period ending June 30, 2007 was 3.44%. We recommend decreasing the payroll growth to 4.0% consisting of 3.5% inflation and .50% real wage growth.

SECTION V – ACTUARIAL COST METHOD AND ASSET VALUATION METHOD

Actuarial Cost Method

The cost method is Entry Age Normal. This is a projected benefit method with level percentage entry age normal cost and open-end unfunded accrued liability. Gains and losses are reflected in the accrued liability. The Entry Age Normal Cost Method is required by statute.

Asset Valuation Method

The asset valuation method is used to determine the actuarial value of assets and to measure the financial status of the System.

The valuation assets are based on a four-year moving market average. The difference between actual investment income and expected income (based on the valuation interest rate) is spread over a period of four years. Valuation assets are not less than 91% of the market value and not more than 109% of the market value.

Use of an actuarial value of assets which smoothes appreciation over a four-year period has the advantage of producing relatively stable changes in the value of assets over time. Thus, provided that the actuarial value remains within a reasonable corridor range of the market value of assets, the four year smoothing period is an acceptable method of valuing assets for actuarial purposes.

A four year history of the actuarial and market value of assets is shown below:

Summary of Asset Values
(\$ in millions)
2004 - 2007

Fiscal Year	Actuarial Value of Assets	Market Value of Assets	Ratio of Actuarial Value to Market Value
2007	\$ 70,738.2	\$ 77,298.9	91.5%
2006	61,533.6	65,875.7	93.4%
2005	57,048.5	59,623.6	95.7%
2004	55,340.7	54,603.4	101.4%

We recommend no change to the asset valuation method.

SECTION VI

**COMPARISON OF ACTUAL AND EXPECTED
EXPERIENCE DURING FOUR-YEAR PERIOD
FROM JULY 1, 2003 THROUGH JUNE 30, 2007**

TABLE 1(a)**SUMMARY OF EXPERIENCE FOR TERMINATION FROM
EMPLOYMENT BEFORE RETIREMENT****NON-VESTED TERMINATIONS****MALES
2004 – 2007**

Average Age	Number of Separations		Exposed	Ratio of Actual to Expected Experience
	Actual	Expected		
20	17	10.89	60	156.1%
25	1,798	2,209.88	13,812	81.4
30	1,221	1,565.98	10,364	78.0
35	876	986.72	6,812	88.8
40	674	771.97	5,596	87.3
45	561	682.72	5,078	82.2
50	610	647.62	4,833	94.2
55	539	596.28	4,450	90.4
60	316	354.31	2,644	89.2
65	152	183.17	1,367	83.0
Over 65	112	116.06	866	96.5
Total	6,876	8,125.60	55,882	84.6%

Recommendation: Decrease rates to reflect experience.

TABLE 1(a)
(continued)

**SUMMARY OF EXPERIENCE FOR TERMINATION FROM
EMPLOYMENT BEFORE RETIREMENT**

NON-VESTED TERMINATIONS

**FEMALES
2004 – 2007**

Average Age	Number of Separations		Exposed	Ratio of Actual to Expected Experience
	Actual	Expected		
20	67	43.92	319	152.6%
25	4,369	5,063.63	42,227	86.3
30	2,186	2,526.72	21,504	86.5
35	1,461	1,591.12	13,900	91.8
40	1,259	1,156.45	12,408	108.9
45	1,145	1,135.26	12,614	100.9
50	978	943.02	10,478	103.7
55	672	598.90	6,781	112.2
60	309	215.52	2,856	143.4
65	116	67.24	928	172.5
Over 65	61	34.34	474	177.6
Total	12,623	13,376.12	124,489	94.4%

Recommendation: Modify rates to reflect experience.

TABLE 1(a)
(continued)

**SUMMARY OF EXPERIENCE FOR TERMINATION FROM
EMPLOYMENT BEFORE RETIREMENT**

NON-VESTED TERMINATIONS

**MALES AND FEMALES
2004 – 2007**

Average Age	Number of Separations		Exposed	Ratio of Actual to Expected Experience
	Actual	Expected		
20	84	54.81	379	153.3%
25	6,167	7,273.51	56,039	84.8
30	3,407	4,092.70	31,868	83.2
35	2,337	2,577.84	20,712	90.7
40	1,933	1,928.42	18,004	100.2
45	1,706	1,817.98	17,692	93.8
50	1,588	1,590.64	15,311	99.8
55	1,211	1,195.18	11,231	101.3
60	625	569.83	5,500	109.7
65	268	250.41	2,295	107.0
Over 65	173	150.40	1,340	115.0
Total	19,499	21,501.72	180,371	90.7%

Recommendation: Modify rates to reflect experience.

TABLE 1(b)

**SUMMARY OF EXPERIENCE FOR TERMINATION FROM
EMPLOYMENT BEFORE RETIREMENT**

VESTED TERMINATIONS

**MALES
2004 – 2007**

Average Age	Number of Separations		Exposed	Ratio of Actual to Expected Experience
	Actual	Expected		
25	88	62.87	569	140.0%
30	468	573.00	13,528	81.7
35	506	545.26	18,809	92.8
40	384	436.97	18,209	87.9
45	420	387.29	20,495	108.4
50	448	398.72	26,247	112.4
55	402	207.91	13,864	193.4
60	224	27.65	1,844	810.1
65	60	-	-	-
Over 65	55	-	-	-
Total	3,055	2,639.67	113,565	115.7%

Recommendation: Increase and adjust pattern of rates to reflect experience.

TABLE 1(b)
(continued)

**SUMMARY OF EXPERIENCE FOR TERMINATION FROM
EMPLOYMENT BEFORE RETIREMENT**

VESTED TERMINATIONS

**FEMALES
2004 – 2007**

Average Age	Number of Separations		Exposed	Ratio of Actual to Expected Experience
	Actual	Expected		
25	485	400.27	2,825	121.2%
30	2,282	2,911.99	37,336	78.4
35	1,753	1,937.59	45,816	90.5
40	958	1,076.62	41,115	89.0
45	869	1,022.29	49,767	85.0
50	1,065	1,349.06	67,453	78.9
55	1,043	861.78	43,089	121.0
60	412	107.80	5,390	382.2
65	81	-	-	-
Over 65	41	-	-	-
Total	8,989	9,667.40	292,791	93.0%

Recommendation: Decrease and adjust pattern of rates to reflect experience.

TABLE 1(b)
(continued)

**SUMMARY OF EXPERIENCE FOR TERMINATION FROM
EMPLOYMENT BEFORE RETIREMENT**

VESTED TERMINATIONS

**MALES AND FEMALES
2004 – 2007**

Average Age	Number of Separations		Exposed	Ratio of Actual to Expected Experience
	Actual	Expected		
25	573	463.14	3,394	123.7%
30	2,750	3,484.99	50,864	78.9
35	2,259	2,482.85	64,625	91.0
40	1,342	1,513.59	59,324	88.7
45	1,289	1,409.58	70,262	91.4
50	1,513	1,747.78	93,700	86.6
55	1,445	1,069.69	56,953	135.1
60	636	135.45	7,234	469.5
65	141	-	-	-
Over 65	96	-	-	-
Total	12,044	12,307.07	406,356	97.9%

Recommendation: Adjust pattern of rates to reflect experience.

TABLE 2
SUMMARY OF EXPERIENCE FOR
DEATH IN ACTIVE SERVICE

MALES
2004 – 2007

Average Age	Number of Separations		Exposed	Ratio of Actual to Expected Experience
	Actual	Expected		
20	0	0.00	60	0%
25	3	6.26	14,381	47.9
30	6	13.60	23,892	44.1
35	5	19.84	25,621	25.2
40	14	20.69	23,805	67.7
45	20	25.01	25,577	80.0
50	44	46.52	34,490	94.6
55	74	73.31	36,885	100.9
60	57	51.46	16,262	110.8
65	27	32.66	5,769	82.7
Over 67	19	32.44	2,604	58.6
Total	269	321.79	209,346	83.6%

Recommendation: Decrease rates to reflect experience.

TABLE 2
(continued)

**SUMMARY OF EXPERIENCE FOR
DEATH IN ACTIVE SERVICE**

**FEMALES
2004 – 2007**

Average Age	Number of Separations		Exposed	Ratio of Actual to Expected Experience
	Actual	Expected		
20	0	0.08	319	0.0%
25	7	11.96	45,052	58.5
30	18	16.36	58,840	110.0
35	10	19.63	59,716	50.9
40	18	23.96	53,523	75.1
45	29	39.45	62,382	73.5
50	64	75.71	85,698	84.5
55	108	103.83	84,963	104.0
60	67	70.19	35,343	95.5
65	22	30.88	8,362	71.2
Over 65	2	17.59	2,086	11.4
Total	345	409.64	496,284	84.2%

Recommendation: Decrease rates to reflect experience.

TABLE 2
(continued)

**SUMMARY OF EXPERIENCE FOR
DEATH IN ACTIVE SERVICE**

**MALES AND FEMALES
2004 – 2007**

Average Age	Number of Separations		Exposed	Ratio of Actual to Expected Experience
	Actual	Expected		
20	0	0.08	379	0%
25	10	18.22	59,433	54.7
30	24	29.96	82,732	80.1
35	15	39.47	85,337	38.0
40	32	44.65	77,328	71.7
45	49	64.46	87,959	76.0
50	108	122.23	120,188	88.4
55	182	177.14	121,848	102.7
60	124	121.65	51,605	101.9
65	49	63.54	14,131	77.1
Over 65	21	50.03	4,690	42.0
Total	614	731.43	705,630	83.9%

Recommendation: Decrease rates to reflect experience.

TABLE 3
SUMMARY OF EXPERIENCE FOR
DISABILITY RETIREMENT

MALES
2004 – 2007

Average Age	Number of Separations		Exposed	Ratio of Actual to Expected Experience
	Actual	Expected		
20	0	0.00	60	0.0%
25	0	1.43	14,381	0.0
30	2	4.25	23,892	47.1
35	14	10.81	25,621	129.5
40	18	22.40	23,805	80.4
45	40	44.94	25,577	89.0
50	98	82.94	34,490	118.2
55	95	110.33	36,885	86.1
60	34	56.21	16,262	60.5
65	2	12.08	3,144	16.6
Over 65	2	0	0	0.0
Total	305	345.39	204,117	88.3%

Recommendation: No change.

TABLE 3
(continued)

**SUMMARY OF EXPERIENCE FOR
DISABILITY RETIREMENT**

**FEMALES
2004 – 2007**

Average Age	Number of Separations		Exposed	Ratio of Actual to Expected Experience
	Actual	Expected		
20	0	0.07	319	0.0%
25	0	9.00	45,052	0.0
30	12	13.42	58,840	89.4
35	30	39.13	59,716	76.7
40	60	66.53	53,523	90.2
45	105	103.91	62,382	101.0
50	232	205.84	85,698	112.7
55	300	253.63	84,963	118.3
60	101	121.89	35,343	82.9
65	13	19.71	5,131	66.0
Over 65	2	0.00	0	0.0
Total	855	833.13	490,967	102.6%

Recommendation: No change.

TABLE 3
(continued)

**SUMMARY OF EXPERIENCE FOR
DISABILITY RETIREMENT**

**MALES AND FEMALES
2004 – 2007**

Average Age	Number of Separations		Exposed	Ratio of Actual to Expected Experience
	Actual	Expected		
20	0	0.07	379	0.0%
25	0	10.43	59,433	0.0
30	14	17.67	82,732	79.2
35	44	49.94	85,337	88.1
40	78	88.93	77,328	87.7
45	145	148.85	87,959	97.4
50	330	288.78	120,188	114.3
55	395	363.96	121,848	108.5
60	135	178.10	51,605	75.8
65	15	31.79	8,275	47.2
Over 65	4	0.00	0	0.0
Total	1,160	1,178.52	695,084	98.4%

Recommendation: No change.

TABLE 4

**SUMMARY OF EXPERIENCE FOR
SERVICE RETIREMENT FOR A
MEMBER AGE 60 WITH 5 YEARS OF SERVICE**

**MALES
2004 – 2007**

Average Age	Number of Separations		Exposed	Ratio of Actual to Expected Experience
	Actual	Expected		
60	159	188.85	1,259	84.2%
61	59	76.88	961	76.7
62	54	72.99	811	74.0
63	45	70.70	707	63.6
64	47	74.20	530	63.3
65	68	73.44	408	92.6
66	43	42.42	303	101.4
67	23	33.46	239	68.7
Over 67	81	137.06	979	59.1
Total	579	770.00	6,197	75.2

Recommendation: Decrease rates and adjust pattern of rates to reflect experience.

TABLE 4
(continued)

**SUMMARY OF EXPERIENCE FOR
SERVICE RETIREMENT FOR A
MEMBER AGE 60 WITH 5 YEARS OF SERVICE**

**FEMALES
2004 – 2007**

Average Age	Number of Separations		Exposed	Ratio of Actual to Expected Experience
	Actual	Expected		
60	714	842.25	3,369	84.8%
61	198	284.76	2,373	69.5
62	169	219.60	1,830	77.0
63	106	163.92	1,366	64.7
64	151	144.00	960	104.9
65	122	147.89	643	82.5
66	55	75.78	421	72.6
67	57	39.78	306	143.3
Over 67	93	109.46	842	85.0
Total	1,665	2,027.44	12,110	82.1%

Recommendation: Decrease rates and adjust pattern of rates to reflect experience.

TABLE 4
(continued)

**SUMMARY OF EXPERIENCE FOR
SERVICE RETIREMENT FOR A
MEMBER AGE 60 WITH 5 YEARS OF SERVICE**

**MALES AND FEMALES
2004 – 2007**

Average Age	Number of Separations		Exposed	Ratio of Actual to Expected Experience
	Actual	Expected		
60	873	1,031.10	4,628	84.7%
61	257	361.64	3,334	71.1
62	223	292.59	2,641	76.2
63	151	234.62	2,073	64.4
64	198	218.20	1,490	90.7
65	190	221.33	1,051	85.8
66	98	118.20	724	82.9
67	80	73.24	545	109.2
Over 67	174	246.52	1,821	70.6
Total	2,244	2,797.44	18,307	80.2%

Recommendation: Decrease rates and adjust pattern of rates to reflect experience.

TABLE 5
SUMMARY OF EXPERIENCE FOR
SERVICE RETIREMENT FOR A
MEMBER AGE 55 WITH 25 YEARS OF SERVICE

MALES
2004 – 2007

Average Age	Number of Separations		Exposed	Ratio of Actual to Expected Experience
	Actual	Expected		
55	189	216.80	1,084	87.2%
56	42	57.84	964	72.6
57	51	46.74	779	109.1
58	37	38.10	635	97.1
59	27	30.66	511	88.1
60	28	33.03	367	84.8
61	27	27.99	311	96.5
62	25	18.48	231	135.3
63	8	14.08	176	56.8
64	23	22.54	161	102.0
65	25	34.75	139	71.9
66	17	23.50	94	72.3
67	9	10.35	69	87.0
Over 67	27	27.00	180	100.0
Total	535	601.86	5,701	88.9%

Recommendation: Decrease rates and adjust pattern of rates to reflect experience.

TABLE 5
(continued)

**SUMMARY OF EXPERIENCE FOR
SERVICE RETIREMENT FOR A
MEMBER AGE 55 WITH 25 YEARS OF SERVICE**

**FEMALES
2004 – 2007**

Average Age	Number of Separations		Exposed	Ratio of Actual to Expected Experience
	Actual	Expected		
55	377	529.80	2,649	71.2%
56	153	223.03	2,478	68.6
57	154	206.10	2,290	74.7
58	185	183.96	2,044	100.6
59	202	219.70	1,690	91.9
60	179	169.91	1,307	105.3
61	130	132.47	1,019	98.1
62	113	117.60	784	96.1
63	83	89.85	599	92.4
64	130	136.50	455	95.2
65	85	93.45	267	91.0
66	36	44.25	177	81.4
67	20	21.80	109	91.7
Over 67	42	48.20	241	87.1
Total	1,889	2,216.61	16,109	85.2%

Recommendation: Decrease rates and adjust pattern of rates to reflect experience.

TABLE 5
(continued)

**SUMMARY OF EXPERIENCE FOR
SERVICE RETIREMENT FOR A MEMBER
AGE 55 WITH 25 YEARS OF SERVICE**

**MALES AND FEMALES
2004 – 2007**

Average Age	Number of Separations		Exposed	Ratio of Actual to Expected Experience
	Actual	Expected		
55	566	746.60	3,733	75.8%
56	195	280.86	3,442	69.4
57	205	252.84	3,069	81.1
58	222	222.06	2,679	100.0
59	229	250.36	2,201	91.5
60	207	202.94	1,674	102.0
61	157	160.46	1,330	97.8
62	138	136.08	1,015	101.4
63	91	103.93	775	87.6
64	153	159.04	616	96.2
65	110	128.20	406	85.8
66	53	67.75	271	78.2
67	29	32.15	178	90.2
Over 67	69	75.20	421	91.8
Total	2,424	2,818.47	21,810	86.0%

Recommendation: Decrease rates and adjust pattern of rates to reflect experience.

TABLE 6

**SUMMARY OF EXPERIENCE FOR
SERVICE RETIREMENT FOR A
MEMBER WITH 30 to 34.99 YEARS OF SERVICE**

**MALES
2004 – 2007**

Average Age	Number of Separations		Exposed	Ratio of Actual to Expected Experience
	Actual	Expected		
Under 53	825	853.50	3,414	96.7%
53	441	397.05	2,647	111.1
54	385	441.00	2,940	87.3
55	291	461.25	3,075	63.1
56	196	730.25	2,921	26.8
57	142	565.00	2,260	25.1
58	121	376.75	1,507	32.1
59	118	206.00	1,030	57.3
60	78	160.20	801	48.7
61	57	143.00	715	39.9
62	43	154.75	619	27.8
63	32	95.40	477	33.5
64	28	72.20	361	38.8
65	13	113.60	284	11.4
66	10	53.25	213	18.8
67	8	39.25	157	20.4
Over 67	25	139.00	556	18.0
Total	2,813	5,001.45	23,977	56.2%

Recommendation: Decrease rates and adjust pattern of rates to reflect experience.

TABLE 6
(continued)

**SUMMARY OF EXPERIENCE FOR
SERVICE RETIREMENT FOR A
MEMBER WITH 30 to 34.99 YEARS OF SERVICE**

**FEMALES
2004 – 2007**

Average Age	Number of Separations		Exposed	Ratio of Actual to Expected Experience
	Actual	Expected		
Under 53	1,550	1,708.30	7,765	90.7%
53	726	782.70	5,218	92.8
54	600	822.60	5,484	72.9
55	490	782.55	5,217	62.6
56	413	969.76	4,408	42.6
57	394	724.90	3,295	54.4
58	293	596.00	2,384	49.2
59	329	537.90	1,793	61.2
60	309	407.40	1,358	75.8
61	221	331.50	1,105	66.7
62	217	327.25	935	66.3
63	194	249.20	712	77.8
64	126	176.75	505	71.3
65	75	127.05	363	59.0
66	58	94.85	271	61.1
67	40	64.40	184	62.1
Over 67	59	183.40	524	32.2
Total	6,094	8,886.51	41,521	68.6%

Recommendation: Decrease rates and adjust pattern of rates to reflect experience.

TABLE 6
(continued)

**SUMMARY OF EXPERIENCE FOR
SERVICE RETIREMENT FOR A
MEMBER WITH 30 to 34.99 YEARS OF SERVICE**

MALES AND FEMALES
2004 – 2007

Average Age	Number of Separations		Exposed	Ratio of Actual to Expected Experience
	Actual	Expected		
Under 53	2,375	2,561.80	11,179	92.7%
53	1,167	1,179.75	7,865	98.9
54	985	1,263.60	8,424	78.0
55	781	1,243.80	8,292	62.8
56	609	1,700.01	7,329	35.8
57	536	1,289.90	5,555	41.6
58	414	972.75	3,891	42.6
59	447	743.90	2,823	60.1
60	387	567.60	2,159	68.2
61	278	474.50	1,820	58.6
62	260	482.00	1,554	53.9
63	226	344.60	1,189	65.6
64	154	248.95	866	61.9
65	88	240.65	647	36.6
66	68	148.10	484	45.9
67	48	103.65	341	46.3
Over 67	84	322.40	1,080	26.1
Total	8,907	13,887.96	65,498	64.1%

Recommendation: Decrease rates and adjust pattern of rates to reflect experience.

TABLE 7
SUMMARY OF EXPERIENCE FOR
SERVICE RETIREMENT FOR A
MEMBER WITH 35 YEARS OF SERVICE

MALES
2004 – 2007

Average Age	Number of Separations		Exposed	Ratio of Actual to Expected Experience
	Actual	Expected		
53	4	1.80	10	222.2%
54	14	3.30	22	424.2
55	68	17.10	114	397.7
56	689	290.25	1,161	237.4
57	750	331.75	1,327	226.1
58	492	231.75	927	212.3
59	279	122.20	611	228.3
60	202	92.80	464	217.7
61	157	79.00	395	198.7
62	113	91.00	364	124.2
63	111	65.60	328	169.2
64	72	49.60	248	145.2
65	65	88.00	220	73.9
66	59	42.50	170	138.8
67	28	31.50	126	88.9
Over 67	108	131.25	525	82.3
Total	3,211	1,669.40	7,012	192.3%

Recommendation: Introduce separate rates for members with 35 years of service and adjust pattern of rates to reflect experience.

TABLE 7
(continued)

**SUMMARY OF EXPERIENCE FOR
SERVICE RETIREMENT FOR A
MEMBER WITH 35 YEARS OF SERVICE**

**FEMALES
2004 – 2007**

Average Age	Number of Separations		Exposed	Ratio of Actual to Expected Experience
	Actual	Expected		
53	15	4.00	22	375.0%
54	39	9.60	64	406.3
55	184	58.65	391	313.7
56	1,043	426.58	1,939	244.5
57	825	375.32	1,706	219.8
58	463	294.00	1,176	157.5
59	392	261.00	870	150.2
60	257	173.10	577	148.5
61	182	122.70	409	148.3
62	162	123.90	354	130.8
63	113	91.70	262	123.2
64	91	73.50	210	123.8
65	83	60.55	173	137.1
66	57	45.15	129	126.2
67	33	30.10	86	109.6
Over 67	140	116.55	333	120.1
Total	4,079	2,266.40	8,701	180.0%

Recommendation: Introduce separate rates for members with 35 years of service and adjust pattern of rates to reflect experience.

TABLE 7
(continued)

**SUMMARY OF EXPERIENCE FOR
SERVICE RETIREMENT FOR A
MEMBER WITH 35 YEARS OF SERVICE**

**MALES AND FEMALES
2004 – 2007**

Average Age	Number of Separations		Exposed	Ratio of Actual to Expected Experience
	Actual	Expected		
53	19	5.80	32	327.6%
54	53	12.90	86	410.9
55	252	75.75	505	332.7
56	1,732	716.83	3,100	241.6
57	1,575	707.07	3,033	222.8
58	955	525.75	2,103	181.6
59	671	383.20	1,481	175.1
60	459	265.90	1,041	172.6
61	339	201.70	804	168.1
62	275	214.90	718	128.0
63	224	157.30	590	142.4
64	163	123.10	458	132.4
65	148	148.55	393	99.6
66	116	87.65	299	132.3
67	61	61.10	212	99.0
Over 67	248	247.80	858	100.1
Total	7,290	3,935.80	15,713	185.2%

Recommendation: Introduce separate rates for members with 35 years of service and adjust pattern of rates to reflect experience.

TABLE 8
SUMMARY OF MORTALITY EXPERIENCE
AMONG RETIREES
SERVICE RETIREMENT
MALES
2004 – 2007

Average Age	Number of Deaths		Exposed	Ratio of Actual to Expected Experience
	Actual	Expected		
55	41	57.61	16,289	71.2%
60	170	218.40	36,071	77.8
65	256	393.75	35,643	65.0
70	410	600.29	31,481	68.3
75	647	795.63	26,798	81.3
80	900	919.42	18,933	97.9
85	773	730.91	9,035	105.8
90	529	450.17	3,558	117.5
Over 92	312	260.29	1,221	119.9
Total	4,038	4,426.47	179,029	91.2%

Recommendation: Adopt the RP 2000 Mortality Table projected to 2010 with a three-year setback for males in anticipation of future mortality improvements.

TABLE 8
(continued)

**SUMMARY OF MORTALITY EXPERIENCE
AMONG RETIREES**

SERVICE RETIREMENTS

FEMALES

2004 – 2007

Average Age	Number of Deaths		Exposed	Ratio of Actual to Expected Experience
	Actual	Expected		
55	44	51.97	23,518	84.7%
60	154	184.68	44,527	83.4
65	287	419.60	52,956	68.4
70	397	596.99	45,632	66.5
75	677	816.05	39,200	83.0
80	893	1,073.91	29,973	83.2
85	1,399	1,391.63	22,391	100.5
90	1,777	1,577.91	14,652	112.6
Over 92	1,938	1,657.28	8,534	116.9
Total	7,566	7,770.02	281,383	97.4%

Recommendation: Adopt the RP 2000 Mortality Table projected to 2010 with a two-year setback for females in anticipation of future mortality improvements.

TABLE 8
(continued)

**SUMMARY OF MORTALITY EXPERIENCE
AMONG RETIREES**

SERVICE RETIREMENT

**MALES AND FEMALES
2004 – 2007**

Average Age	Number of Deaths		Exposed	Ratio of Actual to Expected Experience
	Actual	Expected		
55	85	109.58	39,807	77.6%
60	324	403.08	80,598	80.4
65	543	813.35	88,599	66.8
70	807	1,197.28	77,113	67.4
75	1,324	1,611.68	65,998	82.2
80	1,793	1,993.33	48,906	89.9
85	2,172	2,122.54	31,426	102.3
90	2,306	2,028.08	18,210	113.7
Over 92	2,250	1,917.57	9,755	117.3
Total	11,604	12,196.49	460,412	95.1%

Recommendation: Adopt the RP 2000 Mortality Table with a three-year setback for males and a two-year setback for females in anticipation of future mortality improvements.

TABLE 9
SUMMARY OF MORTALITY EXPERIENCE
AMONG RETIREES
DISABILITY RETIREMENT
MALES
2004 – 2007

Average Age	Number of Deaths		Exposed	Ratio of Actual to Expected Experience
	Actual	Expected		
35	0	0.68	22	0.0%
40	2	3.23	105	61.9
45	5	7.36	239	67.9
50	18	23.25	755	77.4
55	49	68.16	2,213	71.9
60	58	81.19	2,636	71.4
65	57	57.50	1,867	99.1
70	48	45.52	1,478	105.4
75	80	39.75	1,164	201.3
80	53	34.82	682	152.2
85	34	18.51	246	183.7
90	5	5.16	46	96.9
Over 92	1	0.44	3	227.3
Total	410	385.57	11,456	106.3%

Recommendation: No change.

TABLE 9
(continued)

**SUMMARY OF MORTALITY EXPERIENCE
AMONG RETIREES**

DISABILITY RETIREMENT

**FEMALES
2004 – 2007**

Average Age	Number of Deaths		Exposed	Ratio of Actual to Expected Experience
	Actual	Expected		
35	1	3.81	129	26.2%
40	5	10.74	364	46.6
45	14	23.72	804	59.0
50	44	58.06	1,968	75.8
55	80	123.66	4,192	64.7
60	75	125.43	4,252	59.8
65	67	90.45	3,066	74.1
70	51	59.12	2,004	86.3
75	86	49.67	1,654	173.1
80	88	53.55	1,270	164.3
85	70	46.99	737	149.0
90	34	21.49	229	158.2
Over 92	7	4.54	30	154.2
Total	622	671.23	20,699	92.7%

Recommendation: Modify the set back on the mortality table to 5 years to reflect experience.

TABLE 9
(continued)

**SUMMARY OF MORTALITY EXPERIENCE
AMONG RETIREES**

DISABILITY RETIREMENT

**MALES AND FEMALES
2004 – 2007**

Average Age	Number of Deaths		Exposed	Ratio of Actual to Expected Experience
	Actual	Expected		
35	1	4.49	151	22.3%
40	7	13.97	469	50.1
45	19	31.08	1,043	61.1
50	62	81.31	2,723	76.3
55	129	191.82	6,405	67.3
60	133	206.62	6,888	64.4
65	124	147.95	4,933	83.8
70	99	104.64	3,482	94.6
75	166	89.42	2,818	185.6
80	141	88.37	1,952	159.6
85	104	65.50	983	158.8
90	39	26.65	275	146.3
Over 92	8	4.98	33	160.6
Total	1,032	1,056.80	32,155	97.7%

Recommendation: No change to the male mortality table and set back the female mortality table 5 years to reflect experience.

TABLE 10**SUMMARY OF INFLATION AND INVESTMENT RETURNS**

Fiscal Year Ended June 30	Average Annual Increase in CPI-U	Return on Assets	
		Market Value	Actuarial Value
2007	2.36%	20.6%	18.4%
2006	4.15	13.5	11.0
2005	3.17	11.9	5.7
2004	2.99	17.2	9.4
Average	3.16%	15.8%	11.1%

Recommendation: No change.

TABLE 11

SALARY INCREASE RATES OF ACTIVE MEMBERS

MALES AND FEMALES

2004 – 2007

Average Age	Actual Increase					Expected Increase
	2003/2004	2004/2005	2005/2006	2006/2007	Total	
25	13.9%	13.0%	14.9%	15.3%	14.2%	9.35%
30	8.3	7.4	7.7	8.2	7.9	8.25
35	8.1	6.7	7.1	7.1	7.2	7.15
40	6.6	5.9	6.0	5.6	6.0	6.05
45	5.6	5.1	5.0	5.0	5.3	5.28
50	4.8	4.5	4.3	4.4	4.5	4.73
55	4.3	3.8	3.6	3.4	3.8	4.40
60	4.0	3.6	3.3	3.4	3.6	4.13
65	3.5	3.0	3.3	2.8	3.1	3.85
Over 65	2.4	2.9	2.6	2.3	2.5	3.85
Total	6.1%	5.4%	5.4%	5.4%	5.6%	5.5%

Recommendation: No change.

TABLE 12
PAYROLL GROWTH

Year	Total Payroll	Total Population	Payroll Growth	Adjusted* Payroll Growth
2003	\$ 9.206 Bil	179,944	-	-
2004	9.566	179,063	3.91%	4.42%
2005	9.775	176,692	2.19	3.56
2006	9.974	175,065	2.03	2.98
2007	10.200	174,110	<u>2.26</u>	<u>2.82</u>
4 Yr. Avg.			2.59%	3.44%

* Adjusted for negative population growth

Recommendation: Decrease to reflect experience.

APPENDIX A**SUMMARY OF CURRENT AND PROPOSED
ASSUMPTIONS****MALE**

Age	Non-Vested Termination		Vested Termination	
	Current	Proposed	Current	Proposed
20	19.00%	25.00%	15.00%	15.00%
25	16.00	15.00	15.00	15.00
30	15.00	13.00	4.00	4.00
35	14.50	13.00	2.90	2.90
40	13.75	12.50	2.40	2.40
45	13.40	12.50	1.90	2.00
50	13.40	12.50	1.50	2.00
55	13.40	12.00	1.50	2.00
60	13.40	12.00	1.50	2.00
65	13.40	12.00	0.00	0.00
over 65	13.40	12.00	0.00	0.00

APPENDIX A

**SUMMARY OF CURRENT AND PROPOSED
ASSUMPTIONS**

MALE

Age	30 to 34 Retirement		35 and out Retirement		55/25 Retirement		60/5 Retirement	
	Current	Proposed	Current	Proposed	Current	Proposed	Current	Proposed
40	25.0%	25.0%						
45	25.0	25.0						
50	25.0	25.0	25.0%	35.0%				
55	15.0	10.0	15.0	60.0	20.0%	18.0%		
60	20.0	13.0	20.0	45.0	9.0	9.0	15.0%	13.0%
65	40.0	5.0	40.0	30.0	25.0	22.0	18.0	17.0
70	25.0	5.0	25.0	20.0	15.0	15.0	14.0	12.0
75	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

APPENDIX A**SUMMARY OF CURRENT AND PROPOSED
ASSUMPTIONS****MALE**

Age	Disability		Salary Scale	
	Current	Proposed*	Current	Proposed*
20	0.01%	0.01%	10.45%	10.45%
25	0.01	0.01	9.35	9.35
30	0.02	0.02	8.25	8.25
35	0.04	0.04	7.15	7.15
40	0.10	0.10	6.05	6.05
45	0.18	0.18	5.28	5.28
50	0.24	0.24	4.73	4.73
55	0.30	0.30	4.40	4.40
60	0.35	0.35	4.13	4.13
65	0.40	0.40	3.85	3.85
over 65	0.40	0.40	3.85	3.85

Age	Active Death	
	Current	Proposed
20	0.02%	0.020%
25	0.04	0.026
30	0.06	0.032
35	0.08	0.037
40	0.09	0.060
45	0.10	0.090
50	0.13	0.116
55	0.20	0.158
60	0.33	0.238
65	0.60	0.449
70	1.10	0.870

* No change

APPENDIX A**SUMMARY OF CURRENT AND PROPOSED
ASSUMPTIONS****FEMALE**

Age	Non-Vested Termination		Vested Termination	
	Current	Proposed	Current	Proposed
20	15.00%	18.00%	20.00%	20.00%
25	11.75	11.00	19.00	18.00
30	11.75	11.00	8.00	7.00
35	11.75	11.00	4.00	4.00
40	9.00	10.00	2.50	2.50
45	9.00	9.00	2.00	1.75
50	9.00	9.00	2.00	1.75
55	9.00	9.00	2.00	1.75
60	7.25	9.00	2.00	1.75
65	7.25	9.00	0.00	0.00
over 65	7.25	9.00	0.00	0.00

APPENDIX A

**SUMMARY OF CURRENT AND PROPOSED
ASSUMPTIONS**

FEMALE

Age	30 to 34 Retirement		35 and Out Retirement		55/25 Retirement		60/5 Retirement	
	Current	Proposed	Current	Proposed	Current	Proposed	Current	Proposed
40	22.0%	20.0%						
45	22.0	20.0						
50	22.0	20.0	22.0	80.0				
55	15.0	10.0	15.0	50.0	20.0%	18.0%		
60	30.0	25.0	30.0	45.0	13.0	13.0	25.0%	22.0%
65	35.0	25.0	35.0	45.0	35.0	33.0	23.0	20.0
70	35.0	15.0	35.0	40.0	20.0	18.0	13.0	12.0
75	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

APPENDIX A**SUMMARY OF CURRENT AND PROPOSED
ASSUMPTIONS****FEMALE**

Age	Disability*		Salary Scale*	
	Current	Proposed	Current	Proposed
20	0.02%	0.02%	10.45%	10.45%
25	0.02	0.02	9.35	9.35
30	0.020	0.02	8.25	8.25
35	0.07	0.07	7.15	7.15
40	0.12	0.12	6.05	6.05
45	0.17	0.17	5.28	5.28
50	0.24	0.24	4.73	4.73
55	0.30	0.30	4.40	4.40
60	0.35	0.35	4.13	4.13
65	0.40	0.40	3.85	3.85
over 65	0.40	0.40	3.85	3.85

Age	Active Death	
	Current	Proposed
20	0.02%	0.012%
25	0.03	0.016
30	0.03	0.016
35	0.03	0.020
40	0.05	0.032
45	0.06	0.049
50	0.09	0.073
55	0.12	0.111
60	0.21	0.175
65	0.40	0.331
70	0.79	0.633

* No change