



**Wisconsin Retirement System  
Three-Year Experience Study  
January 1, 2003 - December 31, 2005**

**GRS**

Gabriel Roeder Smith & Company

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November 27, 2006

The Employee Trust Funds Board  
801 West Badger Road  
Madison, Wisconsin 53707

Ladies and Gentlemen:

The results of the *3-year investigation of experience* of the Wisconsin Retirement System are presented in this report. The investigation was made for the purpose of updating the actuarial assumptions used in valuing the actuarial liabilities of the Wisconsin Retirement System in compliance with Section 40.03(5)(b) of the Wisconsin Statutes.

The investigation was based upon the statistical data furnished for annual active member and retired life actuarial valuations, supplemental information furnished by your Secretary and his staff, concerning Participants who died, withdrew, became disabled or retired during the last 3 years and on published historical economic data.

The investigation covered the 3-year period from **January 1, 2003 to December 31, 2005**, and was carried out using generally accepted actuarial principles and techniques.

**We believe that the new actuarial assumptions that are the result of this investigation represent a reasonable estimate of past and possible future experience of the Wisconsin Retirement System.**

Respectfully submitted,

Mark Buis, FSA

Norman L. Jones, FSA

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MB/NLJ/BBM:dm

## **SUMMARY OF FINDINGS**

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## INTRODUCTION

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Each year, as of December 31, the liabilities of the Wisconsin Retirement System are valued. In order to perform the valuation, assumptions must be made regarding the future experience of the system with regard to the following risk areas:

- Rates of **withdrawal** of active Participants.
- Rates of **disability** among active Participants.
- Patterns of **salary increases** to active Participants.
- Rates of **retirement** among active Participants.
- Rates of **mortality** among active Participants, retirees, and beneficiaries.
- Long-term rates of **investment return** to be generated by the assets of the Fund.

Assumptions should be carefully chosen and continually monitored. A poor initial choice of assumptions or continued use of outdated assumptions can lead to:

- Understated costs resulting in either an inability to pay benefits when due, or sharp increases in required contributions at some point in the future;
- Overstated costs resulting in either benefit levels that are kept below the level that could be supported by the computed rate or an unnecessarily large burden on the current generation of Participants, employers and taxpayers.

A single set of assumptions will not be suitable indefinitely. Conditions change, and our understanding of conditions (whether or not they are changing) also changes.

In recognition of this, Wisconsin statutes require that assumptions used to value the liabilities of the Wisconsin Retirement System be studied in-depth every three years. The package of assumptions is then adjusted to reflect basic experience trends -- but not random year-to-year fluctuations. Actuarial assumptions were last revised following the December 31, 2002 regular actuarial valuation.

## SUMMARY OF DECREMENT EXPERIENCE

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**Background:** With the exception of mortality, the decrements that we study tend to relate to voluntary human behavior. Human behavior in any short period can be influenced by economic and societal factors that change from time to time. Observed data will very often contain anomalies that cannot be assumed to continue into the future. This happens particularly in smaller groups.

**Method:** The development of new decrement assumptions begins with development of so-called “crude rates of decrement.” The crude rates are the ratios of observed decrement counts to the numbers of people eligible for the decrements. For example, if 100 people retire at age 65 and the study included 400 65-year-olds who were eligible for retirement, the crude rate of retirement for age 65 would be 25%. Then, a credibility factor is assigned to the crude rates. The choice of credibility factor may depend on the general reasonableness of the crude rates, consistency of the crude rates with those observed in prior studies, the size of the group, and other external factors. After testing and any final adjustments, the smoothed rates become the new assumed rates. In this study, credibility factors ranging from below 10% to over 90% have been used, with most factors falling between 50% and 90%. Lower credibility factors were used when the crude rates exhibited unexpected behavior or were unreasonable or inconsistent with prior studies, or when a small group was involved. Higher factors were used in the case of larger groups where the crude rates exhibited generally reasonable behavior. We have taken into consideration comments made by Milliman, Inc. in connection with their May 22, 2006 actuarial review. Additional information regarding their recommendations can be found on page 11. General comments on results are provided below.

**Withdrawal Rates:** In general, there were more withdrawals (terminations) than expected. However, this varied by, age, service and group. Our current assumption is that rates will vary based on service for the first five years (known as the select period) and vary based on age thereafter (known as the ultimate period). The observed withdrawal pattern demonstrates a strong correlation with service beyond the current five year select period and we are recommending extending the select period from five to ten years. Additionally, we are recommending a reduction in the forfeiture assumption from 100% at age 35 to 50% at age 35 (graded down to zero at retirement eligibility). This has the effect of increasing the expected number of vested terminations and decreasing the expected number of non-vested terminations and results in a closer matching of expected liabilities. Detailed information is presented beginning on page A-1.

## SUMMARY OF DECREMENT EXPERIENCE

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**Disability Rates:** Overall, there were fewer disabilities than expected and we recommended lowering the incidence of disability for most groups. This change had a small downward effect on liabilities. Detailed information begins on page B-1.

**Pay Increase Rate (Merit and Longevity Portion):** The rates for General members were very close to the assumed rates and no changes were recommended at this time. Experience for other groups varied and were adjusted closer to actual experience. Detailed information begins on page C-1.

**Normal Retirement Experience:** There were fewer normal retirements than expected in most groups. This is also consistent with trends that many systems are experiencing as changes in the economy and soaring medical costs make it more difficult to retire. New assumptions give about 75% credibility to the observed rates. This will have a downward effect on valuation liabilities. Detailed information begins on page D-1.

**Early Retirement Experience:** Early retirement experience varied based on group and gender. Early retirement rates were adjusted based upon 50% to 75% credibility depending on group size. Detailed information is included with the normal retirement experience beginning on page D-1.

## SUMMARY OF DECREMENT EXPERIENCE

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**Mortality Among Retirees:** Mortality rates among retired public employees have been declining for years. This leads to longer lifetimes after retirement and, therefore, to increased costs to the retirement system. A review of the data with respect to retirees (disabled and non-disabled) indicates that a reduction in rates for both males and females is called for at this time. New tables were constructed this year for this purpose. The new tables were based upon a blending of observed experience for WRS and recently published mortality tables (the RP2000 mortality combined tables projected 15 years). This change will have an upward effect on valuation liabilities for both the active and retired lives valuations. Detailed information begins on page E-1. In addition we are also recommending a change in the reserve for mortality improvements from 1% to 1.5% over a 3-year period.

**Mortality Among Active Members:** Active member deaths were slightly below assumed rates for males and slightly above assumed rates for females. In conjunction with a change in the mortality tables for post-retirement, we are recommending a change to these same mortality tables (reduced by 50%). Detailed information begins on page E-1.

**Complete listings of all assumptions begin on page F-1.**



## SUMMARY OF DECREMENT EXPERIENCE

Decrement Risk Area	Actual	Expected	
		Current	Proposed
<b><u>Withdrawal - Total</u></b>			
General (Without Schools)	23,052	17,775	21,480
Public School and University	11,483	9,189	10,822
Protective			
With Social Security	1,558	1,119	1,422
Without Social Security	70	63	61
Executive and Elected	209	108	186
<b><u>Withdrawal - Service greater than 10</u></b>			
General (Without Schools)	2,481	2,649	2,559
Public School and University	1,605	1,819	1,641
Protective			
With Social Security	349	275	323
Without Social Security	44	33	33
Executive and Elected	59	27	53
<b><u>Disability</u></b>			
General (Without Schools)	507	588	544
Public School and University	250	264	260
Protective			
With Social Security	33	41	36
Without Social Security	17	13	16
Executive and Elected	1	4	2
<b><u>Early Retirement</u></b>			
General (Without Schools)	4,554	5,182	4,694
Public School and University	5,182	5,065	5,081
Executive and Elected	55	41	51
<b><u>Normal Retirement</u></b>			
General (Without Schools) **	3,124	4,405	3,461
Public School and University **	3,575	3,670	3,591
Protective*			
With Social Security	970	1,166	1,085
Without Social Security	170	246	199
Executive and Elected	101	109	109
<b><u>Mortality - Retired Lives</u></b>			
Normal Retirement			
Male	4,787	5,169	4,798
Female	5,065	5,332	5,096
Disabled Retirement			
Male	391	494	397
Female	348	492	353
<b><u>Mortality - Active Lives</u></b>			
Male	422	456	424
Female	360	339	357

\* Includes Early Retirements.

\*\* Figures shown are for people below age 75.

## ECONOMIC ASSUMPTIONS

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Economic assumptions include **long-term rates of investment return** (net after expenses) and **wage inflation** (the across-the-board portion of salary increases). Unlike demographic activities, economic activities do not lend themselves to analysis solely on the basis of internal historical patterns because returns are more affected by external forces; namely inflation and general productivity changes which defy accurate long-term prediction. Estimates of economic activities are generally selected on the basis of the expectations in an inflation-free environment and then both are increased by some provision for long-term inflation.

If inflation and/or productivity increases are higher than expected, it will probably result in both actual rates of salary increases and investment return which exceed the assumed rates. Salaries increasing faster than expected produce unexpected liabilities. Investment return exceeding the assumed rates (whether due to manager performance, change in the mix of assets, or general market conditions) results in unanticipated assets. To the extent that inflation, productivity, and other factors have about the same effect on both sides of the balance sheet, these additional assets and liabilities can offset one another over the long-term.

Typically, no single investment period can be the sole basis for formulating economic assumptions. While information from the present experience period may be considered in developing new assumptions, long-term historical patterns must necessarily play a much larger role.

**Wage inflation.** The average rate of increase in National Average Earnings over the last 56 years is higher than the current WRS 4.1% assumption (see schedule on page 9). However, both regional and national average salaries have risen at a slower pace since 1981 (the WRS average has been 3.9% annually). The difference between the long-term national averages and WRS experience is related to the excess rates of price and wage inflation during the 1970s which most observers do not expect to see repeated. When the decade of high inflation is factored out, long-term national averages approach a 4.0% wage inflation assumption. We believe it is reasonable to assume that the average rate in the future will be similar to the WRS experience rate in the past and that a rate in the range of 3.5% to 4.5% is reasonable. Although wage inflation for the last 3 years is below the current wage inflation assumption, we believe it is prudent to wait and see if this trend continues and are recommending the wage inflation assumption remain at 4.1%.

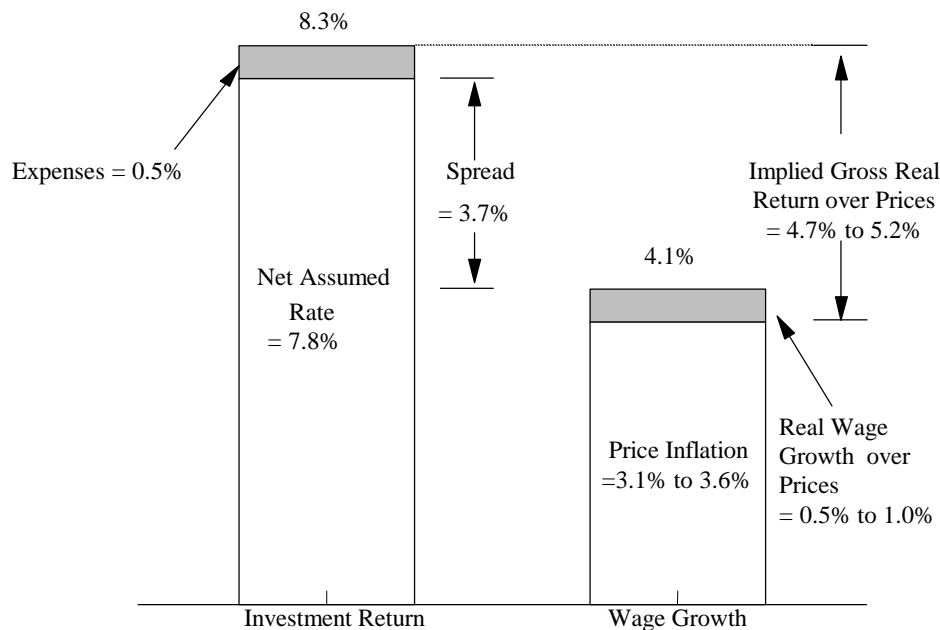
## ECONOMIC ASSUMPTIONS

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**Investment Return and Spread.** The current WRS asset portfolio is a diversified mix of equity and fixed income investments. Real market returns (the spread between recognized net investment return and wage inflation) for balanced portfolios have averaged over 5.1% for the last 56 years (see schedule on page 9). The current real return assumption for the pension valuation is 3.7% (7.8% nominal less 4.1% wage inflation). Only hindsight will tell whether a particular combination of economic assumptions is optimal. If future economic patterns are as favorable as in the 1980's and 1990's, this spread would prove to be conservative. If, on the other hand, future investment markets produce lower real returns, contribution rate increases will become likely in the future.

The State of Wisconsin Investment Board advises that 7.8% is still a reasonable expected return rate for the WRS portfolio. We are recommending that the investment return remain at 7.8% and the resulting spread remain at 3.7%.

The relationship between economic assumptions based on a 3.7% spread is illustrated below:



## HISTORICAL PATTERNS OF INVESTMENT RETURN, PAY INCREASES & INFLATION

Calendar Year Period	Gross Market Returns			Stocks (S&P 500)	Price Inflation (CPI)	National Average Earnings	Sample Balanced Fund*	
	Bonds (Long)		Cash Equiv. (T Bills)				Total Return (I)	Spread: I - NAE - e
	U.S. Treasury	Corp. (S&P AA)						
1950-59	(0.1)%	1.0 %	1.9 %	19.4 %	2.2 %	4.5 %	14.0 %	9.0 %
1960-69	1.4 %	1.7 %	3.9 %	7.8 %	2.5 %	4.3 %	6.2 %	1.4 %
1970-79	5.5 %	6.2 %	6.3 %	5.9 %	7.4 %	6.9 %	6.1 %	(1.3)%
1980-89	12.6 %	13.0 %	8.9 %	17.5 %	5.1 %	5.8 %	16.3 %	10.0 %
1990-99	8.8 %	8.4 %	4.9 %	18.2 %	2.9 %	4.2 %	15.4 %	10.7 %
2000-04	10.3 %	10.7 %	2.7 %	(2.3)%	2.5 %	3.2 %	2.0 %	(1.7)%
2005	7.8 %	5.9 %	3.0 %	4.9 %	3.4 %	2.7 %	5.5 %	2.3 %
<b>Last 56 Years</b>	<b>6.0 %</b>	<b>6.4 %</b>	<b>4.9 %</b>	<b>11.9 %</b>	<b>3.9 %</b>	<b>4.9 %</b>	<b>10.5 %</b>	<b>5.1 %</b> #

* Sample Balanced Fund	
Equities	70%
Bonds - Government	15%
- Corporate	14%
Cash Equivalents	1%
	100%
Fund expenses(e)	0.50%

# Historical Spread	
# Observed spread is very sensitive to the observation period, even over long periods, as illustrated below:	
Observation Period	Spread
56 years	5.1%
46 years	4.3%
36 years	5.1%
26 years	7.5%

## SUMMARY OF VALUATION RESULTS

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The table below describes hypothetical valuation results at December 31, 2005 with new and old decrement assumptions with indicated spreads. The rate changes are illustrative only since contribution rates have already been set based upon the actual December 31, 2005 valuation results.

	<b>General</b>	<b>Executive &amp; Elected</b>	<b>Protective</b>	
			<u>With S.S.</u>	<u>Without S.S.</u>
Present Average 2007 Contribution Rate	10.8%	11.6%	13.4%	14.6%
Hypothetical changes in average rates due to new assumptions	<u>0.2</u>	<u>0.0</u>	<u>(0.4)</u>	<u>0.2</u>
Total	11.0%	11.6%	13.0%	14.8%

New assumptions will be first used in the December 31, 2006 actuarial valuations, at which time experience gains or losses incurred during 2006 will also be recognized. Consequently, no rate changes are recommended at this time.

## OTHER RECOMMENDATIONS

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**Option Factors** are calculated using a 5% interest assumption and the assumed rates of mortality with a blended mortality table consisting of 50% male rates and 50% female rates. If a retiring member elects an optional form of benefit, the straight life benefit is multiplied by the appropriate option factor to produce the benefit actually payable. Examples of option factors calculated using the present and proposed mortality assumptions are shown below. The factors shown illustrate that when mortality experience is improved (i.e., members live longer), that option factors generally increase. The revised factors will usually result in slightly higher benefits being paid when an optional form is elected. Option factors can be changed based upon this study since the mortality table has been changed. We recommend changing these factors October 1, 2007.

Age		5 Year C&L		15 Year C&L		Joint and 75%	
Retiree	Beneficiary	Current	Proposed	Current	Proposed	Current	Proposed
50	45	0.998	0.999	0.986	0.986	0.920	0.921
55	50	0.997	0.997	0.976	0.975	0.901	0.903
60	55	0.995	0.995	0.957	0.959	0.878	0.882
65	60	0.991	0.992	0.918	0.927	0.849	0.856
75	70	0.960	0.965	0.749	0.767	0.781	0.787

**Recommended Implementation Schedule.** It is recommended that the results of this experience study be implemented in accordance with the following schedule.

Active and Inactive Lives Valuation:	12/31/2006 Valuation
Retired Lives Valuation:	12/31/2006 Valuation
Option Factors:	10/01/2007

**Amortization Payoff Reserve.** In conjunction with this study, we have reviewed the method used to account for the possibility that some non-state employers may never be able to pay off their unfunded actuarial accrued liability (UAAL). The prior method assumed a reserve of 5% of non-state UAAL to account for this contingency. The new method will project the outstanding unfunded liability for all employers to 2029 each year. The reserve will then be set equal to this total outstanding balance in 2029 (discounted back to the current valuation date at the assumed valuation rate of interest).

## OTHER RECOMMENDATIONS

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**Participant Contribution Rate.** By statute, rate changes are allocated among Participant Normal Cost, Employer Normal Cost, and a Benefit Adjustment Contribution. The Participant Normal Cost contributions are, in most cases, paid by the employers rather than by the participants. The original intent of the statutory allocation of the rate changes was most likely to permit participants to share in good and bad investment and other experiences. The actual result however, seems to be that, for some members, good experience causes benefits to be decreased, and bad experience causes benefits to be increased. This occurs because good experience decreases contribution rates which decreases future contribution balances, and conversely. Money purchase benefits, refund benefits and some death benefits are based on contribution balances. Consequently, we continue to recommend that policy makers revise statutes to change the participant contribution rate to a fixed percentage of payroll.

**Actuarial Audit.** An actuarial audit was conducted in 2006 by Milliman, Inc. Their report indicated no major areas of disagreement with the actuarial valuations. The following is a list of mostly technical recommendations and our responses:

**Disability Retirements.** **The reviewers suggested the age 50-54 group for protective service members be monitored in the next experience study to see if a change is warranted.** We agree with the recommendation and adjusted the rates accordingly (see page B-7 and B-8). Unusual experience in this age bracket is most likely caused by the relaxed eligibility standards that apply.

**Service Retirements.** **The reviewers noted that other systems measure retirement experience on a “select and ultimate” basis relative to the first year of eligibility and suggest that the next experience study incorporate this analysis.** We tested the effect and noticed no significant difference in retirement rates in the first year of eligibility from the rates we are currently assuming. We will monitor this assumption again in the future.

## OTHER RECOMMENDATIONS

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**Active life mortality.** The reviewers recommended that an assumption of future mortality improvements (sometimes referred to as “generational mortality”) be incorporated in the Active Life Valuation. This methodology is a relatively new trend. Many actuaries are now recommending it be built into their models, however not all experts are in agreement that mortality will continue to improve in the future. Recent studies by some demographic experts have actually predicted a decline in life expectancy in the future. Additionally, due to the complex nature of the Wisconsin Retirement System and, in particular, the operation of the dividend process, this would likely create an artificial gain when a member retired which would then be paid out in the form of dividends. We recommend that generational mortality not be adopted, but that the reserve for mortality improvement in the retired life valuation be increased from 1% to 1.5% phased in over a 3-year period.

The reviewers suggested that either future experience studies be modified so that the withdrawal rates include all separation from active service for the first five years (including death and disability) or that the valuation procedures be modified so that death and disability decrements apply in the first 5 years of a member’s service. We have modified our procedures to include death and disability decrements during the select withdrawal period (previously 5 years and now 10 years). The effect of this change is very minimal and slightly decreased liabilities.

**Rates versus Probabilities.** The reviewers suggested that we change from using decrement rates to probabilities. This has been discussed in the past with DETF staff. Prior analysis indicated that this would not create a material difference in our results.

**Final Average Pay Calculations.** The reviewers noted that for members with prior service in multiple service groups, the assumed retirement age and final average salary that are calculated for each of the divisions are sometimes inconsistent. We reviewed the methodology and adjusted our calculations for these situations. The change had a very minimal effect on liabilities.



## OTHER RECOMMENDATIONS

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**The reviewers recommended the further study of the emerging reserve transfers be performed to gain additional insight into the source of the “other” loss category in our gain/loss reports.** We agree and have suggested this also in the past. Full analysis of this type of loss would require a detailed study. Such a study was suggested in our most recent gain/loss report but was not approved. This loss is likely due to either service purchases at retirement or additional compensation at retirement. In order to account for this, we recommend adding a load of 1.0% to the calculation of final average earnings. The effect of this change is reflected in our results on page 9 and we will continue to monitor this assumption in the future.

**The reviewers suggested that GRS consider providing A/E ratios (Actual versus Expected) in future experience studies.** We note that this is primarily a style difference in reports. We have added this to Section E of our report, where it is particularly helpful.

**The reviewers suggested consideration be given to relating salary rates to both age and service.** In the last experience study we analyzed salary rates by both age and service and found rates to be more correlated with service than with age. We don't believe another change is warranted at this time but could be considered for a future study.

**The reviewers suggested adding a corridor to the valuation asset method so that the valuation assets do not diverge to far from the market value of assets.** Although the asset valuation method is set by statute and cannot be changed, it is possible to add a reserve to the liabilities if this situation were to happen. We recommend establishing a 15% corridor around the market value of assets and establish a reserve for this if the funding value of assets falls outside of this corridor. This change would have no effect on current valuation results as the funding value was within 5% of the market value as of December 31, 2005.

## DURATION OF LONG TERM DISABILITY INSURANCE BENEFITS

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Section 50.56(1)(j) of the Wisconsin Administrative Code provides:

“The duration of LTDI benefits for recipients whose LTDI benefit effective date is on or after the date the recipient attains age 61 shall be periodically reviewed and may be revised based on the actuary’s determinations, as approved by the Employee Trust Funds Board, so as to provide LTDI benefits meeting equal cost standards under federal age discrimination law. As part of the regular 3-year general investigation under Section 40.03(5)(b), Stats., beginning with the investigation based on data through 1996, the actuary shall determine the appropriate duration for LTDI benefits beginning at and after age 61. The Employee Trust Funds Board shall be responsible for approving any change to the duration of LTDI benefits. If the duration of LTDI benefits is changed, the duration of LTDI benefits being paid as the result of an application received by the department prior to the effective date of the change shall not be affected. Any such revision shall be effective upon promulgation as an amendment to this rule by the group insurance board.”

The duration of LTDI benefits referenced in the Code is currently as follows:

<u>Age at LTDI Effective Date</u>	<u>LTDI Benefit Ends</u>
Before age 61	Age 65
Age 61 or 62	Age 66
Age 63 or 64	Age 67
Age 65 or 66	Age 68
Age 67	Age 69
Age 68	Age 70
Age 69 or older	12 months after effective date

EEOC set a safe harbor minimum duration at 5 years, but has said that a shorter minimum duration could be set for persons disabled at advanced ages if the shorter duration was based upon an actuarial sound cost justification. They said further that standard insurance industry data could be relied on until more plan-specific data can be accumulated. The current duration of LTDI benefits is based on standard insurance industry data. There is not sufficient plan data upon which to base an actuarially sound cost justification for a change in the present duration schedule. Therefore, **it is our recommendation that the current duration schedule be continued for the ensuing three-year period.**

# **SECTION A**

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## **WITHDRAWAL EXPERIENCE**

## GENERAL MALES WITHDRAWAL EXPERIENCE

### Male Service-Based Withdrawals

Service Index	Withdrawals	Exposure	Crude Rates	Sample Rates		Expected Withdrawals	
				Old	New	Old	New
1	1,345	5,375	0.2502	0.1800	0.2100	968	1,129
2	1,603	9,604	0.1669	0.1000	0.1300	960	1,249
3	905	8,632	0.1048	0.0800	0.0950	691	820
4	676	8,355	0.0809	0.0600	0.0750	501	627
5	427	7,266	0.0588	0.0500	0.0550	363	400
6	265	6,006	0.0441	0.0000	0.0450	144	270
7	222	5,184	0.0428	0.0000	0.0400	117	207
8	166	4,451	0.0373	0.0000	0.0375	96	167
9	117	3,902	0.0300	0.0000	0.0350	80	137
10	136	3,696	0.0368	0.0000	0.0325	73	120
11	110	3,539	0.0311	0.0000	0.0000	67	-
12	106	3,487	0.0304	0.0000	0.0000	64	-
13	106	3,637	0.0291	0.0000	0.0000	64	-
14	81	3,819	0.0212	0.0000	0.0000	65	-
15	68	3,788	0.0180	0.0000	0.0000	63	-
16	55	3,376	0.0163	0.0000	0.0000	54	-
17	52	2,954	0.0176	0.0000	0.0000	46	-
18	37	2,712	0.0136	0.0000	0.0000	41	-
19	50	2,701	0.0185	0.0000	0.0000	41	-
20	26	2,489	0.0104	0.0000	0.0000	37	-
21	26	2,178	0.0119	0.0000	0.0000	32	-
22	31	1,821	0.0170	0.0000	0.0000	26	-
23	21	1,772	0.0119	0.0000	0.0000	25	-
24	29	2,046	0.0142	0.0000	0.0000	29	-
25	19	2,297	0.0083	0.0000	0.0000	32	-
26	19	2,212	0.0086	0.0000	0.0000	30	-
27	14	1,855	0.0075	0.0000	0.0000	25	-
28	15	1,458	0.0103	0.0000	0.0000	19	-
29	19	1,258	0.0151	0.0000	0.0000	17	-
30 and over	54	1,087	0.0497	0.0377	0.0000	41	-
Totals (10 and under)	5,862	39,232	0.1494	0.1018	0.1307	3,993	5,126

	<u>Actual</u>	<u>Proposed</u>
Current	0.1494	0.1307
<b>Previous Investigation Results</b>		
2000-2002	0.1070	0.1073
1997-1999	0.1142	0.1107

## GENERAL MALES WITHDRAWAL EXPERIENCE

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### Male Age-Based Withdrawals with 10 or More Years of Service

Age	Withdrawals	Exposure	Crude Rates	Sample Rates*		Expected Withdrawals	
				Old	New	Old	New
25-29	1	51	0.0196	0.0500	0.0300	2	2
30-34	36	1,324	0.0272	0.0350	0.0300	43	38
35-39	125	5,240	0.0239	0.0230	0.0230	122	119
40-44	200	11,039	0.0181	0.0180	0.0180	197	197
45-49	227	17,000	0.0134	0.0140	0.0140	243	243
50-54	270	21,598	0.0125	0.0130	0.0130	283	283
Totals	859	56,252	0.0153	0.0158	0.0157	890	882

	<u>Actual</u>	<u>Proposed</u>
Current	0.0153	0.0157
<b>Previous Investigation Results</b>		
2000-2002	0.0169	0.0172
1997-1999	0.0198	0.0200

\* Sample rates are taken from midpoint of age group.

## GENERAL FEMALES WITHDRAWAL EXPERIENCE

### Female Service-Based Withdrawals

Service Index	Withdrawals	Exposure	Crude Rates	Sample Rates		Expected Withdrawals	
				Old	New	Old	New
1	3,231	14,929	0.2164	0.1800	0.2000	2,687	2,986
2	4,012	25,717	0.1560	0.1100	0.1400	2,829	3,600
3	2,364	22,164	0.1067	0.0900	0.1000	1,995	2,216
4	1,654	19,513	0.0848	0.0700	0.0800	1,366	1,561
5	1,161	15,964	0.0727	0.0600	0.0700	958	1,117
6	734	12,677	0.0579	0.0000	0.0600	369	761
7	541	10,721	0.0505	0.0000	0.0500	302	536
8	399	9,012	0.0443	0.0000	0.0450	244	406
9	313	7,821	0.0400	0.0000	0.0425	204	332
10	300	6,997	0.0429	0.0000	0.0400	179	280
11	257	6,537	0.0393	0.0000	0.0000	164	-
12	231	6,186	0.0373	0.0000	0.0000	153	-
13	199	5,898	0.0337	0.0000	0.0000	143	-
14	166	5,690	0.0292	0.0000	0.0000	135	-
15	142	5,287	0.0269	0.0000	0.0000	123	-
16	130	4,612	0.0282	0.0000	0.0000	105	-
17	86	3,949	0.0218	0.0000	0.0000	89	-
18	80	3,430	0.0233	0.0000	0.0000	76	-
19	78	3,148	0.0248	0.0000	0.0000	69	-
20	46	2,897	0.0159	0.0000	0.0000	63	-
21	50	2,581	0.0194	0.0000	0.0000	55	-
22	35	2,323	0.0151	0.0000	0.0000	49	-
23	43	2,229	0.0193	0.0000	0.0000	47	-
24	42	2,329	0.0180	0.0000	0.0000	48	-
25	40	2,403	0.0166	0.0000	0.0000	50	-
26	22	2,244	0.0098	0.0000	0.0000	46	-
27	17	1,874	0.0091	0.0000	0.0000	38	-
28	24	1,491	0.0161	0.0000	0.0000	30	-
29	16	1,274	0.0126	0.0000	0.0000	26	-
30 and over	39	3,595	0.0108	0.0061	0.0000	22	-
Totals (10 and under)	14,709	98,287	0.1497	0.1133	0.1404	11,133	13,795

	<u>Actual</u>	<u>Proposed</u>
Current	0.1497	0.1404
<b>Previous Investigation Results</b>		
2000-2002	0.1184	0.1175
1997-1999	0.1149	0.1135

## GENERAL FEMALES WITHDRAWAL EXPERIENCE

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### Female Age-Based Withdrawals with 10 or More Years of Service

Age	Withdrawals	Exposure	Crude Rates	Sample Rates*		Expected Withdrawals	
				Old	New	Old	New
25-29	3	83	0.0361	0.0550	0.0400	4	3
30-34	77	2,196	0.0351	0.0450	0.0350	93	75
35-39	262	7,809	0.0336	0.0300	0.0300	239	232
40-44	349	15,173	0.0230	0.0250	0.0250	376	376
45-49	461	23,571	0.0196	0.0200	0.0200	484	478
50-54	470	28,142	0.0167	0.0200	0.0180	563	513
Totals	1,622	76,974	0.0211	0.0229	0.0218	1,759	1,677

	<u>Actual</u>	<u>Proposed</u>
Current	0.0211	0.0218
<b>Previous Investigation Results</b>		
2000-2002	0.0250	0.0244
1997-1999	0.0314	0.0312

\* Sample rates are taken from midpoint of age group.

**PUBLIC SCHOOLS MALES  
WITHDRAWAL EXPERIENCE**

**Male Service-Based Withdrawals**

Service Index	Withdrawals	Exposure	Crude Rates	Sample Rates		Expected Withdrawals	
				Old	New	Old	New
1	307	2,058	0.1492	0.1100	0.1400	226	288
2	411	3,588	0.1145	0.0700	0.1100	251	395
3	267	3,555	0.0751	0.0500	0.0700	178	249
4	205	3,542	0.0579	0.0450	0.0525	159	186
5	160	3,304	0.0484	0.0350	0.0400	116	132
6	102	3,042	0.0335	0.0000	0.0325	57	99
7	76	2,828	0.0269	0.0000	0.0275	48	78
8	67	2,653	0.0253	0.0000	0.0250	41	66
9	58	2,453	0.0236	0.0000	0.0225	35	55
10	43	2,231	0.0193	0.0000	0.0200	30	45
11	41	2,073	0.0198	0.0000	0.0000	27	-
12	40	1,990	0.0201	0.0000	0.0000	24	-
13	33	1,936	0.0170	0.0000	0.0000	23	-
14	23	1,993	0.0115	0.0000	0.0000	23	-
15	30	1,896	0.0158	0.0000	0.0000	21	-
16	22	1,711	0.0129	0.0000	0.0000	18	-
17	13	1,483	0.0088	0.0000	0.0000	16	-
18	13	1,336	0.0097	0.0000	0.0000	14	-
19	22	1,209	0.0182	0.0000	0.0000	12	-
20	11	1,085	0.0101	0.0000	0.0000	11	-
21	9	985	0.0091	0.0000	0.0000	10	-
22	10	913	0.0110	0.0000	0.0000	9	-
23	6	921	0.0065	0.0000	0.0000	9	-
24	9	974	0.0092	0.0000	0.0000	9	-
25	4	1,152	0.0035	0.0000	0.0000	10	-
26	13	1,237	0.0105	0.0000	0.0000	11	-
27	7	1,229	0.0057	0.0000	0.0000	11	-
28	11	1,187	0.0093	0.0000	0.0000	11	-
29	10	1,137	0.0088	0.0000	0.0000	10	-
30 and over	49	1,156	0.0424	0.0242	0.0000	28	-
Totals (10 and under)	1,696	16,047	0.1057	0.0711	0.0993	1,141	1,593

	<u>Actual</u>	<u>Proposed</u>
Current	0.1057	0.0993
<b>Previous Investigation Results</b>		
2000-2002	0.0683	0.0657
1997-1999	0.0616	0.0637



**PUBLIC SCHOOLS MALES  
WITHDRAWAL EXPERIENCE**

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**Male Age-Based Withdrawals  
with 10 or More Years of Service**

Age	Withdrawals	Exposure	Crude Rates	Sample Rates*		Expected Withdrawals	
				Old	New	Old	New
25-29	-	-	N/A	0.0350	0.0200	-	-
30-34	16	1,188	0.0135	0.0170	0.0160	20	18
35-39	65	5,134	0.0127	0.0130	0.0130	68	67
40-44	64	5,997	0.0107	0.0120	0.0115	69	69
45-49	64	7,433	0.0086	0.0090	0.0100	70	75
50-54	134	12,059	0.0111	0.0090	0.0090	109	110
Totals	343	31,811	0.0108	0.0106	0.0107	336	339

	<u>Actual</u>	<u>Proposed</u>
Current	0.0108	0.0107
<b>Previous Investigation Results</b>		
2000-2002	0.0113	0.0111
1997-1999	0.0106	0.0110

\* Sample rates are taken from midpoint of age group.

## PUBLIC SCHOOLS FEMALES WITHDRAWAL EXPERIENCE

### Female Service-Based Withdrawals

Service Index	Withdrawals	Exposure	Crude Rates	Sample Rates		Expected Withdrawals	
				Old	New	Old	New
1	655	5,452	0.1201	0.1000	0.1100	545	600
2	1,066	10,230	0.1042	0.0800	0.0900	818	921
3	791	9,939	0.0796	0.0600	0.0700	596	696
4	644	9,833	0.0655	0.0540	0.0600	531	590
5	470	9,117	0.0516	0.0440	0.0500	401	456
6	384	8,354	0.0460	0.0000	0.0425	210	355
7	292	7,614	0.0384	0.0000	0.0375	178	286
8	208	6,903	0.0301	0.0000	0.0325	151	224
9	185	6,373	0.0290	0.0000	0.0275	130	175
10	142	5,883	0.0241	0.0000	0.0250	111	147
11	147	5,644	0.0260	0.0000	0.0000	98	-
12	123	5,404	0.0228	0.0000	0.0000	88	-
13	96	5,437	0.0177	0.0000	0.0000	84	-
14	86	5,417	0.0159	0.0000	0.0000	79	-
15	73	5,039	0.0145	0.0000	0.0000	70	-
16	67	4,412	0.0152	0.0000	0.0000	59	-
17	42	3,838	0.0109	0.0000	0.0000	50	-
18	38	3,460	0.0110	0.0000	0.0000	44	-
19	31	3,186	0.0097	0.0000	0.0000	39	-
20	27	2,787	0.0097	0.0000	0.0000	34	-
21	21	2,426	0.0087	0.0000	0.0000	29	-
22	16	2,136	0.0075	0.0000	0.0000	26	-
23	16	2,043	0.0078	0.0000	0.0000	25	-
24	16	2,095	0.0076	0.0000	0.0000	25	-
25	16	2,202	0.0073	0.0000	0.0000	26	-
26	14	2,203	0.0064	0.0000	0.0000	26	-
27	18	2,136	0.0084	0.0000	0.0000	26	-
28	22	2,030	0.0108	0.0000	0.0000	24	-
29	13	1,957	0.0066	0.0000	0.0000	23	-
30 and over	56	4,740	0.0118	0.0046	0.0000	22	-
Totals (10 and under)	4,837	44,571	0.1085	0.0824	0.0998	3,671	4,450

	<u>Actual</u>	<u>Proposed</u>
Current	0.1085	0.0998
<b>Previous Investigation Results</b>		
2000-2002	0.0713	0.0705
1997-1999	0.0640	0.0677

## PUBLIC SCHOOLS FEMALES WITHDRAWAL EXPERIENCE

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### Female Age-Based Withdrawals with 10 or More Years of Service

Age	Withdrawals	Exposure	Crude Rates	Sample Rates*		Expected Withdrawals	
				Old	New	Old	New
25-29	-	3	0.0000	0.0400	0.0250	-	-
30-34	56	3,138	0.0178	0.0310	0.0200	84	59
35-39	204	12,859	0.0159	0.0180	0.0160	241	206
40-44	159	13,908	0.0114	0.0130	0.0130	183	182
45-49	192	17,307	0.0111	0.0120	0.0110	208	192
50-54	295	27,260	0.0108	0.0120	0.0100	327	275
Totals	906	74,475	0.0122	0.0140	0.0123	1,043	914

	<u>Actual</u>	<u>Proposed</u>
Current	0.0122	0.0123
<b>Previous Investigation Results</b>		
2000-2002	0.0149	0.0158
1997-1997	0.0157	0.0164

\* Sample rates are taken from midpoint of age group.

## UNIVERSITY MALES WITHDRAWAL EXPERIENCE

### Male Service-Based Withdrawals

Service Index	Withdrawals	Exposure	Crude Rates	Sample Rates		Expected Withdrawals	
				Old	New	Old	New
1	222	1,050	0.2114	0.1800	0.2000	189	210
2	334	1,935	0.1726	0.1300	0.1600	252	310
3	277	1,998	0.1386	0.1000	0.1300	200	260
4	185	1,931	0.0958	0.0900	0.1100	174	212
5	167	1,642	0.1017	0.0700	0.0900	115	148
6	118	1,356	0.0870	0.0000	0.0750	61	102
7	66	1,126	0.0586	0.0000	0.0600	49	68
8	52	942	0.0552	0.0000	0.0500	38	47
9	34	792	0.0429	0.0000	0.0400	31	32
10	26	663	0.0392	0.0000	0.0350	25	23
11	24	615	0.0390	0.0000	0.0000	21	-
12	25	618	0.0405	0.0000	0.0000	20	-
13	18	616	0.0292	0.0000	0.0000	19	-
14	15	625	0.0240	0.0000	0.0000	17	-
15	15	598	0.0251	0.0000	0.0000	16	-
16	10	556	0.0180	0.0000	0.0000	14	-
17	5	495	0.0101	0.0000	0.0000	12	-
18	6	430	0.0140	0.0000	0.0000	10	-
19	8	403	0.0199	0.0000	0.0000	9	-
20	7	394	0.0178	0.0000	0.0000	8	-
21	4	349	0.0115	0.0000	0.0000	7	-
22	3	305	0.0098	0.0000	0.0000	6	-
23	1	232	0.0043	0.0000	0.0000	4	-
24	3	209	0.0144	0.0000	0.0000	4	-
25	-	176	0.0000	0.0000	0.0000	3	-
26	-	147	0.0000	0.0000	0.0000	3	-
27	1	115	0.0087	0.0000	0.0000	2	-
28	3	101	0.0297	0.0000	0.0000	2	-
29	3	85	0.0353	0.0000	0.0000	1	-
30 and over	3	57	0.0526	0.0351	0.0000	2	-
Totals (10 and under)	1,481	8,556	0.1731	0.1325	0.1650	1,134	1,412

	<u>Actual</u>	<u>Proposed</u>
Current	0.1731	0.1650
<b>Previous Investigation Results</b>		
2000-2002	0.1203	0.1226
1997-1999	0.1433	0.1411

## UNIVERSITY MALES WITHDRAWAL EXPERIENCE

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### Male Age-Based Withdrawals with 10 or More Years of Service

Age	Withdrawals	Exposure	Crude Rates	Sample Rates*		Expected Withdrawals	
				Old	New	Old	New
25-29	-	-	N/A	0.0700	0.0350	-	-
30-34	2	84	0.0238	0.0650	0.0350	5	3
35-39	21	507	0.0414	0.0600	0.0350	29	18
40-44	39	1,296	0.0301	0.0400	0.0325	51	41
45-49	57	2,441	0.0234	0.0250	0.0250	61	59
50-54	42	3,531	0.0119	0.0150	0.0150	57	57
Totals	161	7,859	0.0205	0.0258	0.0226	203	178

	<u>Actual</u>	<u>Proposed</u>
Current	0.0205	0.0226
<b>Previous Investigation Results</b>		
2000-2002	0.0293	0.0300
1997-1999	0.0326	0.0337

\* Sample rates are taken from midpoint of age group.

	<u>Actual</u>	<u>Proposed</u>
Current	0.0205	0.0226
<b>Previous Investigation Results</b>		
2000-2002	0.0293	0.0300
1997-1999	0.0326	0.0337

## UNIVERSITY FEMALES WITHDRAWAL EXPERIENCE

### Female Service-Based Withdrawals

Service Index	Withdrawals	Exposure	Crude Rates	Sample Rates		Expected Withdrawals	
				Old	New	Old	New
1	253	1,251	0.2022	0.1800	0.2000	225	250
2	392	2,139	0.1833	0.1500	0.1700	321	364
3	371	2,244	0.1653	0.1300	0.1400	292	314
4	284	2,049	0.1386	0.1000	0.1200	205	246
5	171	1,659	0.1031	0.0900	0.1000	149	166
6	109	1,359	0.0802	0.0000	0.0900	66	122
7	106	1,238	0.0856	0.0000	0.0800	57	99
8	75	1,001	0.0749	0.0000	0.0700	44	70
9	58	842	0.0689	0.0000	0.0625	35	53
10	45	766	0.0587	0.0000	0.0550	30	42
11	43	683	0.0630	0.0000	0.0000	26	-
12	22	628	0.0350	0.0000	0.0000	23	-
13	21	570	0.0368	0.0000	0.0000	20	-
14	19	579	0.0328	0.0000	0.0000	19	-
15	15	544	0.0276	0.0000	0.0000	18	-
16	8	498	0.0161	0.0000	0.0000	15	-
17	9	413	0.0218	0.0000	0.0000	13	-
18	8	343	0.0233	0.0000	0.0000	10	-
19	7	323	0.0217	0.0000	0.0000	9	-
20	5	297	0.0168	0.0000	0.0000	8	-
21	3	260	0.0115	0.0000	0.0000	7	-
22	1	217	0.0046	0.0000	0.0000	6	-
23	1	200	0.0050	0.0000	0.0000	5	-
24	2	187	0.0107	0.0000	0.0000	5	-
25	3	162	0.0185	0.0000	0.0000	4	-
26	1	126	0.0079	0.0000	0.0000	3	-
27	1	123	0.0081	0.0000	0.0000	3	-
28	-	110	0.0000	0.0000	0.0000	3	-
29	1	96	0.0104	0.0000	0.0000	2	-
30 and over	1	200	0.0050	0.0100	0.0000	2	-
Totals (10 and under)	1,864	9,342	0.1995	0.1524	0.1848	1,424	1,726

	<u>Actual</u>	<u>Proposed</u>
Current	0.1995	0.1848
<b>Previous Investigation Results</b>		
2000-2002	0.1385	0.1377
1997-1999	0.1447	0.1540

## UNIVERSITY FEMALES WITHDRAWAL EXPERIENCE

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### Female Age-Based Withdrawals with 10 or More Years of Service

Age	Withdrawals	Exposure	Crude Rates	Sample Rates*		Expected Withdrawals	
				Old	New	Old	New
25-29	-	-	N/A	0.0900	0.0550	-	-
30-34	5	129	0.0388	0.0700	0.0550	9	7
35-39	38	646	0.0588	0.0550	0.0550	35	34
40-44	58	1,376	0.0422	0.0420	0.0420	57	57
45-49	48	2,129	0.0225	0.0280	0.0280	62	59
50-54	46	3,045	0.0151	0.0240	0.0160	74	53
Totals	195	7,325	0.0266	0.0324	0.0287	237	210

	<u>Actual</u>	<u>Proposed</u>
Current	0.0266	0.0287
<b>Previous Investigation Results</b>		
2000-2002	0.0354	0.0358
1997-1999	0.0373	0.0409

\* Sample rates are taken from midpoint of age group.

**PROTECTIVE WITH SOCIAL SECURITY  
WITHDRAWAL EXPERIENCE**

**Male and Female Service-Based Withdrawals**

Service Index	Withdrawals	Exposure	Crude Rates	Sample Rates		Expected Withdrawals	
				Old	New	Old	New
1	168	1,262	0.1331	0.1100	0.1200	139	151
2	248	3,097	0.0801	0.0600	0.0650	186	201
3	192	3,352	0.0573	0.0350	0.0450	117	151
4	154	3,469	0.0444	0.0320	0.0410	111	142
5	119	3,386	0.0351	0.0320	0.0325	108	110
6	93	3,036	0.0306	0.0000	0.0300	43	91
7	81	2,858	0.0283	0.0000	0.0275	39	79
8	55	2,697	0.0204	0.0000	0.0250	36	67
9	52	2,576	0.0202	0.0000	0.0225	34	58
10	47	2,428	0.0194	0.0000	0.0200	31	49
11	52	2,148	0.0242	0.0000	0.0000	27	-
12	35	1,983	0.0177	0.0000	0.0000	25	-
13	39	1,924	0.0203	0.0000	0.0000	23	-
14	38	2,013	0.0189	0.0000	0.0000	24	-
15	22	1,773	0.0124	0.0000	0.0000	21	-
16	18	1,545	0.0117	0.0000	0.0000	18	-
17	16	1,301	0.0123	0.0000	0.0000	15	-
18	9	1,266	0.0071	0.0000	0.0000	14	-
19	10	1,266	0.0079	0.0000	0.0000	14	-
20	10	1,073	0.0093	0.0000	0.0000	12	-
21	8	824	0.0097	0.0000	0.0000	9	-
22	12	680	0.0176	0.0000	0.0000	8	-
23	5	627	0.0080	0.0000	0.0000	7	-
24	6	692	0.0087	0.0000	0.0000	7	-
25	7	660	0.0106	0.0000	0.0000	7	-
26	8	563	0.0142	0.0000	0.0000	6	-
27	6	355	0.0169	0.0000	0.0000	4	-
28	6	194	0.0309	0.0000	0.0000	2	-
29	1	128	0.0078	0.0000	0.0000	1	-
30 and over	18	68	0.2647	0.0147	0.0000	1	-
Totals (10 and under)	1,209	14,566	0.0830	0.0579	0.0754	844	1,099

	<u>Actual</u>	<u>Proposed</u>
Current	0.0830	0.0754
<b>Previous Investigation Results</b>		
2000-2002	0.0546	0.0551
1997-1999	0.0709	0.0609



**PROTECTIVE WITH SOCIAL SECURITY  
WITHDRAWAL EXPERIENCE**

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**Male and Female Age-Based Withdrawals  
with 10 or More Years of Service**

Age	Withdrawals	Exposure	Crude Rates	Sample Rates*		Expected Withdrawals	
				Old	New	Old	New
25-29	-	69	0.0000	0.0160	0.0200	1	1
30-34	44	2,384	0.0185	0.0140	0.0200	33	46
35-39	108	6,112	0.0177	0.0130	0.0160	79	98
40-44	77	6,564	0.0117	0.0120	0.0130	79	86
45-49	76	6,983	0.0109	0.0110	0.0110	73	78
50-54	44	1,399	0.0315	0.0060	0.0100	10	14
Totals	349	23,511	0.0148	0.0117	0.0137	275	323

	<u>Actual</u>	<u>Proposed</u>
Current	0.0148	0.0137
<b>Previous Investigation Results</b>		
2000-2002	0.0116	0.0116
1997-1999	0.0110	0.0117

\* Sample rates are taken from midpoint of age group.

**PROTECTIVE WITHOUT SOCIAL SECURITY  
WITHDRAWAL EXPERIENCE**

**Male and Female Service-Based Withdrawals**

Service Index	Withdrawals	Exposure	Crude Rates	Sample Rates		Expected Withdrawals	
				Old	New	Old	New
1	4	79	0.0506	0.0500	0.0500	4	4
2	9	230	0.0391	0.0250	0.0300	6	7
3	5	280	0.0179	0.0220	0.0200	6	6
4	5	330	0.0152	0.0200	0.0150	7	5
5	3	394	0.0076	0.0170	0.0140	7	6
6	5	382	0.0131	0.0000	0.0130	3	5
7	3	372	0.0081	0.0000	0.0120	3	4
8	4	350	0.0114	0.0000	0.0110	3	4
9	4	333	0.0120	0.0000	0.0100	3	3
10	2	306	0.0065	0.0000	0.0090	2	3
11	-	286	0.0000	0.0000	0.0000	2	-
12	3	275	0.0109	0.0000	0.0000	2	-
13	3	278	0.0108	0.0000	0.0000	2	-
14	3	366	0.0082	0.0000	0.0000	3	-
15	2	372	0.0054	0.0000	0.0000	3	-
16	4	348	0.0115	0.0000	0.0000	3	-
17	2	249	0.0080	0.0000	0.0000	2	-
18	2	225	0.0089	0.0000	0.0000	2	-
19	2	246	0.0081	0.0000	0.0000	2	-
20	2	248	0.0081	0.0000	0.0000	2	-
21	1	196	0.0051	0.0000	0.0000	1	-
22	1	144	0.0069	0.0000	0.0000	1	-
23	-	129	0.0000	0.0000	0.0000	1	-
24	3	138	0.0217	0.0000	0.0000	1	-
25	4	122	0.0328	0.0000	0.0000	1	-
26	-	102	0.0000	0.0000	0.0000	1	-
27	3	57	0.0526	0.0000	0.0000	-	-
28	2	31	0.0645	0.0000	0.0000	-	-
29	2	13	0.1538	0.0000	0.0000	-	-
30 and over	8	12	0.6667	0.0000	0.0000	-	-
Totals (10 and under)	26	1,313	0.0198	0.0228	0.0213	30	28

**PROTECTIVE WITHOUT SOCIAL SECURITY  
WITHDRAWAL EXPERIENCE**

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**Male and Female Age-Based Withdrawals  
with 10 or More Years of Service**

Age	Withdrawals	Exposure	Crude Rates	Sample Rates*		Expected Withdrawals*	
				Old	New	Old	New
25-29	-	2	0.0000	0.0100	0.0090	-	-
30-34	1	325	0.0031	0.0080	0.0080	3	3
35-39	7	845	0.0083	0.0080	0.0080	7	7
40-44	7	1,353	0.0052	0.0080	0.0080	11	11
45-49	12	1,390	0.0086	0.0070	0.0070	10	10
50-54	17	228	0.0746	0.0070	0.0070	2	2
Totals	44	4,143	0.0106	0.0080	0.0080	33	33

	<u>Actual</u>	<u>Proposed</u>
Current	0.0106	0.0080
<b>Previous Investigation Results</b>		
2000-2002	0.0085	0.0075
1997-1999	0.0081	0.0068

\* Sample rates are taken from midpoint of age group.

## EXECUTIVE AND ELECTIVE WITHDRAWAL EXPERIENCE

### Male and Female Service-Based Withdrawals

Service Index	Withdrawals	Exposure	Crude Rates	Sample Rates		Expected Withdrawals	
				Old	New	Old	New
1	22	191	0.1152	0.0900	0.1600	17	31
2	59	325	0.1815	0.0850	0.1400	28	46
3	41	236	0.1737	0.0800	0.1200	19	28
4	15	164	0.0915	0.0700	0.1000	11	16
5	13	126	0.1032	0.0500	0.0950	6	12
6	3	72	0.0417	0.0000	0.0900	2	6
7	6	101	0.0594	0.0000	0.0850	3	9
8	7	74	0.0946	0.0000	0.0800	2	6
9	5	84	0.0595	0.0000	0.0750	2	6
10	5	63	0.0794	0.0000	0.0700	2	4
11	7	76	0.0921	0.0000	0.0000	2	-
12	6	64	0.0938	0.0000	0.0000	2	-
13	4	71	0.0563	0.0000	0.0000	2	-
14	6	59	0.1017	0.0000	0.0000	1	-
15	5	77	0.0649	0.0000	0.0000	2	-
16	3	66	0.0455	0.0000	0.0000	2	-
17	4	66	0.0606	0.0000	0.0000	1	-
18	4	62	0.0645	0.0000	0.0000	1	-
19	3	53	0.0566	0.0000	0.0000	1	-
20	2	56	0.0357	0.0000	0.0000	1	-
21	1	50	0.0200	0.0000	0.0000	1	-
22	1	46	0.0217	0.0000	0.0000	1	-
23	4	47	0.0851	0.0000	0.0000	1	-
24	2	48	0.0417	0.0000	0.0000	1	-
25	1	54	0.0185	0.0000	0.0000	1	-
26	5	58	0.0862	0.0000	0.0000	1	-
27	2	48	0.0417	0.0000	0.0000	1	-
28	1	26	0.0385	0.0000	0.0000	1	-
29	1	21	0.0476	0.0000	0.0000	-	-
30 and over	1	62	0.0161	0.0161	0.0000	1	-
Totals(10 and under)	150	1,042	0.1440	0.0777	0.1276	81	133

	<u>Actual</u>	<u>Proposed</u>
Current	0.1440	0.1276
<b>Previous Investigation Results</b>		
2000-2002	0.0874	0.0786
1997-1999	0.0698	0.0670

## EXECUTIVE AND ELECTIVE WITHDRAWAL EXPERIENCE

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### Male and Female Age-Based Withdrawals with 10 or More Years of Service

Age	Withdrawals	Exposure	Crude Rates	Sample Rates*		Expected Withdrawals*	
				Old	New	Old	New
25-29	-	-	N/A	0.0500	0.0700	-	-
30-34	1	3	0.3333	0.0450	0.0700	-	-
35-39	5	50	0.1000	0.0400	0.0700	2	3
40-44	11	190	0.0579	0.0300	0.0500	6	10
45-49	18	349	0.0516	0.0200	0.0450	7	16
50-54	24	581	0.0413	0.0200	0.0400	12	24
Totals	59	1,173	0.0503	0.0230	0.0452	27	53

	<u>Actual</u>	<u>Proposed</u>
Current	0.0503	0.0452
<b>Previous Investigation Results</b>		
2000-2002	0.0214	0.0235
1997-1999	0.0334	0.0288

\* Sample rates are taken from midpoint of age group.

## **SECTION B**

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### **DISABILITY EXPERIENCE**

# GENERAL MALES DISABILITY EXPERIENCE

## Male Disability Experience

Age	Disabilities	Exposure	Crude Rates	Sample Rates*		Expected Disabilities	
				Old	New	Old	New
Under 20	-	-	N\A	0.0001	0.0001	-	-
20-24	-	35	0.0000	0.0001	0.0001	-	-
25-29	-	1,185	0.0000	0.0001	0.0001	-	-
30-34	-	4,722	0.0000	0.0001	0.0001	-	-
35-39	0	9,199	0.0000	0.0003	0.0003	3	3
40-44	14	15,202	0.0009	0.0009	0.0008	14	12
45-49	37	20,865	0.0018	0.0012	0.0011	31	28
50-54	72	24,587	0.0029	0.0033	0.0030	82	74
55-59	67	16,572	0.0040	0.0059	0.0053	94	85
60-64	40	5,754	0.0070	0.0117	0.0105	58	52
65-69	4	662	0.0060	0.0045	0.0040	4	3
70-74	-	251	0.0000	0.0040	0.0036	1	1
75 and over	-	-	N\A	0.0040	0.0036	-	-
Totals	234	99,034	0.0024	0.0029	0.0026	287	258

	<u>Actual</u>	<u>Proposed</u>
Current	0.0024	0.0026
<b>Previous Investigation Results</b>		
2000-2002	0.0029	0.0030
1997-1999	0.0024	0.0026
1994-1996	0.0025	0.0027
1991-1993	0.0034	0.0033
1988-1990	0.0032	
1985-1987	0.0030	

\* Sample rates are taken from midpoint of age group.

**GENERAL FEMALES  
DISABILITY EXPERIENCE**

**Female Disability Experience**

Age	Disabilities	Exposure	Crude Rates	Sample Rates*		Expected Disabilities	
				Old	New	Old	New
Under 20	-	-	N\A	0.0001	0.0001	-	-
20-24	-	65	0.0000	0.0001	0.0001	-	-
25-29	-	2,289	0.0000	0.0001	0.0001	1	-
30-34	-	7,569	0.0000	0.0004	0.0004	3	3
35-39	1	13,578	0.0001	0.0005	0.0005	8	7
40-44	15	23,274	0.0006	0.0008	0.0008	20	19
45-49	42	33,681	0.0012	0.0011	0.0010	40	38
50-54	84	36,749	0.0023	0.0019	0.0018	73	70
55-59	72	27,746	0.0026	0.0036	0.0034	94	90
60-64	54	13,165	0.0041	0.0045	0.0043	56	53
65-69	5	1,316	0.0038	0.0036	0.0034	5	5
70-74	-	482	0.0000	0.0030	0.0029	1	1
75 and over	-	-	N\A	0.0030	0.0029	-	-
Totals	273	159,914	0.0017	0.0019	0.0018	301	286

	<u>Actual</u>	<u>Proposed</u>
Current	0.0017	0.0018
<b>Previous Investigation Results</b>		
2000-2002	0.0020	0.0017
1997-1999	0.0014	0.0017
1994-1996	0.0018	0.0021
1991-1993	0.0018	0.0023
1988-1990	0.0021	
1985-1987	0.0019	

\* Sample rates are taken from midpoint of age group.



## PUBLIC SCHOOL MALES DISABILITY EXPERIENCE

### Male Disability Experience

Age	Disabilities	Exposure	Crude Rates	Sample Rates*		Expected Disabilities	
				Old	New	Old	New
Under 20	-	-	N/A	0.0001	0.0001	-	-
20-24	-	-	N/A	0.0001	0.0001	-	-
25-29	-	769	0.0000	0.0001	0.0001	-	-
30-34	-	5,772	0.0000	0.0001	0.0001	1	1
35-39	2	7,555	0.0003	0.0001	0.0001	1	1
40-44	2	7,356	0.0003	0.0003	0.0003	3	2
45-49	5	8,487	0.0006	0.0006	0.0006	6	6
50-54	19	12,848	0.0015	0.0023	0.0022	28	27
55-59	30	8,548	0.0035	0.0030	0.0029	26	24
60-64	5	1,218	0.0041	0.0054	0.0051	6	6
65-69	-	98	0.0000	0.0076	0.0072	1	1
70-74	-	20	0.0000	0.0079	0.0075	-	-
75 and over	-	-	N/A	0.0079	0.0075	-	-
Totals	63	52,671	0.0012	0.0014	0.0013	72	68

	<u>Actual</u>	<u>Proposed</u>
Current	0.0012	0.0013
<b>Previous Investigation Results</b>		
2000-2002	0.0017	0.0016
1997-1999	0.0013	0.0014
1994-1996	0.0016	0.0016
1991-1993	0.0014	0.0015
1988-1990	0.0010	
1985-1987	0.0011	

\* Sample rates are taken from midpoint of age group.

	<u>Actual</u>	<u>Proposed</u>
Current	0.0012	0.0013
<b>Previous Investigation Results</b>		
2000-2002	0.0017	0.0016
1997-1999	0.0013	0.0014
1994-1996	0.0016	0.0016
1991-1993	0.0014	0.0015

1988-1990

0.0010

1985-1987

0.0011

**PUBLIC SCHOOL FEMALES  
DISABILITY EXPERIENCE**

**Female Disability Experience**

Age	Disabilities	Exposure	Crude Rates	Sample Rates*		Expected Disabilities	
				Old	New	Old	New
Under 20	-	-	N\A	0.0001	0.0001	-	-
20-24	-	2	0.0000	0.0001	0.0001	-	-
25-29	-	2,521	0.0000	0.0001	0.0001	-	-
30-34	-	14,336	0.0000	0.0001	0.0001	2	2
35-39	4	18,032	0.0002	0.0001	0.0001	3	3
40-44	12	17,441	0.0007	0.0004	0.0004	8	8
45-49	15	21,051	0.0007	0.0013	0.0013	26	26
50-54	52	30,336	0.0017	0.0018	0.0018	56	56
55-59	65	19,848	0.0033	0.0028	0.0028	52	52
60-64	8	4,335	0.0018	0.0038	0.0038	15	15
65-69	1	184	0.0054	0.0022	0.0022	-	-
70-74	-	47	0.0000	0.0018	0.0018	-	-
75 and over	-	-	N\A	0.0018	0.0018	-	-
Totals	157	128,133	0.0012	0.0013	0.0013	162	162

	<u>Actual</u>	<u>Proposed</u>
Current	0.0012	0.0013
<b>Previous Investigation Results</b>		
2000-2002	0.0016	0.0013
1997-1999	0.0010	0.0010
1994-1996	0.0011	0.0011
1991-1993	0.0009	0.0011
1988-1990	0.0009	
1985-1987	0.0006	

\* Sample rates are taken from midpoint of age group.

# UNIVERSITY MALES DISABILITY EXPERIENCE

## Male Disability Experience

Age	Disabilities	Exposure	Crude Rates	Sample Rates*		Expected Disabilities	
				Old	New	Old	New
Under 20	-	-	N/A	0.0001	0.0001	-	-
20-24	-	-	N/A	0.0001	0.0001	-	-
25-29	-	105	0.0000	0.0001	0.0001	-	-
30-34	-	681	0.0000	0.0001	0.0001	-	-
35-39	1	1,513	0.0007	0.0001	0.0001	-	-
40-44	0	2,373	0.0000	0.0001	0.0001	-	-
45-49	0	3,297	0.0000	0.0004	0.0004	1	1
50-54	3	4,106	0.0007	0.0006	0.0006	3	3
55-59	8	3,415	0.0023	0.0020	0.0020	6	6
60-64	3	1,496	0.0020	0.0019	0.0019	3	3
65-69	-	89	0.0000	0.0024	0.0024	-	-
70-74	-	29	0.0000	0.0021	0.0021	-	-
75 and over	-	-	N/A	0.0021	0.0021	-	-
Totals	15	17,104	0.0009	0.0008	0.0008	13	13

	<u>Actual</u>	<u>Proposed</u>
Current	0.0009	0.0008
<b>Previous Investigation Results</b>		
2000-2002	0.0008	0.0010
1997-1999	0.0008	0.0011
1994-1996	0.0010	0.0011
1991-1993	0.0009	0.0015
1988-1990	0.0012	
1985-1987	0.0009	

\* Sample rates are taken from midpoint of age group.

# UNIVERSITY FEMALES DISABILITY EXPERIENCE

## Female Disability Experience

Age	Disabilities	Exposure	Crude Rates	Sample Rates*		Expected Disabilities	
				Old	New	Old	New
Under 20	-	-	N\A	0.0001	0.0001	-	-
20-24	-	-	N\A	0.0001	0.0001	-	-
25-29	-	132	0.0000	0.0001	0.0001	-	-
30-34	-	846	0.0000	0.0001	0.0001	-	-
35-39	1	1,641	0.0006	0.0005	0.0005	1	1
40-44	0	2,376	0.0000	0.0007	0.0007	1	1
45-49	0	3,022	0.0000	0.0005	0.0005	2	2
50-54	3	3,748	0.0008	0.0013	0.0013	5	5
55-59	8	2,788	0.0029	0.0017	0.0017	5	5
60-64	3	1,094	0.0027	0.0027	0.0027	3	3
65-69	-	66	0.0000	0.0018	0.0018	-	-
70-74	-	10	0.0000	0.0015	0.0015	-	-
75 and over	-	-	N\A	0.0015	0.0015	-	-
Totals	15	15,723	0.0010	0.0011	0.0011	17	17

	<u>Actual</u>	<u>Proposed</u>
Current	0.0010	0.0011
<b>Previous Investigation Results</b>		
2000-2002	0.0006	0.0011
1997-1999	0.0010	0.0012
1994-1996	0.0003	0.0014
1991-1993	0.0010	0.0018
1988-1990	0.0016	
1985-1987	0.0018	

\* Sample rates are taken from midpoint of age group.

**PROTECTIVE WITH SOCIAL SECURITY  
DISABILITY EXPERIENCE**

**Male and Female Disability Experience**

Age	Disabilities	Exposure	Crude Rates	Sample Rates*		Expected Disabilities	
				Old	New	Old	New
Under 20	-	-	N\A	0.0001	0.0002	-	-
20-24	-	43	0.0000	0.0001	0.0002	-	-
25-29	-	2,146	0.0000	0.0001	0.0002	-	-
30-34	-	7,189	0.0000	0.0002	0.0002	1	2
35-39	4	8,429	0.0005	0.0004	0.0004	3	3
40-44	4	7,585	0.0005	0.0005	0.0005	4	4
45-49	6	7,591	0.0008	0.0012	0.0008	11	6
50-54	6	4,481	0.0013	0.0043	0.0013	18	9
55-59	10	354	0.0282	0.0137	0.0280	4	9
60-64	3	96	0.0313	0.0020	0.0300	-	3
65-69	-	22	0.0000	0.0020	0.0020	-	-
70-74	-	-	N\A	0.0020	0.0020	-	-
75 and over	-	-	N\A	0.0020	0.0020	-	-
Totals	33	37,936	0.0009	0.0011	0.0009	41	36

	<u>Actual</u>	<u>Proposed</u>
Current	0.0009	0.0009
<b>Previous Investigation Results</b>		
2000-2002	0.0012	0.0017
1997-1999	0.0016	0.0019
1994-1996	0.0019	0.0019
1991-1993	0.0013	0.0018
1988-1990	0.0015	
1985-1987	0.0015	

\* Sample rates are taken from midpoint of age group.

**PROTECTIVE WITHOUT SOCIAL SECURITY  
DISABILITY EXPERIENCE**

**Male and Female Disability Experience**

Age	Disabilities	Exposure	Crude Rates	Sample Rates*		Expected Disabilities	
				Old	New	Old	New
Under 20	-	-	N\A	0.0004	0.0005	-	-
20-24	-	-	N\A	0.0004	0.0005	-	-
25-29	-	211	0.0000	0.0004	0.0005	-	-
30-34	1	974	0.0010	0.0005	0.0005	-	-
35-39	-	1,237	0.0000	0.0006	0.0005	1	1
40-44	-	1,485	0.0000	0.0015	0.0009	2	1
45-49	1	1,435	0.0007	0.0021	0.0018	4	4
50-54	15	928	0.0162	0.0079	0.0126	6	10
55-59	-	9	0.0000	0.0055	0.0018	-	-
60-64	-	1	0.0000	0.0000	0.0018	-	-
65-69	-	-	N\A	0.0000	0.0018	-	-
70-74	-	-	N\A	0.0000	0.0018	-	-
75 and over	-	-	N\A	0.0000	0.0018	-	-
Totals	17	6,280	0.0027	0.0021	0.0025	13	16

	<u>Actual</u>	<u>Proposed</u>
Current	0.0027	0.0025
<b>Previous Investigation Results</b>		
2000-2002	0.0030	0.0025
1997-1999	0.0017	0.0021
1994-1996	0.0031	0.0029
1991-1993	0.0013	0.0024
1988-1990	0.0024	
1985-1987	0.0024	

\* Sample rates are taken from midpoint of age group.

## EXECUTIVE AND ELECTED DISABILITY EXPERIENCE

### Male and Female Disability Experience

Age	Disabilities	Exposure	Crude Rates	Sample Rates*		Expected Disabilities	
				Old	New	Old	New
Under 20	-	-	N\A	0.0001	0.0000	-	-
20-24	-	-	N\A	0.0001	0.0000	-	-
25-29	-	2	0.0000	0.0001	0.0000	-	-
30-34	-	26	0.0000	0.0001	0.0000	-	-
35-39	-	91	0.0000	0.0001	0.0001	-	-
40-44	-	251	0.0000	0.0002	0.0002	-	-
45-49	-	450	0.0000	0.0003	0.0003	-	-
50-54	-	684	0.0000	0.0006	0.0005	1	1
55-59	-	697	0.0000	0.0024	0.0020	2	1
60-64	1	272	0.0037	0.0021	0.0018	1	-
65-69	-	58	0.0000	0.0018	0.0015	-	-
70-74	-	33	0.0000	0.0018	0.0015	-	-
75 and over	-	-	N\A	0.0018	0.0015	-	-
Totals	1	2,564	0.0004	0.0016	0.0008	4	2

	<u>Actual</u>	<u>Proposed</u>
Current	0.0004	0.0008
<b>Previous Investigation Results</b>		
2000-2002	0.0006	0.0012
1997-1999	0.0007	0.0012
1994-1996	0.0003	0.0007

\* Sample rates are taken from midpoint of age group.



## **SECTION C**

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### **PAY INCREASES MERIT & LONGEVITY PORTION**

**GENERAL  
MERIT & LONGEVITY PAY INCREASE ASSUMPTION**

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**Service Based Pay Increase Experience**

Service Group		Merit/Seniority % Increase			Total % Increase		
Beginning of Year	Number	Actual	Expected*		Actual	Expected*	
			Old	New		Old	New
1-5	124,782	3.42 %	3.50 %	3.50 %	7.52 %	7.60 %	7.60 %
6-10	81,319	1.89 %	2.00 %	2.00 %	5.99 %	6.10 %	6.10 %
11-15	60,671	1.37 %	1.40 %	1.40 %	5.47 %	5.50 %	5.50 %
16-20	44,637	1.18 %	1.20 %	1.20 %	5.28 %	5.30 %	5.30 %
21-25	31,520	1.02 %	1.00 %	1.00 %	5.12 %	5.10 %	5.10 %
26-30	24,044	0.69 %	0.80 %	0.80 %	4.79 %	4.90 %	4.90 %
31-35	10,625	0.53 %	0.60 %	0.60 %	4.63 %	4.70 %	4.70 %
36-40	2,157	0.39 %	0.40 %	0.40 %	4.49 %	4.50 %	4.50 %
Over 40	224	0.45 %	0.40 %	0.40 %	4.55 %	4.50 %	4.50 %
Total	379,979						

\* Sample values are selected from mid-point of service group.

**PUBLIC SCHOOLS**  
**MERIT & LONGEVITY PAY INCREASE ASSUMPTION**

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**Service Based Pay Increase Experience**

Service Group Beginning of Year		Merit/Seniority % Increase			Total % Increase		
		Actual	Expected*		Actual	Expected*	
			Old	New		Old	New
Number							
1-5	56,255	4.97 %	5.80 %	5.50 %	9.07 %	9.90 %	9.60 %
6-10	50,182	3.68 %	3.50 %	3.60 %	7.78 %	7.60 %	7.70 %
11-15	41,462	2.61 %	2.00 %	2.30 %	6.71 %	6.10 %	6.40 %
16-20	30,286	1.20 %	1.20 %	1.20 %	5.30 %	5.30 %	5.30 %
21-25	20,385	0.54 %	0.80 %	0.70 %	4.64 %	4.90 %	4.80 %
26-30	21,440	0.18 %	0.40 %	0.30 %	4.28 %	4.50 %	4.40 %
31-35	12,586	0.01 %	0.10 %	0.30 %	4.11 %	4.20 %	4.40 %
36-40	1,841	(0.34)%	0.10 %	0.20 %	3.76 %	4.20 %	4.30 %
Over 40	194	(0.39)%	0.10 %	0.20 %	3.71 %	4.20 %	4.30 %
Total	234,631						

\* Sample values are selected from mid-point of service group.

**UNIVERSITY  
MERIT & LONGEVITY PAY INCREASE ASSUMPTION**

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**Service Based Pay Increase Experience**

Service Group Beginning of Year		Merit/Seniority % Increase			Total % Increase		
		Actual	Expected*		Actual	Expected*	
			Old	New		Old	New
Number							
1-5	15,435	2.63 %	4.40 %	3.50 %	6.73 %	8.50 %	7.60 %
6-10	10,669	2.36 %	4.10 %	3.00 %	6.46 %	8.20 %	7.10 %
11-15	7,417	1.75 %	2.90 %	2.50 %	5.85 %	7.00 %	6.60 %
16-20	5,913	1.26 %	2.30 %	2.00 %	5.36 %	6.40 %	6.10 %
21-25	4,132	0.85 %	2.10 %	1.50 %	4.95 %	6.20 %	5.60 %
26-30	2,970	0.91 %	2.00 %	1.20 %	5.01 %	6.10 %	5.30 %
31-35	1,761	0.43 %	1.60 %	1.00 %	4.53 %	5.70 %	5.10 %
36-40	686	(0.16)%	0.70 %	0.70 %	3.94 %	4.80 %	4.80 %
Over 40	116	0.01 %	0.60 %	0.60 %	4.11 %	4.70 %	4.70 %
Total	49,099						

\* Sample values are selected from mid-point of service group.

**PROTECTIVE WITH SOCIAL SECURITY  
MERIT & LONGEVITY PAY INCREASE ASSUMPTION**

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**Service Based Pay Increase Experience**

Service Group Beginning of Year		Merit/Seniority % Increase			Total % Increase		
		Actual	Expected*		Actual	Expected*	
			Old	New		Old	New
Number							
1-5	13,614	5.59 %	4.00 %	5.00 %	9.69 %	8.10 %	9.10 %
6-10	13,524	1.61 %	2.00 %	1.80 %	5.71 %	6.10 %	5.90 %
11-15	10,099	0.97 %	1.50 %	1.00 %	5.07 %	5.60 %	5.10 %
16-20	6,981	0.88 %	1.00 %	0.90 %	4.98 %	5.10 %	5.00 %
21-25	4,912	0.75 %	1.00 %	0.80 %	4.85 %	5.10 %	4.90 %
26-30	3,197	1.10 %	1.00 %	0.70 %	5.20 %	5.10 %	4.80 %
31-35	694	0.66 %	0.50 %	0.60 %	4.76 %	4.60 %	4.70 %
36-40	68	0.11 %	0.50 %	0.50 %	4.21 %	4.60 %	4.60 %
Over 40	7	1.77 %	0.50 %	0.40 %	5.87 %	4.60 %	4.50 %
Total	53,096						

\* Sample values are selected from mid-point of service group.

**PROTECTIVE WITHOUT SOCIAL SECURITY  
MERIT & LONGEVITY PAY INCREASE ASSUMPTION**

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**Service Based Pay Increase Experience**

Service Group Beginning of Year		Merit/Seniority % Increase			Total % Increase			
		Number	Actual	Expected*		Actual	Expected*	
				Old	New		Old	New
1-5	1,286	6.03 %	4.50 %	4.75 %	10.13 %	8.60 %	8.85 %	
6-10	1,733	1.60 %	2.00 %	1.55 %	5.70 %	6.10 %	5.65 %	
11-15	1,571	0.92 %	0.50 %	0.75 %	5.02 %	4.60 %	4.85 %	
16-20	1,355	0.77 %	0.50 %	0.65 %	4.87 %	4.60 %	4.75 %	
21-25	1,067	0.78 %	0.50 %	0.55 %	4.88 %	4.60 %	4.65 %	
26-30	682	0.84 %	0.50 %	0.45 %	4.94 %	4.60 %	4.55 %	
31-35	142	0.70 %	0.50 %	0.35 %	4.80 %	4.60 %	4.45 %	
36-40	7	0.09 %	0.50 %	0.25 %	4.19 %	4.60 %	4.35 %	
Over 40	1	(9.15)%	0.50 %	0.15 %	(5.05)%	4.60 %	4.25 %	
Total	7,844							

\* Sample values are selected from mid-point of service group.

**EXECUTIVE AND ELECTED  
MERIT & LONGEVITY PAY INCREASE ASSUMPTION**

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**Service Based Pay Increase Experience**

Service Group		Merit/Seniority % Increase			Total % Increase		
Beginning of Year	Number	Actual	Expected*		Actual	Expected*	
			Old	New		Old	New
1-5	1,207	1.59 %	1.20 %	1.20 %	5.69 %	5.30 %	5.30 %
6-10	627	0.90 %	1.10 %	1.10 %	5.00 %	5.20 %	5.20 %
11-15	545	0.52 %	1.00 %	1.00 %	4.62 %	5.10 %	5.10 %
16-20	517	0.67 %	0.90 %	0.90 %	4.77 %	5.00 %	5.00 %
21-25	429	0.55 %	0.70 %	0.70 %	4.65 %	4.80 %	4.80 %
26-30	363	0.30 %	0.50 %	0.50 %	4.40 %	4.60 %	4.60 %
31-35	162	2.61 %	0.40 %	0.40 %	6.71 %	4.50 %	4.50 %
36-40	37	(0.33)%	0.00 %	0.00 %	3.77 %	4.10 %	4.10 %
Over 40	9	0.11 %	0.00 %	0.00 %	4.21 %	4.10 %	4.10 %
Total	3,896						

\* Sample values are selected from mid-point of service group.

## **SECTION D**

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### **NORMAL & EARLY RETIREMENT EXPERIENCE**



**GENERAL MALES**  
**NORMAL RETIREMENT EXPERIENCE**

**Male Age-Based Retirement Experience**

Age	Retirements	Exposure	Crude Rates	Sample Rates		Expected Retirements	
				Old	New	Old	New
57	252	1,141	0.2209	0.2800	0.2500	319	285
58	209	863	0.2422	0.2800	0.2500	242	216
59	113	635	0.1780	0.2800	0.2500	178	159
60	118	513	0.2300	0.2800	0.2500	144	128
61	82	414	0.1981	0.3000	0.2000	124	83
62	103	340	0.3029	0.4000	0.3500	136	119
63	82	209	0.3923	0.4000	0.3500	84	73
64	30	127	0.2362	0.3500	0.2500	44	32
65	162	879	0.1843	0.3500	0.2500	308	220
66	127	653	0.1945	0.3500	0.2500	229	163
67	55	502	0.1096	0.1500	0.1000	75	50
68	30	435	0.0690	0.1500	0.1000	65	44
69	35	397	0.0882	0.1500	0.1000	60	40
70	21	317	0.0662	0.1500	0.1000	48	32
71	15	261	0.0575	0.1500	0.1000	39	26
72	10	221	0.0452	0.1500	0.1000	33	22
73	8	200	0.0400	0.1500	0.1000	30	20
74	6	170	0.0353	0.1500	0.1000	26	17
Sub Totals	1,463	8,277	0.1768	0.2639	0.2089	2,184	1,729
75 & Over	44	681	0.0646			681	681
Total	1,507	8,958	0.1682			2,865	2,410

	<u>Actual</u>	<u>Proposed</u>
Current	0.1768	0.2089
<b>Previous Investigation Results</b>		
2000-2002	0.2753	0.2820
1997-1999	0.2666	0.2732
1994-1996	0.3297	0.2998

**GENERAL MALES  
EARLY RETIREMENT EXPERIENCE**

**Male Age-Based Early Retirement Experience**

Age	Retirements	Exposure	Crude Rates	Sample Rates		Expected Retirements	
				Old	New	Old	New
55	372	4,969	0.0749	0.0800	0.0750	398	373
56	349	4,604	0.0758	0.0800	0.0750	368	345
57	112	2,967	0.0377	0.0400	0.0400	119	119
58	109	2,437	0.0447	0.0600	0.0500	146	122
59	89	1,936	0.0460	0.0600	0.0500	116	97
60	113	1,610	0.0702	0.0800	0.0750	129	121
61	90	1,452	0.0620	0.0800	0.0700	116	102
62	197	1,253	0.1572	0.2000	0.1800	251	226
63	161	919	0.1752	0.2000	0.1800	184	165
64	99	684	0.1447	0.1500	0.1500	103	103
Totals	1,691	22,831	0.0741	0.0845	0.0777	1,930	1,773

	<u>Actual</u>	<u>Proposed</u>
Current	0.0741	0.0777
<b>Previous Investigation Results</b>		
2000-2002	0.0874	0.0868
1997-1999	0.0755	0.0773
1994-1996	0.0876	0.0876

**GENERAL FEMALES  
NORMAL RETIREMENT EXPERIENCE**

**Female Age-Based Retirement Experience**

Age	Retirements	Exposure	Crude Rates	Sample Rates		Expected Retirements	
				Old	New	Old	New
57	121	727	0.1664	0.2700	0.2000	196	145
58	128	561	0.2282	0.2700	0.2000	151	112
59	81	407	0.1990	0.2500	0.2000	102	81
60	63	331	0.1903	0.2500	0.2000	83	66
61	65	279	0.2330	0.2500	0.2000	70	56
62	50	224	0.2232	0.3000	0.3000	67	67
63	59	155	0.3806	0.3500	0.3000	54	47
64	26	112	0.2321	0.3500	0.2500	39	28
65	344	1,686	0.2040	0.3000	0.2500	506	422
66	295	1,185	0.2489	0.3000	0.2500	356	296
67	121	842	0.1437	0.2000	0.1500	168	126
68	75	699	0.1073	0.1500	0.1000	105	70
69	59	582	0.1014	0.1500	0.1000	87	58
70	61	455	0.1341	0.1500	0.1000	68	46
71	32	347	0.0922	0.1500	0.1000	52	35
72	26	297	0.0875	0.1500	0.1000	45	30
73	20	264	0.0758	0.1500	0.1000	40	26
74	24	214	0.1121	0.1500	0.1000	32	21
Sub Totals	1,661	9,367	0.1773	0.2371	0.1849	2,221	1,732
75 & Over	85	673	0.1263			673	673
Total	1,746	10,040	0.1739			2,894	2,405

	<u>Actual</u>	<u>Proposed</u>
Current	0.1773	0.1849
<b>Previous Investigation Results</b>		
2000-2002	0.2149	0.2378
1997-1999	0.2651	0.3218
1994-1996	0.2890	0.3091

**GENERAL FEMALES  
EARLY RETIREMENT EXPERIENCE**

**Female Age-Based Early Retirement Experience**

Age	Retirements	Exposure	Crude Rates	Sample Rates		Expected Retirements	
				Old	New	Old	New
55	370	7,276	0.0509	0.0600	0.0525	437	382
56	352	6,872	0.0512	0.0600	0.0525	412	361
57	209	5,502	0.0380	0.0500	0.0400	275	220
58	237	4,756	0.0498	0.0500	0.0500	238	238
59	211	4,029	0.0524	0.0500	0.0500	201	201
60	258	3,549	0.0727	0.0800	0.0750	284	266
61	243	3,263	0.0745	0.0800	0.0750	261	245
62	403	2,848	0.1415	0.1800	0.1500	513	427
63	367	2,237	0.1641	0.1800	0.1500	403	336
64	213	1,630	0.1307	0.1400	0.1500	228	245
Totals	2,863	41,962	0.0682	0.0775	0.0696	3,252	2,921

	<u>Actual</u>	<u>Proposed</u>
Current	0.0682	0.0696
<b>Previous Investigation Results</b>		
2000-2002	0.0783	0.0785
1997-1999	0.0879	0.0924
1994-1996	0.0952	0.1026

**PUBLIC SCHOOL MALES  
NORMAL RETIREMENT EXPERIENCE**

**Male Age-Based Retirement Experience**

Age	Retirements	Exposure	Crude Rates	Sample Rates		Expected Retirements	
				Old	New	Old	New
57	490	1,263	0.3880	0.2500	0.4000	316	505
58	336	857	0.3921	0.2500	0.3500	214	300
59	166	527	0.3150	0.2500	0.3000	132	158
60	124	371	0.3342	0.3000	0.3000	111	111
61	80	283	0.2827	0.3500	0.3000	99	85
62	72	211	0.3412	0.6000	0.4000	127	84
63	43	105	0.4095	0.5000	0.4000	53	42
64	12	52	0.2308	0.5000	0.2500	26	13
65	39	151	0.2583	0.7000	0.2500	106	38
66	25	112	0.2232	0.7000	0.2500	78	28
67	11	80	0.1375	0.5000	0.1500	40	12
68	7	49	0.1429	0.5000	0.1500	25	7
69	6	35	0.1714	0.5000	0.2000	18	7
70	5	29	0.1724	0.5000	0.2000	15	6
71	1	29	0.0345	0.5000	0.2000	15	6
72	1	21	0.0476	0.5000	0.2000	11	4
73	-	15	0.0000	0.5000	0.2000	8	3
74	-	10	0.0000	0.5000	0.2000	5	2
Totals	1,418	4,200	0.3376	0.3331	0.3360	1,399	1,411
75 & Over	4	57	0.0702			57	57
Total	1,422	4,257	0.3340			1,456	1,468

	<u>Actual</u>	<u>Proposed</u>
Current	0.3376	0.3360
<b>Previous Investigation Results</b>		
2000-2002	0.3552	0.3371
1997-1999	0.4213	0.3229
1994-1996	0.3149	0.2632

**PUBLIC SCHOOL MALES  
EARLY RETIREMENT EXPERIENCE**

**Male Age-Based Early Retirement Experience**

Age	Retirements	Exposure	Crude Rates	Sample Rates		Expected Retirements	
				Old	New	Old	New
55	613	3,313	0.1850	0.1500	0.1500	497	497
56	523	2,827	0.1850	0.1500	0.1500	424	424
57	93	1,091	0.0852	0.1500	0.1500	164	164
58	87	802	0.1085	0.1500	0.1500	120	120
59	53	570	0.0930	0.1000	0.1000	57	57
60	53	410	0.1293	0.1500	0.1500	62	62
61	50	321	0.1558	0.1500	0.1500	48	48
62	40	242	0.1653	0.2500	0.2500	61	61
63	38	171	0.2222	0.2500	0.2500	43	43
64	18	100	0.1800	0.1500	0.1500	15	15
Totals	1,568	9,847	0.1592	0.1514	0.1514	1,491	1,491

	<u>Actual</u>	<u>Proposed</u>
Current	0.1592	0.1514
<b>Previous Investigation Results</b>		
2000-2002	0.1642	0.1511
1997-1999	0.1034	0.1043
1994-1996	0.1209	0.1028

**PUBLIC SCHOOL FEMALES  
NORMAL RETIREMENT EXPERIENCE**

**Female Age-Based Retirement Experience**

Age	Retirements	Exposure	Crude Rates	Sample Rates		Expected Retirements	
				Old	New	Old	New
57	467	1,399	0.3338	0.3000	0.3000	420	420
58	293	870	0.3368	0.3000	0.3000	261	261
59	151	542	0.2786	0.3000	0.3000	163	163
60	132	391	0.3376	0.3000	0.3000	117	117
61	77	265	0.2906	0.3500	0.3500	93	93
62	63	180	0.3500	0.4000	0.4000	72	72
63	42	132	0.3182	0.3500	0.3500	46	46
64	17	79	0.2152	0.2500	0.2500	20	20
65	137	430	0.3186	0.3000	0.3000	129	129
66	61	266	0.2293	0.2500	0.2500	67	67
67	31	184	0.1685	0.2500	0.2500	46	46
68	27	137	0.1971	0.2000	0.2000	27	27
69	12	94	0.1277	0.2000	0.2000	19	19
70	9	73	0.1233	0.2000	0.2000	15	15
71	5	53	0.0943	0.2000	0.2000	11	11
72	7	41	0.1707	0.2000	0.2000	8	8
73	3	26	0.1154	0.2000	0.2000	5	5
74	1	14	0.0714	0.2000	0.2000	3	3
Totals	1,540	5,176	0.2975	0.2940	0.2940	1,522	1,522
75 & Over	8	63	0.1270			63	63
Total	1,548	5,239	0.2955			1,585	1,585

	<u>Actual</u>	<u>Proposed</u>
Current	0.2975	0.2940
<b>Previous Investigation Results</b>		
2000-2002	0.3024	0.2961
1997-1999	0.3297	0.2617
1994-1996	0.1846	0.2284

**PUBLIC SCHOOL FEMALES  
EARLY RETIREMENT EXPERIENCE**

**Female Age-Based Early Retirement Experience**

Age	Retirements	Exposure	Crude Rates	Sample Rates		Expected Retirements	
				Old	New	Old	New
55	757	6,629	0.1142	0.1100	0.1100	729	729
56	740	5,805	0.1275	0.1100	0.1100	639	639
57	282	3,279	0.0860	0.1100	0.1100	361	361
58	270	2,509	0.1076	0.1200	0.1200	301	301
59	215	1,846	0.1165	0.1200	0.1200	222	222
60	216	1,445	0.1495	0.1500	0.1500	217	217
61	170	1,175	0.1447	0.1500	0.1500	176	176
62	220	861	0.2555	0.2500	0.2500	215	215
63	103	544	0.1893	0.2000	0.2000	109	109
64	74	382	0.1937	0.1500	0.1500	57	57
Totals	3,047	24,475	0.1245	0.1236	0.1236	3,026	3,026

	<u>Actual</u>	<u>Proposed</u>
Current	0.1245	0.1236
<b>Previous Investigation Results</b>		
2000-2002	0.1245	0.1241
1997-1999	0.1110	0.1075
1994-1996	0.1210	0.1067



**UNIVERSITY MALES  
NORMAL RETIREMENT EXPERIENCE**

**Male Age-Based Retirement Experience**

Age	Retirements	Exposure	Crude Rates	Sample Rates		Expected Retirements	
				Old	New	Old	New
57	16	120	0.1333	0.2500	0.2000	30	24
58	24	162	0.1481	0.2000	0.1500	32	24
59	28	177	0.1582	0.2000	0.1500	35	27
60	22	188	0.1170	0.2000	0.1500	38	28
61	37	228	0.1623	0.2000	0.1700	46	39
62	38	235	0.1617	0.2000	0.1700	47	40
63	37	225	0.1644	0.2000	0.1700	45	38
64	24	186	0.1290	0.2000	0.1700	37	32
65	77	331	0.2326	0.2000	0.2000	66	66
66	52	225	0.2311	0.2000	0.2000	45	45
67	26	162	0.1605	0.2000	0.2000	32	32
68	20	124	0.1613	0.2000	0.2000	25	25
69	16	101	0.1584	0.2000	0.2000	20	20
70	16	83	0.1928	0.2000	0.2000	17	17
71	12	54	0.2222	0.2000	0.2000	11	11
72	2	38	0.0526	0.2000	0.2000	8	8
73	6	34	0.1765	0.2000	0.2000	7	7
74	5	30	0.1667	0.2000	0.2000	6	6
Sub Totals	459	2,703	0.1698	0.2024	0.1809	547	489
75 & Over	14	68	0.2059			68	68
Total	473	2,771	0.1707			615	557

	<u>Actual</u>	<u>Proposed</u>
Current	0.1698	0.1809
<b>Previous Investigation Results</b>		
2000-2002	0.2033	0.2022
1997-1999	0.2229	0.2158
1994-1996	0.1643	0.1813

**UNIVERSITY MALES  
EARLY RETIREMENT EXPERIENCE**

**Male Age-Based Early Retirement Experience**

Age	Retirements	Exposure	Crude Rates	Sample Rates		Expected Retirements	
				Old	New	Old	New
55	38	814	0.0467	0.0500	0.0500	41	41
56	47	812	0.0579	0.0500	0.0500	41	41
57	16	688	0.0233	0.0400	0.0300	28	21
58	20	627	0.0319	0.0400	0.0350	25	22
59	18	533	0.0338	0.0500	0.0350	27	19
60	28	461	0.0607	0.0500	0.0550	23	25
61	23	370	0.0622	0.0500	0.0750	19	28
62	27	293	0.0922	0.1000	0.1000	29	29
63	18	221	0.0814	0.1000	0.0900	22	20
64	14	179	0.0782	0.1000	0.0800	18	14
Totals	249	4,998	0.0498	0.0546	0.0520	273	260

	<u>Actual</u>	<u>Proposed</u>
Current	0.0498	0.0520
<b>Previous Investigation Results</b>		
2000-2002	0.0547	0.0541
1997-1999	0.0408	0.0500
1994-1996	0.0534	0.0615

**UNIVERSITY FEMALES  
NORMAL RETIREMENT EXPERIENCE**

**Female Age-Based Retirement Experience**

Age	Retirements	Exposure	Crude Rates	Sample Rates		Expected Retirements	
				Old	New	Old	New
57	12	78	0.1538	0.2000	0.1500	16	12
58	11	69	0.1594	0.2000	0.1500	14	10
59	9	70	0.1286	0.2000	0.1500	14	11
60	9	58	0.1552	0.2000	0.1500	12	9
61	15	58	0.2586	0.2000	0.2500	12	15
62	10	47	0.2128	0.2500	0.2500	12	12
63	7	40	0.1750	0.3000	0.2000	12	8
64	6	33	0.1818	0.3000	0.2000	10	7
65	18	126	0.1429	0.2500	0.2000	32	25
66	21	92	0.2283	0.2500	0.2000	23	18
67	12	60	0.2000	0.2500	0.2000	15	12
68	8	41	0.1951	0.2000	0.2000	8	8
69	6	35	0.1714	0.2000	0.2000	7	7
70	4	27	0.1481	0.2000	0.2000	5	5
71	4	17	0.2353	0.2000	0.2000	3	3
72	2	15	0.1333	0.2000	0.2000	3	3
73	-	12	0.0000	0.2000	0.2000	2	2
74	2	11	0.1818	0.2000	0.2000	2	2
Totals	158	889	0.1777	0.2272	0.1901	202	169
75 & Over	4	19	0.2105			19	19
Total	162	908	0.1784			221	188

	<u>Actual</u>	<u>Proposed</u>
Current	0.1777	0.1901
<b>Previous Investigation Results</b>		
2000-2002	0.1964	0.2296
1997-1999	0.2722	0.0257
1994-1996	0.3002	0.2744

**UNIVERSITY FEMALES  
EARLY RETIREMENT EXPERIENCE**

**Female Age-Based Early Retirement Experience**

Age	Retirements	Exposure	Crude Rates	Sample Rates		Expected Retirements	
				Old	New	Old	New
55	44	713	0.0617	0.0500	0.0600	36	43
56	52	667	0.0780	0.0500	0.0600	33	40
57	21	546	0.0385	0.0500	0.0500	27	27
58	28	504	0.0556	0.0500	0.0600	25	30
59	25	415	0.0602	0.1000	0.0800	42	33
60	32	336	0.0952	0.1000	0.1000	34	34
61	23	259	0.0888	0.1000	0.0750	26	19
62	46	223	0.2063	0.1000	0.1500	22	33
63	19	167	0.1138	0.1000	0.1500	17	25
64	28	132	0.2121	0.1000	0.1500	13	20
Totals	318	3,962	0.0803	0.0694	0.0767	275	304

	<u>Actual</u>	<u>Proposed</u>
Current	0.0803	0.0767
<b>Previous Investigation Results</b>		
2000-2002	0.0667	0.0689
1997-1999	0.0680	0.0750
1994-1996	0.0831	0.0851

**PROTECTIVE WITH SOCIAL SECURITY  
NORMAL RETIREMENT EXPERIENCE**

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**Male and Female Age-Based Retirement Experience**

Age	Retirements	Exposure	Crude Rates	Sample Rates		Expected Retirements	
				Old	New	Old	New
50	82	910	0.0901	0.0600	0.0800	55	73
51	83	855	0.0971	0.0700	0.0800	60	68
52	72	742	0.0970	0.0700	0.0800	52	59
53	155	670	0.2313	0.3800	0.3000	255	201
54	145	838	0.1730	0.2000	0.2000	168	168
55	110	655	0.1679	0.2000	0.2000	131	131
56	80	525	0.1524	0.2500	0.1800	131	95
57	56	430	0.1302	0.2000	0.1800	86	77
58	47	337	0.1395	0.2000	0.1800	67	61
59	40	227	0.1762	0.2000	0.1800	45	41
60	18	136	0.1324	0.2000	0.1800	27	24
61	22	112	0.1964	0.2000	0.1800	22	20
62	13	85	0.1529	0.2000	0.2000	17	17
63	20	71	0.2817	0.3000	0.3000	21	21
64	7	41	0.1707	0.2000	0.2000	8	8
65	10	31	0.3226	0.3000	0.3000	9	9
66	4	15	0.2667	0.2500	0.2500	4	4
67	2	10	0.2000	0.2500	0.2500	3	3
68	3	6	0.5000	0.2500	0.2500	2	2
69	1	4	0.2500	0.2500	0.2500	1	1
70	-	1	0.0000	1.0000	1.0000	1	1
71	-	-	N\A	1.0000	1.0000	-	-
72	-	-	N\A	1.0000	1.0000	-	-
73	-	1	0.0000	1.0000	1.0000	1	1
74	-	-	N\A	1.0000	1.0000	-	-
Totals	970	6,702	0.1447	0.1739	0.1619	1,166	1,085
75 & Over	1	3	0.3333			3	3
Total	971	6,705	0.1448			1,169	1,088

	<u>Actual</u>	<u>Proposed</u>
Current	0.1447	0.1619
<b>Previous Investigation Results</b>		
2000-2002	0.1434	0.1566
1997-1999	0.1715	0.1509
1994-1996	0.1206	0.1541

**PROTECTIVE WITHOUT SOCIAL SECURITY  
NORMAL RETIREMENT EXPERIENCE**

**Male and Female Age-Based Retirement Experience**

Age	Retirements	Exposure	Crude Rates	Sample Rates		Expected Retirements	
				Old	New	Old	New
50	11	206	0.0534	0.0200	0.0300	4	6
51	7	216	0.0324	0.0200	0.0300	4	6
52	10	218	0.0459	0.0900	0.0700	20	15
53	35	186	0.1882	0.3800	0.2500	71	47
54	39	156	0.2500	0.3600	0.3000	56	47
55	27	95	0.2842	0.3600	0.3000	34	29
56	16	60	0.2667	0.3600	0.3000	22	18
57	14	42	0.3333	0.3600	0.3500	15	15
58	5	25	0.2000	0.4000	0.3000	10	8
59	2	12	0.1667	0.3000	0.2000	4	2
60	-	6	0.0000	0.3000	0.2000	2	1
61	-	5	0.0000	0.3000	0.2000	2	1
62	-	3	0.0000	0.1500	0.2000	-	1
63	1	4	0.2500	0.1500	0.2000	1	1
64	1	3	0.3333	0.1500	0.2000	-	1
65	2	2	1.0000	0.4000	0.4000	1	1
66	-	-	N/A	0.4000	0.4000	-	-
67	-	-	N/A	0.4000	0.4000	-	-
68	-	-	N/A	0.4000	0.4000	-	-
69	-	-	N/A	0.4000	0.4000	-	-
70	-	-	N/A	1.0000	1.0000	-	-
71	-	-	N/A	1.0000	1.0000	-	-
72	-	-	N/A	1.0000	1.0000	-	-
73	-	-	N/A	1.0000	1.0000	-	-
74	-	-	N/A	1.0000	1.0000	-	-
Totals	170	1,239	0.1372	0.1983	0.1606	246	199
75 & Over	-	-	N/A			-	-
Total	170	1,239	0.1372			246	199

	<u>Actual</u>	<u>Proposed</u>
Current	0.1372	0.1606
<b>Previous Investigation Results</b>		
2000-2002	0.1870	0.1863
1997-1999	0.1989	0.1679
1994-1996	0.1504	0.1652

**EXECUTIVE AND ELECTIVE  
NORMAL RETIREMENT EXPERIENCE**

**Male and Female Age-Based Retirement Experience**

Age	Retirements	Exposure	Crude Rates	Sample Rates		Expected Retirements	
				Old	New	Old	New
57	5	30	0.1667	0.0800	0.1500	2	4
58	3	20	0.1500	0.0800	0.1500	2	3
59	3	16	0.1875	0.1200	0.1500	2	2
60	2	15	0.1333	0.1400	0.1500	2	2
61	3	14	0.2143	0.3500	0.1500	5	2
62	13	126	0.1032	0.1000	0.1000	13	13
63	8	93	0.0860	0.1000	0.1000	9	9
64	10	88	0.1136	0.1000	0.1000	9	9
65	12	84	0.1429	0.1000	0.1000	8	8
66	14	70	0.2000	0.2000	0.2000	14	14
67	7	49	0.1429	0.2000	0.2000	10	10
68	2	38	0.0526	0.2000	0.2000	8	8
69	5	45	0.1111	0.2000	0.2000	9	9
70	2	40	0.0500	0.1000	0.1000	4	4
71	2	32	0.0625	0.1000	0.1000	3	3
72	4	25	0.1600	0.1000	0.1000	3	3
73	3	25	0.1200	0.1000	0.1000	3	3
74	3	29	0.1034	0.1000	0.1000	3	3
Totals	101	839	0.1204	0.1298	0.1299	109	109
75 & Over	11	103	0.1068			103	103
Total	112	942	0.1189			212	212

	<u>Actual</u>	<u>Proposed</u>
Current	0.1204	0.1299
<b>Previous Investigation Results</b>		
2000-2002	0.0972	0.1769
1997-1999	0.1221	0.1769
1994-1996	0.1408	0.1801



**EXECUTIVE AND ELECTIVE  
EARLY RETIREMENT EXPERIENCE**

**Male and Female Age-Based Early Retirement Experience**

Age	Retirements	Exposure	Crude Rates	Sample Rates		Expected Retirements	
				Old	New	Old	New
55	7	170	0.0412	0.0500	0.0500	9	10
56	15	172	0.0872	0.0500	0.0600	9	10
57	5	137	0.0365	0.0400	0.0400	5	5
58	7	121	0.0579	0.0400	0.0400	5	5
59	5	116	0.0431	0.0400	0.0400	5	5
60	8	110	0.0727	0.0400	0.0600	4	7
61	8	99	0.0808	0.0400	0.0600	4	6
62	-	-	N\A	0.0400	0.0400	-	1
63	-	-	N\A	0.0400	0.0400	-	1
64	-	-	N\A	0.0400	0.0400	-	1
Totals	55	925	0.0595	0.0443	0.0551	41	51

	<u>Actual</u>	<u>Proposed</u>
Current	0.0595	0.0551
<b>Previous Investigation Results</b>		
2000-2002	0.0411	0.0437
1997-1999	0.0490	0.0600
1994-1996	0.5350	0.0600

## **SECTION E**

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### **MORTALITY EXPERIENCE**

**MALE RETIRED-LIFE MORTALITY EXPERIENCE  
(NORMAL RETIREMENT, ORIGINAL ANNUITANTS ONLY)**

Age	Life Years Exposure	Post - Retirement Death			Post - Retirement Death Rates			A/E Ratio	
		Actual Experience	Expected		Actual	Expected		Present	Proposed
			Present	Proposed		Present	Proposed		
55-59	23,390	124.0	129.0	131.0	0.0053	0.0055	0.0056	0.9612	0.9466
60-64	31,898	234.0	274.0	248.0	0.0073	0.0086	0.0078	0.8540	0.9435
65-69	30,826	399.0	472.0	405.0	0.0129	0.0153	0.0131	0.8453	0.9852
70-74	27,443	610.0	763.0	630.0	0.0222	0.0278	0.0230	0.7995	0.9683
75-79	21,684	917.0	1,013.0	923.0	0.0423	0.0467	0.0426	0.9052	0.9935
80-84	14,133	1,035.0	1,128.0	1,037.0	0.0732	0.0798	0.0734	0.9176	0.9981
85-89	6,777	849.0	851.0	841.0	0.1253	0.1256	0.1241	0.9976	1.0095
90-94	2,274	473.0	418.0	453.0	0.2080	0.1838	0.1992	1.1316	1.0442
95-99	420	120.0	109.0	118.0	0.2857	0.2595	0.2810	1.1009	1.0169
<b>Totals</b>	<b>161,932</b>	<b>4,787</b>	<b>5,169</b>	<b>4,798</b>	<b>0.0296</b>	<b>0.0319</b>	<b>0.0296</b>	<b>0.9261</b>	<b>0.9977</b>

Current	0.0296	0.0296
<b>Previous Investigation Results</b>		
2000-2002	0.0322	0.0356
1997-1999	0.0352	
1994-1996	0.0375	
1991-1993	0.0365	
1988-1990	0.0372	
1985-1987	0.0393	
1982-1984	0.0430	
1979-1981	0.0489	

**FEMALE RETIRED-LIFE MORTALITY EXPERIENCE  
(NORMAL RETIREMENT, ORIGINAL ANNUITANTS ONLY)**

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Age	Life Years Exposure	Post - Retirement Death			Post - Retirement Death Rates			A/E Ratio	
		Actual Experience	Expected		Actual	Expected		Present	Proposed
			Present	Proposed		Present	Proposed		
55-59	21,786	81	57.0	77.0	0.0037	0.0026	0.0035	1.4211	1.0519
60-64	31,413	149	139.0	162.0	0.0047	0.0044	0.0052	1.0719	0.9198
65-69	33,711	252	253.0	264.0	0.0075	0.0075	0.0078	0.9960	0.9545
70-74	30,176	404	439.0	415.0	0.0134	0.0145	0.0138	0.9203	0.9735
75-79	26,584	633	747.0	643.0	0.0238	0.0281	0.0242	0.8474	0.9844
80-84	21,427	937	1,067.0	947.0	0.0437	0.0498	0.0442	0.8782	0.9894
85-89	13,956	1,145	1,179.0	1,147.0	0.0820	0.0845	0.0822	0.9712	0.9983
90-94	6,707	992	956.0	966.0	0.1479	0.1425	0.1440	1.0377	1.0269
95-99	2,061	472	495.0	475.0	0.2290	0.2402	0.2305	0.9535	0.9937
<b>Totals</b>	<b>187,821</b>	<b>5,065</b>	<b>5,332</b>	<b>5,096.0</b>	<b>0.0270</b>	<b>0.0284</b>	<b>0.0271</b>	<b>0.9499</b>	<b>0.9939</b>

Current	0.0270	0.0271
<b>Previous Investigation Results</b>		
2000-2002	0.0320	0.0314
1997-1999	0.0330	
1994-1996	0.0321	
1991-1993	0.0302	
1988-1990	0.0295	
1985-1987	0.0284	
1982-1984	0.0267	
1979-1981	0.0273	

**MALE RETIRED-LIFE MORTALITY EXPERIENCE  
(DISABLED RETIREMENT, ORIGINAL ANNUITANTS ONLY)**

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Age	Life Years Exposure	Post - Retirement Death			Post - Retirement Death Rates			A/E R
		Actual Experience	Expected		Actual	Expected		
			Present	Proposed		Present	Proposed	Present
50-54	1,054	32	10.0	8.0	0.0304	0.0094	0.0080	3.2000
55-59	1,489	45	22.0	20.0	0.0302	0.0145	0.0132	2.0455
60-64	1,461	38	33.0	26.0	0.0260	0.0229	0.0178	1.1515
65-69	1,359	48	56.0	43.0	0.0353	0.0412	0.0313	0.8571
70-74	1,110	61	84.0	59.0	0.0550	0.0760	0.0535	0.7262
75-79	752	77	95.0	77.0	0.1024	0.1269	0.1028	0.8105
80-84	461	59	102.0	82.0	0.1280	0.2208	0.1780	0.5784
85-89	151	22	53.0	46.0	0.1457	0.3497	0.3062	0.4151
90-94	23	7	12.0	12.0	0.3043	0.5223	0.5082	0.5833
95-99	8	2	6.0	6.0	0.2500	0.7419	0.6991	0.3333
100 & Up	20	0	21.0	18.0	0.0000	1.0374	0.9092	0.0000
<b>Totals</b>	<b>7,888</b>	<b>391</b>	<b>494.0</b>	<b>397.0</b>	<b>0.0496</b>	<b>0.0626</b>	<b>0.0503</b>	<b>0.7915</b>

**FEMALE RETIRED-LIFE MORTALITY EXPERIENCE  
(DISABLED RETIREMENT, ORIGINAL ANNUITANTS ONLY)**

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Age	Life Years Exposure	Post - Retirement Death			Post - Retirement Death Rates			A/E Ratio	
		Actual Experience	Expected		Actual	Expected		Present	Proposed
			Present	Proposed		Present	Proposed		
50-54	1,434	38	7.0	5.0	0.0265	0.0049	0.0037	5.4286	7.6000
55-59	1,829	41	14.0	14.0	0.0224	0.0077	0.0079	2.9286	2.9286
60-64	1,767	50	24.0	21.0	0.0283	0.0134	0.0116	2.0833	2.3810
65-69	1,588	44	36.0	28.0	0.0277	0.0229	0.0174	1.2222	1.5714
70-74	1,356	44	60.0	43.0	0.0324	0.0446	0.0314	0.7333	1.0233
75-79	1,017	46	88.0	57.0	0.0452	0.0869	0.0560	0.5227	0.8070
80-84	586	38	90.0	59.0	0.0648	0.1543	0.1015	0.4222	0.6441
85-89	293	23	78.0	56.0	0.0785	0.2653	0.1905	0.2949	0.4107
90-94	104	20	47.0	36.0	0.1923	0.4545	0.3433	0.4255	0.5556
95-99	27	4	21.0	14.0	0.1481	0.7742	0.5320	0.1905	0.2857
100 & Up	23	0	27.0	20.0	0.0000	1.1825	0.8693	0.0000	0.0000
<b>Totals</b>	<b>10,024</b>	<b>348</b>	<b>492.0</b>	<b>353.0</b>	<b>0.0347</b>	<b>0.0491</b>	<b>0.0352</b>	<b>0.7073</b>	<b>0.9858</b>

## MALE DEATH-IN-SERVICE EXPERIENCE

Age	Deaths	Exposure	Crude Rates	Sample Rates*		Expected Deaths	
				Old	New	Old	New
Under 20	-	231	0.0000	0.0001	0.0002	-	-
20-24	1	6,778	0.0001	0.0002	0.0003	1	2
25-29	8	22,425	0.0004	0.0002	0.0004	4	8
30-34	7	32,075	0.0002	0.0003	0.0004	9	14
35-39	22	37,017	0.0006	0.0004	0.0005	14	17
40-44	29	42,739	0.0007	0.0006	0.0006	25	28
45-49	49	49,382	0.0010	0.0011	0.0010	54	49
50-54	107	54,629	0.0020	0.0019	0.0017	103	92
55-59	102	38,083	0.0027	0.0029	0.0027	108	101
60-64	51	14,010	0.0036	0.0046	0.0037	62	52
65-69	21	3,972	0.0053	0.0082	0.0065	32	25
70-74	12	1,497	0.0080	0.0152	0.0112	22	17
75 and over	13	785	0.0166	0.0254	0.0214	22	19
Totals	422	303,623	0.0014	0.0015	0.0014	456	424

\* Sample rates are taken from midpoint of age group.

## FEMALE DEATH-IN-SERVICE EXPERIENCE

Age	Deaths	Exposure	Crude Rates	Sample Rates*		Expected Deaths	
				Old	New	Old	New
Under 20	1	647	0.0015	0.0001	0.0001	-	-
20-24	2	12,306	0.0002	0.0001	0.0001	1	1
25-29	6	39,076	0.0002	0.0001	0.0001	5	4
30-34	6	46,469	0.0001	0.0002	0.0002	8	7
35-39	18	55,941	0.0003	0.0002	0.0002	14	13
40-44	27	70,739	0.0004	0.0004	0.0003	26	25
45-49	58	82,035	0.0007	0.0005	0.0005	45	41
50-54	93	86,989	0.0011	0.0008	0.0008	72	72
55-59	75	59,569	0.0013	0.0013	0.0017	75	97
60-64	49	22,705	0.0022	0.0022	0.0025	49	56
65-69	12	5,650	0.0021	0.0038	0.0038	21	21
70-74	6	1,707	0.0035	0.0074	0.0068	12	11
75 and over	7	667	0.0105	0.0145	0.0122	11	9
Totals	360	484,500	0.0007	0.0007	0.0007	339	357

\* Sample rates are taken from midpoint of age group.



## **SECTION F**

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### **COMPLETE LISTS OF PROPOSED DECREMENT ASSUMPTIONS**

**ACTUAL ASSUMPTIONS  
BASED ON 2003-2005 EXPERIENCE STUDY**

**Select and Ultimate Withdrawal**

Age	Service	% of Active Participants Withdrawing								
		General		Public Schools		University		Protective		Executive & Elected
		Male	Female	Male	Female	Male	Female	With SS	Without SS	
	0-1	21.0%	20.0%	14.0%	11.0%	20.0%	20.0%	12.0%	5.0%	16.0%
	1-2	13.0%	14.0%	11.0%	9.0%	16.0%	17.0%	6.5%	3.0%	14.0%
	2-3	9.5%	10.0%	7.0%	7.0%	13.0%	14.0%	4.5%	2.0%	12.0%
	3-4	7.5%	8.0%	5.2%	6.0%	11.0%	12.0%	4.1%	1.5%	10.0%
	4-5	5.5%	7.0%	4.0%	5.0%	9.0%	10.0%	3.2%	1.4%	9.5%
	5-6	4.5%	6.0%	3.2%	4.3%	7.5%	9.0%	3.0%	1.3%	9.0%
	6-7	4.0%	5.0%	2.7%	3.8%	6.0%	8.0%	2.7%	1.2%	8.5%
	7-8	3.8%	4.5%	2.5%	3.2%	5.0%	7.0%	2.5%	1.1%	8.0%
	8-9	3.5%	4.3%	2.3%	2.7%	4.0%	6.3%	2.3%	1.0%	7.5%
	9-10	3.2%	4.0%	2.0%	2.5%	3.5%	5.5%	2.0%	0.9%	7.0%
Under 30	10 & Up	3.0%	3.7%	1.8%	2.2%	3.5%	5.5%	2.0%	0.8%	7.0%
31		3.0%	3.6%	1.7%	2.1%	3.5%	5.5%	2.0%	0.8%	7.0%
32		3.0%	3.5%	1.6%	2.0%	3.5%	5.5%	2.0%	0.8%	7.0%
33		2.9%	3.4%	1.5%	1.9%	3.5%	5.5%	1.9%	0.8%	7.0%
34		2.7%	3.3%	1.5%	1.8%	3.5%	5.5%	1.8%	0.8%	7.0%
35		2.6%	3.2%	1.4%	1.8%	3.5%	5.5%	1.8%	0.8%	7.0%
36		2.4%	3.1%	1.4%	1.7%	3.5%	5.5%	1.7%	0.8%	7.0%
37		2.3%	3.0%	1.3%	1.6%	3.5%	5.5%	1.6%	0.8%	7.0%
38		2.2%	2.9%	1.3%	1.5%	3.4%	5.2%	1.5%	0.8%	6.6%
39		2.1%	2.8%	1.2%	1.5%	3.4%	5.0%	1.5%	0.8%	6.2%
40		2.0%	2.7%	1.2%	1.4%	3.4%	4.7%	1.4%	0.8%	5.8%
41		1.9%	2.6%	1.2%	1.4%	3.3%	4.5%	1.4%	0.8%	5.4%
42		1.8%	2.5%	1.2%	1.3%	3.2%	4.2%	1.3%	0.8%	5.0%
43		1.7%	2.4%	1.1%	1.3%	3.1%	3.9%	1.3%	0.8%	4.9%
44		1.6%	2.3%	1.1%	1.2%	3.0%	3.6%	1.2%	0.8%	4.8%
45		1.6%	2.2%	1.1%	1.2%	2.8%	3.4%	1.2%	0.7%	4.7%
46		1.5%	2.1%	1.0%	1.1%	2.6%	3.1%	1.1%	0.7%	4.6%
47		1.4%	2.0%	1.0%	1.1%	2.5%	2.8%	1.1%	0.7%	4.5%
48		1.4%	2.0%	1.0%	1.1%	2.3%	2.6%	1.1%	0.7%	4.4%
49		1.4%	1.9%	1.0%	1.1%	2.1%	2.3%	1.1%	0.7%	4.3%
50		1.3%	1.9%	0.9%	1.0%	1.9%	2.1%	1.0%	0.7%	4.2%
51		1.3%	1.8%	0.9%	1.0%	1.7%	1.8%	1.0%	0.7%	4.1%
52		1.3%	1.8%	0.9%	1.0%	1.5%	1.6%	1.0%	0.7%	4.0%
53		1.3%	1.8%	0.9%	1.0%	1.5%	1.6%	1.0%	0.7%	4.0%
54		1.3%	1.8%	0.9%	1.0%	1.5%	1.6%	1.0%	0.7%	4.0%

**ACTUAL ASSUMPTIONS  
BASED ON 2003-2005 EXPERIENCE STUDY**

**Disability Rates**

Age	% of Active Participants Withdrawing								Executive & Elected
	General		Public Schools		University		Protective		
	Male	Female	Male	Female	Male	Female	With SS	Without SS	
20	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.02%	0.05%	0.00%
21	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.02%	0.05%	0.00%
22	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.02%	0.05%	0.00%
23	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.02%	0.05%	0.00%
24	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.02%	0.05%	0.00%
25	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.02%	0.05%	0.00%
26	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.02%	0.05%	0.00%
27	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.02%	0.05%	0.00%
28	0.01%	0.03%	0.01%	0.01%	0.01%	0.01%	0.02%	0.05%	0.00%
29	0.01%	0.03%	0.01%	0.01%	0.01%	0.01%	0.02%	0.05%	0.00%
30	0.01%	0.04%	0.01%	0.01%	0.01%	0.01%	0.02%	0.05%	0.00%
31	0.01%	0.04%	0.01%	0.01%	0.01%	0.01%	0.02%	0.05%	0.00%
32	0.01%	0.04%	0.01%	0.01%	0.01%	0.01%	0.02%	0.05%	0.00%
33	0.01%	0.04%	0.01%	0.01%	0.01%	0.02%	0.02%	0.05%	0.00%
34	0.01%	0.05%	0.01%	0.01%	0.01%	0.03%	0.03%	0.05%	0.00%
35	0.02%	0.05%	0.01%	0.01%	0.01%	0.04%	0.03%	0.05%	0.01%
36	0.02%	0.05%	0.01%	0.01%	0.01%	0.05%	0.04%	0.05%	0.01%
37	0.03%	0.05%	0.01%	0.01%	0.01%	0.05%	0.04%	0.05%	0.01%
38	0.04%	0.06%	0.01%	0.01%	0.01%	0.05%	0.04%	0.06%	0.01%
39	0.05%	0.07%	0.02%	0.02%	0.01%	0.05%	0.04%	0.07%	0.01%
40	0.05%	0.07%	0.02%	0.02%	0.01%	0.06%	0.05%	0.08%	0.01%
41	0.07%	0.08%	0.03%	0.04%	0.01%	0.06%	0.05%	0.08%	0.02%
42	0.08%	0.08%	0.03%	0.04%	0.01%	0.07%	0.05%	0.09%	0.02%
43	0.09%	0.09%	0.04%	0.06%	0.02%	0.06%	0.06%	0.11%	0.02%
44	0.10%	0.10%	0.05%	0.07%	0.02%	0.05%	0.06%	0.13%	0.02%
45	0.10%	0.10%	0.05%	0.08%	0.03%	0.05%	0.07%	0.14%	0.02%
46	0.11%	0.10%	0.06%	0.11%	0.04%	0.05%	0.07%	0.16%	0.03%
47	0.11%	0.10%	0.06%	0.13%	0.04%	0.05%	0.08%	0.18%	0.03%
48	0.15%	0.12%	0.08%	0.13%	0.04%	0.07%	0.09%	0.40%	0.03%
49	0.19%	0.13%	0.10%	0.14%	0.04%	0.08%	0.10%	0.61%	0.03%
50	0.22%	0.15%	0.14%	0.16%	0.05%	0.10%	0.11%	0.83%	0.04%
51	0.26%	0.16%	0.18%	0.17%	0.06%	0.11%	0.12%	1.04%	0.04%
52	0.30%	0.18%	0.22%	0.18%	0.06%	0.13%	0.13%	1.26%	0.05%
53	0.34%	0.21%	0.23%	0.19%	0.09%	0.13%	0.66%	1.04%	0.09%
54	0.38%	0.25%	0.24%	0.22%	0.12%	0.14%	1.20%	0.83%	0.12%
55	0.43%	0.28%	0.26%	0.23%	0.15%	0.15%	1.73%	0.61%	0.15%
56	0.49%	0.30%	0.28%	0.25%	0.17%	0.16%	2.27%	0.40%	0.18%
57	0.53%	0.34%	0.29%	0.28%	0.20%	0.17%	2.80%	0.18%	0.20%
58	0.59%	0.36%	0.34%	0.30%	0.20%	0.19%	2.84%	0.18%	0.19%
59	0.65%	0.37%	0.39%	0.32%	0.20%	0.20%	2.88%	0.18%	0.19%
60	0.77%	0.39%	0.43%	0.34%	0.20%	0.23%	2.92%	0.18%	0.19%

**ACTUAL ASSUMPTIONS  
BASED ON 2003-2005 EXPERIENCE STUDY**

**Salary Scale – Service Based Rates**

Service	% Merit Increases in Salaries Next Year					
	General (Not Including Schools)	University Teachers	Public School Teachers	Protective With SS	Protective Without SS	Executive & Elected
1	3.5%	3.5%	5.5%	5.0%	5.0%	1.2%
2	3.5%	3.5%	5.5%	5.0%	5.0%	1.2%
3	3.2%	3.4%	5.1%	4.4%	4.4%	1.2%
4	2.9%	3.3%	4.7%	3.7%	3.7%	1.2%
5	2.6%	3.2%	4.4%	3.1%	3.1%	1.1%
6	2.3%	3.1%	4.0%	2.4%	2.4%	1.1%
7	2.0%	3.0%	3.6%	1.8%	1.8%	1.1%
8	1.9%	2.9%	3.3%	1.6%	1.6%	1.1%
9	1.8%	2.9%	3.1%	1.6%	1.6%	1.1%
10	1.6%	2.9%	2.8%	1.6%	1.6%	1.0%
11	1.5%	2.9%	2.6%	1.6%	1.6%	1.0%
12	1.4%	2.5%	2.3%	1.0%	1.0%	1.0%
13	1.4%	2.4%	2.1%	1.0%	1.0%	1.0%
14	1.3%	2.4%	1.9%	1.0%	1.0%	1.0%
15	1.3%	2.4%	1.6%	1.0%	1.0%	0.9%
16	1.2%	2.4%	1.4%	1.0%	1.0%	0.9%
17	1.2%	2.0%	1.2%	0.9%	0.9%	0.9%
18	1.2%	1.9%	1.1%	0.9%	0.9%	0.9%
19	1.1%	1.9%	1.0%	0.9%	0.9%	0.8%
20	1.1%	1.9%	0.9%	0.9%	0.9%	0.8%
21	1.0%	1.9%	0.8%	0.9%	0.9%	0.7%
22	1.0%	1.5%	0.7%	0.8%	0.8%	0.7%
23	1.0%	1.4%	0.6%	0.8%	0.8%	0.7%
24	0.9%	1.4%	0.5%	0.8%	0.8%	0.6%
25	0.9%	1.3%	0.5%	0.7%	0.7%	0.6%
26	0.9%	1.3%	0.4%	0.7%	0.7%	0.5%
27	0.8%	1.2%	0.3%	0.7%	0.7%	0.5%
28	0.8%	1.2%	0.3%	0.7%	0.7%	0.5%
29	0.7%	1.2%	0.3%	0.7%	0.7%	0.5%
30	0.7%	1.2%	0.3%	0.7%	0.7%	0.4%
31	0.6%	1.2%	0.3%	0.7%	0.7%	0.4%
32	0.6%	1.0%	0.3%	0.6%	0.6%	0.4%
33	0.6%	0.9%	0.3%	0.6%	0.6%	0.3%
34	0.5%	0.9%	0.3%	0.6%	0.6%	0.2%
35	0.5%	0.8%	0.2%	0.5%	0.5%	0.2%
36	0.4%	0.8%	0.2%	0.5%	0.5%	0.1%
37	0.4%	0.7%	0.2%	0.5%	0.5%	0.0%
38	0.4%	0.7%	0.2%	0.5%	0.5%	0.0%
39	0.4%	0.7%	0.2%	0.5%	0.5%	0.0%
40	0.4%	0.6%	0.2%	0.4%	0.4%	0.0%

**ACTUAL ASSUMPTIONS  
BASED ON 2003-2005 EXPERIENCE STUDY**

**Normal Retirement Pattern**

Age	% of Active Participants Retiring								
	General		Public Schools		University		Protective		Executive & Elected
	Male	Female	Male	Female	Male	Female	With SS *	Without SS *	
50	%						8%	3%	
51							8%	3%	
52							8%	7%	
53							30%	25%	
54							20%	30%	
55							20%	30%	
56							18%	30%	
57	25%	20%	40%	30%	20%	15%	18%	35%	4%
58	25%	20%	35%	30%	15%	15%	18%	30%	4%
59	25%	20%	30%	30%	15%	15%	18%	20%	4%
60	25%	20%	30%	30%	15%	15%	18%	20%	6%
61	20%	20%	30%	35%	17%	25%	18%	20%	6%
62	35%	30%	40%	40%	17%	25%	20%	20%	4%
63	35%	30%	40%	35%	17%	20%	30%	20%	4%
64	25%	25%	25%	25%	17%	20%	20%	20%	4%
65	25%	25%	25%	30%	20%	20%	30%	40%	4%
66	25%	25%	25%	25%	20%	20%	25%	40%	4%
67	10%	15%	15%	25%	20%	20%	25%	40%	4%
68	10%	10%	15%	20%	20%	20%	25%	40%	4%
69	10%	10%	20%	20%	20%	20%	25%	40%	4%
70	10%	10%	20%	20%	20%	20%	100%	100%	4%
71	10%	10%	20%	20%	20%	20%	100%	100%	100%
72	10%	10%	20%	20%	20%	20%	100%	100%	100%
73	10%	10%	20%	20%	20%	20%	100%	100%	100%
74	10%	10%	20%	20%	20%	20%	100%	100%	100%
75	100%	100%	100%	100%	100%	100%	100%	100%	100%

\* Includes Early Retirement.

**ACTUAL ASSUMPTIONS  
BASED ON 2003-2005 EXPERIENCE STUDY**

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**Early Retirement Pattern**

Age	% of Active Participants Retiring						
	General		Public Schools		University		Executive & Elected
	Male	Female	Male	Female	Male	Female	
55	8%	5%	15%	11%	5%	6%	6%
56	8%	5%	15%	11%	5%	6%	6%
57	4%	4%	15%	11%	3%	5%	4%
58	5%	5%	15%	12%	4%	6%	4%
59	5%	5%	10%	12%	4%	8%	4%
60	8%	8%	15%	15%	5%	10%	6%
61	7%	8%	15%	15%	8%	8%	6%
62	18%	15%	25%	25%	10%	15%	4%
63	18%	15%	25%	20%	9%	15%	4%
64	15%	15%	15%	15%	8%	15%	4%

**ACTUAL ASSUMPTIONS  
BASED ON 2003-2005 EXPERIENCE STUDY**

**Mortality Rates – Healthy Lives**

Age	% Dying Next Year		Age	% Dying Next Year		Age	% Dying Next Year	
	Male	Female		Male	Female		Male	Female
20	0.0517%	0.0154%	60	0.6750%	0.4347%	100	34.2818%	32.8129%
21	0.0541%	0.0154%	61	0.7165%	0.4662%	101	36.0656%	35.4510%
22	0.0567%	0.0154%	62	0.7436%	0.5050%	102	37.8828%	37.7942%
23	0.0601%	0.0157%	63	0.8262%	0.5511%	103	39.0701%	39.8425%
24	0.0636%	0.0162%	64	0.9235%	0.6044%	104	39.9843%	41.5958%
25	0.0674%	0.0170%	65	1.0355%	0.6650%	105	40.5844%	43.0543%
26	0.0710%	0.0181%	66	1.1622%	0.7329%	106	40.8000%	44.2178%
27	0.0742%	0.0188%	67	1.3036%	0.7575%	107	40.8000%	45.0864%
28	0.0769%	0.0198%	68	1.4596%	0.8415%	108	40.8000%	47.1252%
29	0.0795%	0.0209%	69	1.6304%	0.9441%	109	40.8000%	49.2569%
30	0.0817%	0.0229%	70	1.8158%	1.0653%	110	40.8000%	51.1506%
31	0.0837%	0.0275%	71	2.0159%	1.2051%	111	40.8000%	52.5064%
32	0.0856%	0.0313%	72	2.2307%	1.3635%	112	40.8000%	53.0250%
33	0.0865%	0.0347%	73	2.5720%	1.5405%	113	40.8000%	53.0250%
34	0.0866%	0.0378%	74	2.9339%	1.7360%	114	40.8000%	53.0250%
35	0.0868%	0.0406%	75	3.3399%	1.9501%	115	40.8000%	53.0250%
36	0.0879%	0.0433%	76	3.7899%	2.1828%	116	40.8000%	53.0250%
37	0.0909%	0.0460%	77	4.2840%	2.4341%	117	40.8000%	53.0250%
38	0.0958%	0.0489%	78	4.8222%	2.6571%	118	40.8000%	53.0250%
39	0.1019%	0.0522%	79	5.4044%	2.9848%	119	40.8000%	53.0250%
40	0.1093%	0.0569%	80	6.0306%	3.3867%	120	100.0000%	100.0000%
41	0.1179%	0.0623%	81	6.7010%	3.8630%			
42	0.1277%	0.0686%	82	7.4154%	4.4137%			
43	0.1379%	0.0754%	83	8.2755%	5.0387%			
44	0.1487%	0.0828%	84	9.2094%	5.7380%			
45	0.1610%	0.0891%	85	10.2681%	6.5117%			
46	0.1756%	0.0955%	86	11.4517%	7.3597%			
47	0.1937%	0.1010%	87	12.7602%	8.2820%			
48	0.2144%	0.1034%	88	14.1935%	9.4883%			
49	0.2373%	0.1107%	89	15.7517%	10.7561%			
50	0.2631%	0.1228%	90	17.4347%	12.0853%			
51	0.2929%	0.1398%	91	19.2425%	13.4758%			
52	0.3335%	0.1616%	92	21.1752%	14.9278%			
53	0.3771%	0.1883%	93	22.7321%	16.4412%			
54	0.4204%	0.2198%	94	24.2817%	18.0160%			
55	0.4634%	0.2561%	95	25.8648%	19.6522%			
56	0.5062%	0.2973%	96	27.4812%	21.3498%			
57	0.5488%	0.3434%	97	29.1312%	23.1290%			
58	0.5911%	0.3935%	98	30.8146%	26.6519%			
59	0.6331%	0.4105%	99	32.5315%	29.8798%			

**ACTUAL ASSUMPTIONS  
BASED ON 2003-2005 EXPERIENCE STUDY**

**Mortality Rates – Disabled Lives**

Age	% Dying Next Year		Age	% Dying Next Year		Age	% Dying Next Year	
	Male	Female		Male	Female		Male	Female
20	0.1241%	0.0354%	60	1.6200%	0.9998%	100	82.2763%	75.4697%
21	0.1298%	0.0354%	61	1.7196%	1.0723%	101	86.5574%	81.5373%
22	0.1361%	0.0354%	62	1.7846%	1.1615%	102	90.9187%	86.9267%
23	0.1442%	0.0361%	63	1.9829%	1.2675%	103	93.7682%	91.6378%
24	0.1526%	0.0373%	64	2.2164%	1.3901%	104	95.9623%	95.6703%
25	0.1618%	0.0391%	65	2.4852%	1.5295%	105	97.4026%	99.0249%
26	0.1704%	0.0416%	66	2.7893%	1.6857%	106	97.9200%	101.7009%
27	0.1781%	0.0432%	67	3.1286%	1.7423%	107	97.9200%	103.6987%
28	0.1846%	0.0455%	68	3.5030%	1.9354%	108	97.9200%	108.3880%
29	0.1908%	0.0481%	69	3.9130%	2.1714%	109	100.0000%	100.0000%
30	0.1961%	0.0527%	70	4.3579%	2.4502%	110	100.0000%	100.0000%
31	0.2009%	0.0632%	71	4.8382%	2.7717%	111	100.0000%	100.0000%
32	0.2054%	0.0720%	72	5.3537%	3.1361%	112	100.0000%	100.0000%
33	0.2076%	0.0798%	73	6.1728%	3.5432%	113	100.0000%	100.0000%
34	0.2078%	0.0869%	74	7.0414%	3.9928%	114	100.0000%	100.0000%
35	0.2083%	0.0934%	75	8.0158%	4.4852%	115	100.0000%	100.0000%
36	0.2110%	0.0996%	76	9.0958%	5.0204%	116	100.0000%	100.0000%
37	0.2182%	0.1058%	77	10.2816%	5.5984%	117	100.0000%	100.0000%
38	0.2299%	0.1125%	78	11.5733%	6.1113%	118	100.0000%	100.0000%
39	0.2446%	0.1201%	79	12.9706%	6.8650%	119	100.0000%	100.0000%
40	0.2623%	0.1309%	80	14.4734%	7.7894%	120	100.0000%	100.0000%
41	0.2830%	0.1433%	81	16.0824%	8.8849%			
42	0.3065%	0.1578%	82	17.7970%	10.1515%			
43	0.3310%	0.1734%	83	19.8612%	11.5890%			
44	0.3569%	0.1904%	84	22.1026%	13.1974%			
45	0.3864%	0.2049%	85	24.6434%	14.9769%			
46	0.4214%	0.2196%	86	27.4841%	16.9273%			
47	0.4649%	0.2323%	87	30.6245%	19.0486%			
48	0.5146%	0.2378%	88	34.0644%	21.8231%			
49	0.5695%	0.2546%	89	37.8041%	24.7390%			
50	0.6314%	0.2824%	90	41.8433%	27.7962%			
51	0.7030%	0.3215%	91	46.1820%	30.9943%			
52	0.8004%	0.3717%	92	50.8205%	34.3339%			
53	0.9050%	0.4331%	93	54.5570%	37.8148%			
54	1.0090%	0.5055%	94	58.2761%	41.4368%			
55	1.1122%	0.5890%	95	62.0755%	45.2001%			
56	1.2149%	0.6838%	96	65.9549%	49.1045%			
57	1.3171%	0.7898%	97	69.9149%	53.1967%			
58	1.4186%	0.9050%	98	73.9550%	61.2994%			
59	1.5194%	0.9441%	99	78.0756%	68.7235%			



**ACTUAL ASSUMPTIONS  
BASED ON 2003-2005 EXPERIENCE STUDY**

**Mortality Rates – Death-in-Service**

Age	% Dying Next Year		Age	% Dying Next Year		Age	% Dying Next Year	
	Male	Female		Male	Female		Male	Female
20	0.0258%	0.0077%	60	0.3375%	0.2173%	100	17.1409%	16.4064%
21	0.0270%	0.0077%	61	0.3582%	0.2331%	101	18.0328%	17.7255%
22	0.0284%	0.0077%	62	0.3718%	0.2525%	102	18.9414%	18.8971%
23	0.0300%	0.0079%	63	0.4131%	0.2755%	103	19.5350%	19.9213%
24	0.0318%	0.0081%	64	0.4618%	0.3022%	104	19.9922%	20.7979%
25	0.0337%	0.0085%	65	0.5178%	0.3325%	105	20.2922%	21.5272%
26	0.0355%	0.0090%	66	0.5811%	0.3665%	106	20.4000%	22.1089%
27	0.0371%	0.0094%	67	0.6518%	0.3788%	107	20.4000%	22.5432%
28	0.0384%	0.0099%	68	0.7298%	0.4207%	108	20.4000%	23.5626%
29	0.0397%	0.0105%	69	0.8152%	0.4721%	109	20.4000%	24.6284%
30	0.0408%	0.0114%	70	0.9079%	0.5327%	110	20.4000%	25.5753%
31	0.0419%	0.0137%	71	1.0080%	0.6026%	111	20.4000%	26.2532%
32	0.0428%	0.0156%	72	1.1153%	0.6818%	112	20.4000%	26.5125%
33	0.0433%	0.0173%	73	1.2860%	0.7703%	113	20.4000%	26.5125%
34	0.0433%	0.0189%	74	1.4670%	0.8680%	114	20.4000%	26.5125%
35	0.0434%	0.0203%	75	1.6700%	0.9751%	115	20.4000%	26.5125%
36	0.0439%	0.0217%	76	1.8949%	1.0914%	116	20.4000%	26.5125%
37	0.0454%	0.0230%	77	2.1420%	1.2171%	117	20.4000%	26.5125%
38	0.0479%	0.0244%	78	2.4111%	1.3285%	118	20.4000%	26.5125%
39	0.0509%	0.0261%	79	2.7022%	1.4924%	119	20.4000%	26.5125%
40	0.0547%	0.0285%	80	3.0153%	1.6934%	120	100.0000%	100.0000%
41	0.0590%	0.0312%	81	3.3505%	1.9315%			
42	0.0638%	0.0343%	82	3.7077%	2.2069%			
43	0.0690%	0.0377%	83	4.1377%	2.5193%			
44	0.0744%	0.0414%	84	4.6047%	2.8690%			
45	0.0805%	0.0445%	85	5.1341%	3.2559%			
46	0.0878%	0.0477%	86	5.7259%	3.6798%			
47	0.0968%	0.0505%	87	6.3801%	4.1410%			
48	0.1072%	0.0517%	88	7.0968%	4.7442%			
49	0.1186%	0.0554%	89	7.8759%	5.3780%			
50	0.1316%	0.0614%	90	8.7173%	6.0426%			
51	0.1464%	0.0699%	91	9.6212%	6.7379%			
52	0.1668%	0.0808%	92	10.5876%	7.4639%			
53	0.1886%	0.0942%	93	11.3660%	8.2206%			
54	0.2102%	0.1099%	94	12.1408%	9.0080%			
55	0.2317%	0.1280%	95	12.9324%	9.8261%			
56	0.2531%	0.1487%	96	13.7406%	10.6749%			
57	0.2744%	0.1717%	97	14.5656%	11.5645%			
58	0.2956%	0.1967%	98	15.4073%	13.3260%			
59	0.3166%	0.2052%	99	16.2657%	14.9399%			