February 16, 2012

Experience Study 2006 - 2011
Local Government Correctional
Service Plan

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February 16, 2012

Ms. Mary Most Vanek
Executive Director
Public Employees Retirement Association of Minnesota
60 Empire Drive, Suite 200
St. Paul, MN 55103

2006 to 2011 Experience Study – Local Government Correctional Service Plan

Dear Mary:

The results of the actuarial valuation are based on actuarial methods, procedures and assumptions adopted by the Legislative Commission on Pensions and Retirement (LCPR). These assumptions are used in developing employer contribution rates, disclosing employer liabilities pursuant to GASB requirements and for analyzing the fiscal impact of proposed legislative amendments.
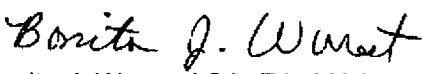
The purpose of this report is to present the results of our review of the actuarial methods and procedures, economic assumptions, and demographic assumptions used in the June 30, 2011 actuarial valuation. Our proposals represent our best-estimate based on recent experience, future expectations and professional judgment.
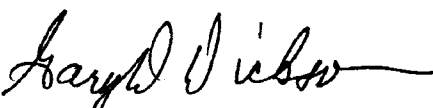
The analysis in this study was based on data for the period from July 1, 2006, to June 30, 2011, as provided by the Fund. The Fund's actuary would not customarily verify this data. We have reviewed the information for internal consistency and reasonableness and have no reason to doubt its substantial accuracy.

This report has been prepared exclusively for the Public Employees Retirement Association. Mercer is not responsible for consequences arising from the use of this report for any other purposes.

We are available to answer any questions on the material contained in the report, or to provide explanations or further details as may be appropriate. The undersigned credentialed actuaries meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained in this report.
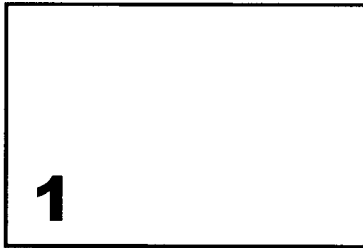
Sincerely,

Bonita J. Wurst, ASA, EA, MAAA   Gary D. Dickson, FSA, EA, MAAA

The information contained in this document (including any attachments) is not intended by Mercer to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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Executive Summary

This report has been prepared by Mercer for the Public Employees Retirement Association in order to analyze the Local Government Correctional Service Plan's experience from July 1, 2006 through June 30, 2011, and to develop proposals for changes in valuation methods, allocation procedures, economic assumptions, and demographic assumptions.

A brief summary of our proposals is as follows:

Actuarial Methods	No changes to current actuarial methods.
Economic Assumptions	Reduce the real wage growth assumption from 1.50% to 0.75%. Reduce the payroll growth assumption from 4.50% to 3.75%. Reduce the age-related salary increase rates. Reduce the investment return assumption from 8.50% to 8.00%.
Demographic Assumptions	Change the basis for several of the assumptions and make adjustments to several other current assumptions to more closely match experience.

A valuation assumption which is outside the scope of this experience study is the Combined Service Annuity load factor. Currently, deferred vested liabilities are increased 30.00% to account for the effect of some members being eligible for a Combined Service Annuity. This assumption has been unchanged since 2002. We recommend that actual Combined Service Annuity data be collected and reviewed in order to determine whether the current factors are appropriate.

Executive Summary

Overview of Proposed Changes

Actuarial Methods
We propose no changes to the actuarial methods.

Economic Assumptions
Real Wage Growth

Based on our analysis of actual growth in real National Average Wages over the last 50 years, we propose changing the current assumption from 1.50% to 0.75%.

Payroll Growth

Based on our proposed change in the Real Wage Growth assumption, we propose changing the current assumption from 4.50% to 3.75%.

Salary Increases

We propose changing the salary increase rates to reflect lower expected salary increases.

Investment Return

Based on our analysis of anticipated returns for asset classes included in the target asset allocation, we propose changing the current assumption from 8.50% to 8.00%. Please see our Experience Study for the Public Employees Retirement Fund dated August 31, 2009 for the detail behind this proposal.

Demographic Assumptions
Healthy Post-retirement Mortality

Mortality rates are used to project the length of time benefits will be paid to current and future retirees and beneficiaries. We propose a change to a more recent mortality table to better anticipate current and future mortality patterns.

Disabled Retired Mortality

In conjunction with our proposed change for healthy retiree mortality, we propose a change to a more recent disabled mortality table to better anticipate current and future mortality patterns.

Pre-retirement Mortality

In conjunction with our proposed change for healthy retiree mortality, we are proposing a change to a more recent mortality table to better anticipate current and future mortality patterns.

Executive Summary

Retirement from Active Status

Retirement rates for actives are used to predict when active members will elect to begin receiving retirement benefits. We propose changing the retirement rates to reflect retirement patterns observed over the five-year experience study period.

Retirement from Inactive Status

Retirement rates for inactives are used to predict when vested terminated members will elect to begin receiving retirement benefits. We propose no change in the current assumption.

Annuity Form Elections at Retirement

We propose making minor adjustments to the percentages of retirees electing the optional forms of benefit at retirement.

Disability Retirement

We recommend an increase in disability rates for male and female members.

Termination Rates

We recommend changing the termination rates for male and female members to reflect higher expected turnover, especially in the first three years of employment.

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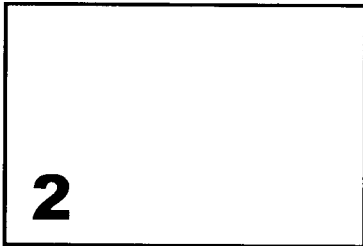
Actuarial Methods

Overview

Actuarial methods and allocation procedures are used as part of the valuation to determine actuarial accrued liabilities, to determine normal costs, to allocate costs to individual employers and to amortize unfunded accrued liabilities (UAL). We used the following objectives to propose actuarial methods and allocation procedures:

- Transparency of costs and funded status
- Predictable and stable employer contribution rates
- Protection of the plan's funded status
- Equity across generations
- Actuarial soundness
- Compliance with GASB requirements

We propose no changes to the fundamental actuarial methods at this time. The actuarial methods used for the June 30, 2011 actuarial valuation are shown in the table on the next page.

Actuarial Methods

Method	June 30, 2011 Method	Proposed Method
Cost method	Entry Age Normal	No change
UAL amortization method	UAL Amortized as a level percent of payroll. The UAL amortization method results in initial payments less than the "interest only" payment on the UAL. Payments less than the interest only amount will result in the UAL increasing for an initial period of time.	No change
UAL amortization period	A closed period ending June 30, 2023. If there is a negative Unfunded Actuarial Accrued Liability, the surplus amount shall be amortized over 30 years as a level percentage of payroll	No change
Asset valuation method	The assets are valued based on a five-year moving average of expected and market values (five-year average actuarial value) determined as follows:	No change

- At the end of each plan year, an average asset value is calculated as the average of the market asset value at the beginning and end of the fiscal year net of investment income for the fiscal year;

- The investment gain or (loss) is taken as the excess of actual investment income over the expected investment income based on average asset value as calculated above;

- The investment gain or (loss) so determined is recognized over five years at 20% per year;

- The asset value is the sum of the expected asset value plus the schedule recognition of investment gains or (losses) during the current and the preceding four plan years.

For the purpose of determining the actuarial value of assets, the Post Fund asset loss for the fiscal year ending June 30, 2009 is recognized incrementally over five years at 20% per year, similar to the smoothing of active fund assets. Prior to June 30, 2009, Post Fund asset gains and losses were not smoothed.

The funding method is described in greater detail on the following page.

Actuarial Methods

Actuarial Cost Method

Actuarial Accrued Liability and required contributions in this report are computed using the Individual Entry Age Normal Cost Method. This method is prescribed by Minnesota Statutes.

The objective under this method is to fund each member's benefits under the Plan as payments which are level as a percentage of salary, starting at original participation date (or employment date), and continuing until the assumed date of retirement termination, disability or death. For valuation purposes, entry age for each member is determined as the age at valuation minus years of service as of the valuation date.

At any given date, a liability is calculated equal to the contributions which would have been accumulated if this method of funding had always been used, the current plan provisions had always been in place, and all assumptions had been precisely accurate. The difference between this liability and the assets (if any) which are held in the fund is the unfunded liability. The unfunded liability is typically funded over a chosen period in accordance with the amortization schedule.

A detailed description of the calculation follows:

The normal cost for each active member under the assumed retirement age is determined by applying to earnings the level percentage of salary which, if contributed each year from date of entry into the Plan until the assumed retirement (termination, disability or death) date, is sufficient to provide the full value of the benefits expected to be payable.

- The present value of future normal costs is the total of the discounted values of all active members' normal cost, assuming these to be paid in each case from the valuation date until retirement (termination, disability or death) date.

- The present value of projected benefits is calculated as the value of all benefit payments expected to be paid to the Plan's current members, including active and retired members, beneficiaries, and terminated members with vested rights.

- The accrued liability is the excess of the present value of projected benefits over the present value of future normal costs.

- The unfunded liability is the excess of the accrued liability over the assets of the fund, and represents that part of the accrued liability which has not been funded by accumulated past contributions.

Current Benefit Obligation is computed to be the present value of benefits earned to the valuation date, based on current service and including future salary increases to retirement.

Actuarial Methods

Decrement timing

All decrements are assumed to occur on the anniversary of the valuation date, beginning on the valuation date. Decrement timing is a fundamental part of the computer programming underlying actuarial calculations. Mercer's valuation systems use beginning of year decrements, a generally accepted actuarial practice. The Legislative Commission on Pensions and Retirement approved this modification to the Standards for Actuarial Work prior to the preparation of the 2011 valuation report in order to ensure consistency and comparability.

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Economic Assumptions

Overview

Actuaries have traditionally been involved in the selection of economic assumptions and actuarial standards provide parameters for doing so. However, while actuaries have expertise in making sure assumptions are internally consistent within a model, actuaries have no more expertise in selecting many of the economic assumptions than do certain other professionals, e.g. economists. Actuaries must make "educated guesses" using professional judgment applied to historical information and estimates of future outcomes. As such, this report contains one set of economic assumptions that we would categorize as our best estimate. However, other sets of assumptions may be equally valid.

Actuarial Standard of Practice (ASOP) No. 27, *Selection of Economic Assumptions for Measuring Pension Obligations,* provides guidance on selecting economic assumptions used in measuring obligations under defined benefit pension plans. ASOP No. 27 suggests that economic assumptions be developed using the actuary's professional judgment, taking into consideration past experience and the actuary's expectations regarding the future. The process for selecting economic assumptions involves:

- Identifying components of each assumption and evaluating relevant data;
- Developing a best-estimate range for each economic assumption; and
- Evaluating measurement specific factors and selecting a point within the best-estimate range.

Economic Assumptions

A summary of the economic assumptions used for the June 30, 2011 actuarial valuation and proposed changes are shown below:

Assumption	June 30, 2011 Assumption	Proposed Assumption
Inflation	3.00%	No Change[1]
Real wage growth (productivity)	1.50%	0.75%
Payroll growth	4.50%	3.75%
Salary Growth	Age related table	Age related table
Regular investment return	8.50%	8.00%[1]

Where appropriate, our economic assumption analysis and proposals are consistent with our recent analysis and final assumptions for the Public Employees Retirement Fund.

Real Wage Growth

Real wage growth represents the increase in wages above inflation for the entire group due to improvements in productivity and competitive pressures. Merit and longevity wage growth, in contrast, represent the increases in wages for an individual due to factors such as performance, promotion, or seniority. Real wage growth combined with inflation represents the expected growth in total payroll for a stable population. Changes in payroll due to an increase or decline in the covered population are not captured by this assumption.

The chart below shows the real growth in national average wages over the past fifty years based on data compiled by the Social Security Administration.

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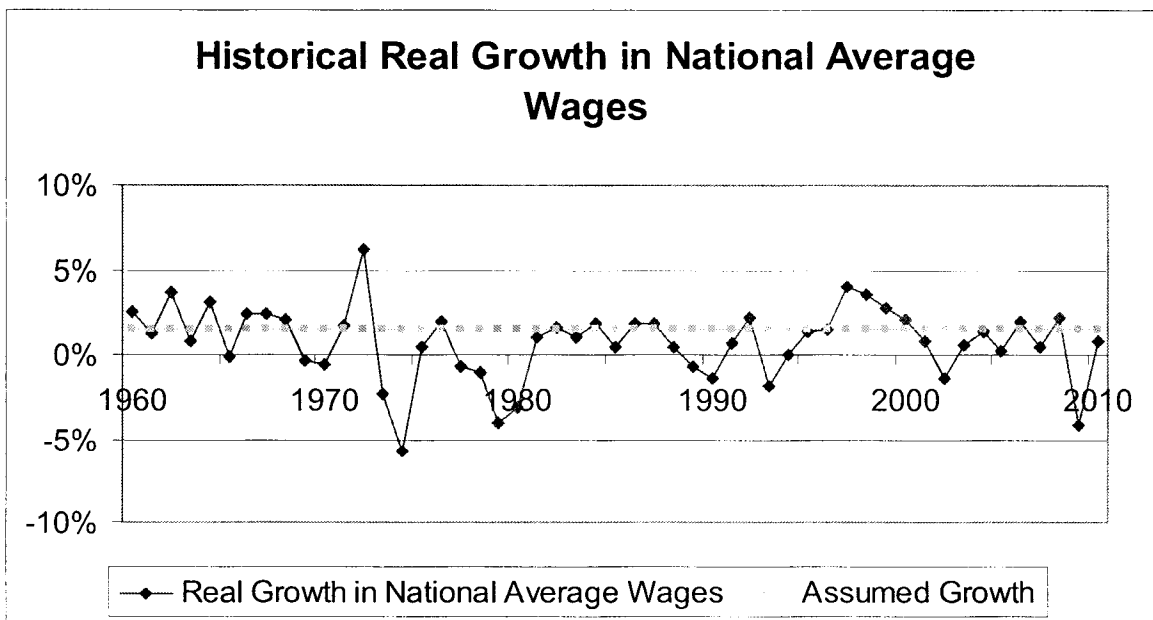
[1] Please see the Experience Study for the Public Employees Retirement Fund dated August 31, 2009 for the detail behind this proposed assumption.

Economic Assumptions

While the change in any one year has been volatile, the change over longer periods of time is more stable as shown in the table below.

Length of Period Ending December 31, 2010	Average Real Growth in National Average Wages
10 years	0.29%
20 years	0.96%
30 years	0.91%
40 years	0.51%
50 years	0.70%

Mercer's economic modeling suggests a reasonable expectation of average real growth in wages is from 0.50% to as much as 1.50%. Based on the table above, we propose changing the current assumption of 1.50% to 0.75%.

Payroll Growth

The payroll growth assumption is used to develop the annual amount necessary to amortize the unfunded actuarial liability as a level percentage of expected payroll.

Payroll growth is the sum of inflation and real wage growth. Since we are proposing a change in the real wage growth assumption, we propose a corresponding change in the payroll growth assumption, from 4.50% to 3.75%.

Salary Increases

Using the building block approach recommended in ASOP 27, this assumption is composed of three components;

- Inflation
- Productivity
- Merit/promotion

The inflation and productivity components are combined to produce the assumed rate of wage inflation. This rate represents the "across the board" average annual increase in salaries shown in the experience data. The merit component includes the additional increases in salary due to individual performance, seniority, promotions, etc.

We reviewed the annual salary increases for the period July 1, 2006 through June 30, 2011 by both age and service. The data group was continuing active members with two consecutive full years of employment. For the salary analysis, we excluded some of the most dramatic salary changes. We excluded the lowest 2.5% and the highest 2.5% for a total of 5.0% of records excluded. While this was a relatively small group, their salary increases distorted the experience of the overall group of continuing active members. We also excluded people with less than one year of service for the same reason.

Economic Assumptions

The following chart shows the actual and expected salary increases for 2006 to 2011.

Salary Increase

Age Group	Exposures	Observed Average	Expected Average
<25	365	8.33%	7.07%
25-29	1,893	7.14%	7.00%
30-34	1,933	6.34%	7.00%
35-39	2,108	5.37%	6.80%
40-44	2,083	4.92%	6.21%
45-49	1,903	4.42%	5.64%
50-54	1,614	4.29%	5.39%
55-59	1,138	4.05%	5.25%
60-64	388	3.38%	5.25%
65-69	48	5.45%	5.25%
70-75	14	-0.71%	5.25%
75+	2	1.40%	5.25%
Total	**13,489**	**5.33%**	**6.26%**

Economic Assumptions

The actual experience shows that the current assumption is generally too high. Due to the short service of this group (this plan was created in 1999 and initial members were transfers from the Public Employees Retirement Fund), we are not recommending a service related salary increase table, and have therefore proposed some changes to the current age-based table.

Based on the experience from the last five years, and our expectations for inflation and productivity, our proposed salary increase assumption is shown below.

Age Group	Exposures	Observed Average	Expected Average	Proposed Average
<25	365	8.33%	7.07%	8.19%
25-29	1,893	7.14%	7.00%	7.22%
30-34	1,933	6.34%	7.00%	6.50%
35-39	2,108	5.37%	6.80%	6.00%
40-44	2,083	4.92%	6.21%	5.50%
45-49	1,903	4.42%	5.64%	5.00%
50-54	1,614	4.29%	5.39%	5.00%
55-59	1,138	4.05%	5.25%	4.54%
60-64	388	3.38%	5.25%	4.25%
65-69	48	5.45%	5.25%	4.00%
70-75	14	-0.71%	5.25%	4.00%
75+	2	1.40%	5.25%	4.00%
Total	**13,489**	**5.33%**	**6.26%**	**5.78%**

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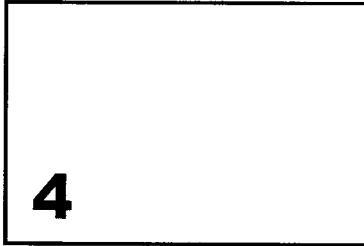
Demographic Assumptions

Overview

Actuarial Standard of Practice (ASOP) No. 35, *Selection of Demographic and Other Noneconomic Assumptions for Measuring Pension Obligations,* provides guidance on selecting demographic assumptions used in measuring obligations under defined benefit pension plans. The general process for recommending demographic assumptions as defined in ASOP No. 35 is as follows:

- Identify the types of assumptions;
- Consider the relevant assumption universe;
- Consider the assumption format;
- Select the specific assumptions; and
- Evaluate the reasonableness of the selected assumption.

The purpose of the demographic experience study is to compare actual experience against expected experience based on the assumptions used in the most recent actuarial valuation. The observation period used in this study is July 1, 2006 through June 30, 2011, and the current assumptions are those adopted by the Legislative Commission on Pensions and Retirement (LCPR) for the June 30, 2011 actuarial valuation. If the actual experience differs significantly from the overall expected experience, or if the pattern of actual decrements by age, sex, or duration does not follow the expected pattern, new assumptions are considered.

Note that the expected counts provided are rounded throughout this report, so the totals may not add up and the A/E ratios (actual over expected outcomes) may not divide to the exact percentage shown.

Demographic Assumptions

The demographic assumptions used for the June 30, 2011 actuarial valuation and the proposed assumptions for the June 30, 2012 actuarial valuation are shown in detail in the following sections.

A summary of the proposed changes are as follows:

- Changes to the healthy mortality assumption tables
- Changes to the disabled mortality assumption tables
- Adjustments to retirement assumptions
- Adjustments to annuity option elections
- Adjustments to disability retirement assumptions
- Adjustments to the termination rates

The proposed assumptions, in our opinion, were selected in a manner consistent with the requirements of ASOP No. 35.

Mortality Assumptions

Mortality rates are used to project the length of time benefits will be paid to current and future retirees and beneficiaries. The selection of a mortality assumption affects plan liabilities because the value of retiree benefits depends on how long the benefit payments are expected to continue. There are clear differences in the mortality rates among males and females, healthy retired members, disabled retired members and non-retired members. As a result, each of these groups is potentially subject to a different mortality assumption.

The current healthy mortality assumptions are based on the 1983 Group Annuity Mortality table, which is almost 30 years old. Mortality rates have improved since this table was adopted for use by the plan and are generally expected to continue to improve. This increased longevity should be reflected in the actuarial valuation through lower mortality rates than indicated by current experience. Generational mortality tables incorporate improvements in mortality each year into the future.

There is not enough plan-specific data to make a reasonable analysis of the mortality assumption. For most plans, standard mortality tables represent the best estimate of future events. We recommend that the mortality assumptions for this plan mirror the assumptions used for the Public Employees Retirement Fund (except for plan specific age adjustments made to fit the experience in that plan).

Demographic Assumptions

A summary of the current and proposed mortality assumptions is shown below:

Assumption	Current Assumption	Proposed Assumption
Healthy Post-retirement Mortality	1983 Group Annuity Mortality	RP2000 annuitant generational mortality, white collar adjustment
Males	Set forward 2 years	No adjustment
Females	Set forward 2 years	No adjustment
Disabled Retired Mortality	Combined Annuity Mortality	RP2000 disabled mortality
Healthy Pre-retirement Mortality	1983 Group Annuity Mortality	RP2000 non-annuitant generational mortality, white collar adjustment
Males	Set back 1 year	No adjustment
Females	No adjustment	No adjustment

Demographic Assumptions

Retirement Assumptions

The retirement assumptions used in the actuarial valuation include the following assumptions:
- Regular retirement from active status
- Retirement from inactive status

Members are eligible to retire as early as age 50 and three years.[2]

The normal and early retirement dates under the plan are as follows:

Normal Retirement Age	Early Retirement Age
Age 55 and three years[2]	Age 50 and three years[2]

Retirement from Active Status

The following chart shows the exposures, actual retirements, expected retirements and actual to expected ratios for each of the years in the experience study.

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	Exposures	Actual Retirements	Current (June 30, 2011) Assumption	
			Expected Retirements	A/E Ratio
Total				
July 1, 2006 to June 30, 2007	595	38	65	59%
July 1, 2007 to June 30, 2008	642	45	73	62%
July 1, 2008 to June 30, 2009	684	52	82	64%
July 1, 2009 to June 30, 2010	729	63	92	68%
July 1, 2010 to June 30, 2011	768	62	96	65%
July 1, 2006 to June 30, 2011	**3,418**	**260**	**408**	**64%**

Not all numbers may add due to rounding.

Discussion

The actual number of retirements is less than predicted by the current table. Please refer to age by age retirement experience beginning on page 39 for additional detail. As shown, the experience was lower than expected at most ages and we are proposing adjustments at most ages.

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[2] A graded vesting table is in effect for those hired after June 30, 2010.

Demographic Assumptions

The following chart shows the exposures, actual retirements, expected retirements under the proposed assumption and actual to expected ratios for each of the years in the experience study.

| | | | Proposed Assumption | |
Retirements	Exposures	Actual Retirements	Expected Retirements	A/E Ratio
Total				
July 1, 2006 to June 30, 2007	595	38	54	70%
July 1, 2007 to June 30, 2008	642	45	60	75%
July 1, 2008 to June 30, 2009	684	52	67	77%
July 1, 2009 to June 30, 2010	729	63	76	83%
July 1, 2010 to June 30, 2011	768	62	79	79%
July 1, 2006 to June 30, 2011	**3,418**	**260**	**336**	**77%**

Not all numbers may add due to rounding.

Note that the A/E ratio for ages 50 to 69 improves from 66% under the current assumptions to 82% under the proposed assumptions.

Summary of Proposed Retirement Rates

	Active Status	
Age	Current	Proposed
50	2%	3%
51	2%	2%
52	2%	2%
53	2%	2%
54	5%	5%
55	25%	20%
56	10%	8%
57	10%	8%
58	10%	8%
59	10%	8%
60	20%	15%
61	20%	15%
62	40%	30%
63	40%	30%
64	40%	30%
65	50%	40%
66	50%	40%
67	50%	40%
68	50%	40%
69	50%	40%
70	100%	100%

Demographic Assumptions

Retirement from Inactive Status

Members who terminate after completing three years of service (five years if first hired after June 30, 2010) are vested and entitled to either a refund of their employee contributions with interest, or a deferred retirement benefit. The valuation currently assumes that members will elect a refund if it is more valuable than the deferred annuity. For those inactive members for whom the deferred retirement benefit is more valuable than a refund, the valuation assumes the benefit will commence at normal retirement age.

The following chart shows the exposures, actual retirements, actual percent retiring and expected percent retiring during the five years of the experience study.

	Exposures	Actual Retirements	Actual Percent Retiring	Current (June 30, 2011) Assumption
				Expected Percent Retiring
Age				
50	131	4	3%	0%
51	114	1	1%	0%
52	103	0	0%	0%
53	99	0	0%	0%
54	84	3	4%	0%
55+	433	40	9%	100%
Total	**964**	**48**	**17%**	**100%**

Discussion

The actual experience shows that a significant number of inactive participants retired at ages above normal retirement age. However, we are not proposing a change in this assumption at this time. We believe that many of the retirements in this plan during the five-year period are combined service annuities, which would generally result in later retirement ages. These later retirement ages may not be appropriate to reflect in a long-term assumption. Also, the recently enacted changes in the post-retirement adjustment and augmentation rates are likely to result in different behavior in the future. The current assumption is conservative; if retirements occur after age 55 it will result in small actuarial gains that will favorably impact valuation results.

Demographic Assumptions

Retirement Statistics

The retirement statistics used in the actuarial valuation include the following assumptions:

- Marital status (% married)
- Age of beneficiary
- Annuity form elected at retirement

Marital Status

The current (June 30, 2011) valuation assumption is 85% members are married.

The data reported to us does not contain a marital status; beneficiary date of birth is only reported for those retirees that elect a joint and survivor form of payment. Since we do not have sufficient information to analyze the marital status of plan members, we propose no change to the 85% married assumption.

We also propose that marital status data be provided by PERA and analyzed in the next experience study.

Age of Beneficiary

Joint & Survivor annuity benefit amounts are determined based on the member's and beneficiary's age. The current (June 30, 2011) valuation assumption is that males are three years older than females. The following chart shows the current assumed age difference and the observed experience for members that elected a joint and survivor annuity.

Demographic Assumptions

Age of Beneficiary

	Total New Retirees	Actual Electing Joint Annuity Form	Average Age Difference for Those Electing Joint Annuities	Current (June 30, 2011) Assumption	
				Expected Age Difference	A - E
Males					
July 1, 2006 to June 30, 2007	27	13	2.20	3.00	(0.80)
July 1, 2007 to June 30, 2008	24	14	1.57	3.00	(1.43)
July 1, 2008 to June 30, 2009	44	21	2.11	3.00	(0.89)
July 1, 2009 to June 30, 2010	31	14	2.40	3.00	(0.60)
July 1, 2010 to June 30, 2011	41	24	3.18	3.00	0.18
July 1, 2006 to June 30, 2011	**167**	**86**	**2.38**	**3.00**	**(0.62)**
Females					
July 1, 2006 to June 30, 2007	7	1	(0.50)	(3.00)	2.50
July 1, 2007 to June 30, 2008	9	0	N/A	(3.00)	N/A
July 1, 2008 to June 30, 2009	15	3	0.91	(3.00)	3.91
July 1, 2009 to June 30, 2010	13	1	(1.50)	(3.00)	1.50
July 1, 2010 to June 30, 2011	26	5	(4.38)	(3.00)	(1.38)
July 1, 2006 to June 30, 2011	**70**	**10**	**(2.12)**	**(3.00)**	**0.88**

Not all numbers may add due to rounding.

We propose no change in the current age difference assumption at this time.

Annuity Form
Upon retirement, a member can elect any of the following forms of payment:

- Straight life annuity – the benefit is paid for the lifetime of the member. No benefit is payable to a beneficiary upon member's death.

- 25% Joint & Survivor – a reduced benefit is paid for the lifetime of the member. Upon death of the member, 25% of the benefit is paid to a beneficiary. If the beneficiary predeceases the member, the benefit reverts back to the straight life annuity amount.

- 50% Joint & Survivor – a reduced benefit is paid for the lifetime of the member. Upon death of the member, 50% of the benefit is paid to a beneficiary. If the beneficiary predeceases the member, the benefit reverts back to the straight life annuity amount.

- 75% Joint & Survivor – a reduced benefit is paid for the lifetime of the member. Upon death of the member, 75% of the benefit is paid to a beneficiary. If the beneficiary predeceases the member, the benefit reverts back to the straight life annuity amount.

- 100% Joint & Survivor – a reduced benefit is paid for the lifetime of the member. Upon death of the member, 100% of the benefit is paid to a beneficiary. If the beneficiary predeceases the member, the benefit reverts back to the straight life annuity amount.

Demographic Assumptions

Annuity Form

The following chart shows the current assumed annuity selection and the observed experience:

New Retirees from July 1, 2006 to June 30, 2011	Total New Retirees	Assumed Percent Married	Assumed Married New Retirees	Actual Electing Annuity Form	Actual Percent Electing Annuity Form	Current (June 30, 2011) Assumption — Expected Percent Electing Annuity Form
Males						
25% Joint & Survivor	167	85%	142	8	5.6%	0%
50% Joint & Survivor	167	85%	142	13	9.2%	25%
75% Joint & Survivor	167	85%	142	15	10.6%	0%
100% Joint & Survivor	167	85%	142	50	35.2%	25%
Females						
25% Joint & Survivor	70	85%	60	0	0%	0%
50% Joint & Survivor	70	85%	60	4	6.7%	5%
75% Joint & Survivor	70	85%	60	2	3.4%	0%
100% Joint & Survivor	70	85%	60	4	6.7%	5%

Not all numbers may add due to rounding.

The assumed Straight Life annuity selection is the sum of 100% of the non-married retirees plus those married retirees that are not assumed to elect a joint and survivor form of payment.

We propose the following changes to the annuity selection assumption:

	Percent of Married Members Electing			
	Current (June 30, 2011)		Proposed	
Annuity Form	Males	Females	Males	Females
Straight Life	50%	90%	40%	80%
25% Joint & Survivor	0%	0%	5%	5%
50% Joint & Survivor	25%	5%	10%	5%
75% Joint & Survivor	0%	0%	10%	5%
100% Joint & Survivor	25%	5%	35%	5%

Note that the increased utilization of the subsidized Joint and Survivor options would be expected to increase costs modestly.

Demographic Assumptions

Disability Assumptions

The Plan provides disability benefits to members. Members are eligible for disability benefits if they become physically or mentally unable to perform duties of the job prior to age 65.

Disability Retirement

The following chart shows the exposures, actual retirements, expected retirements under the current assumption and actual to expected ratios for males and females for each of the years in the experience study for disability retirements.

| | | | Current (June 30, 2011) Assumption | |
Disability Retirement	Exposures	Actual Retirements	Expected Retirements	A/E Ratio
Males				
July 1, 2006 to June 30, 2007	2,178	15	6	237%
July 1, 2007 to June 30, 2008	2,206	8	7	120%
July 1, 2008 to June 30, 2009	2,304	8	7	113%
July 1, 2009 to June 30, 2010	2,302	8	7	110%
July 1, 2010 to June 30, 2011	2,198	5	7	70%
July 1, 2006 to June 30, 2011	**11,188**	**44**	**34**	**128%**
Females				
July 1, 2006 to June 30, 2007	1,353	8	4	222%
July 1, 2007 to June 30, 2008	1,360	1	4	27%
July 1, 2008 to June 30, 2009	1,406	5	4	124%
July 1, 2009 to June 30, 2010	1,413	10	4	236%
July 1, 2010 to June 30, 2011	1,323	8	4	192%
July 1, 2006 to June 30, 2011	**6,855**	**32**	**20**	**162%**

Not all numbers may add due to rounding.

Discussion

The actual experience shows that the current assumption is predicting too few disabilities. We are proposing increases to the current disability rates, as shown in detail on page 34.

Demographic Assumptions

The following chart shows the exposures, actual retirements, expected retirements under the proposed assumption and actual to expected ratios for each of the years in the experience study.

| | | | Proposed Assumption | |
| | | **Actual** | **Expected** | |
Disability Retirement	**Exposures**	**Retirements**	**Retirements**	**A/E Ratio**
Males				
July 1, 2006 to June 30, 2007	2,178	15	7	213%
July 1, 2006 to June 30, 2007	2,206	8	7	108%
July 1, 2008 to June 30, 2009	2,304	8	8	102%
July 1, 2009 to June 30, 2010	2,302	8	8	99%
July 1, 2010 to June 30, 2011	2,198	5	8	63%
July 1, 2006 to June 30, 2011	**11,188**	**44**	**38**	**115%**
Females				
July 1, 2006 to June 30, 2007	1,353	8	4	180%
July 1, 2006 to June 30, 2007	1,360	1	5	21%
July 1, 2008 to June 30, 2009	1,406	5	5	100%
July 1, 2009 to June 30, 2010	1,413	10	5	187%
July 1, 2010 to June 30, 2011	1,323	8	5	150%
July 1, 2006 to June 30, 2011	**6,855**	**32**	**24**	**129%**

Not all numbers may add due to rounding.

Demographic Assumptions

Termination Assumptions

The termination assumptions used in the actuarial valuation include an assumption for termination from active status prior to retirement eligibility, since not all active members are expected to continue working until retirement. Termination rates represent the probabilities that a member at any given age will leave employment at that age.

The following chart shows the exposures, actual terminations, expected terminations under the current assumption and actual to expected ratios for each of the years in the experience study.

| | | | Current (June 30, 2011) Assumption | |
Terminations	Exposures	Actual Terminations	Expected Terminations	A/E Ratio
Males				
July 1, 2006 to June 30, 2007	1,793	268	136	197%
July 1, 2007 to June 30, 2008	1,788	222	133	167%
July 1, 2008 to June 30, 2009	1,859	193	140	138%
July 1, 2009 to June 30, 2010	1,834	219	133	165%
July 1, 2010 to June 30, 2011	1,710	146	122	120%
July 1, 2006 to June 30, 2011	**8,984**	**1,048**	**663**	**158%**
Females				
July 1, 2006 to June 30, 2007	1,143	191	130	147%
July 1, 2007 to June 30, 2008	1,136	197	128	154%
July 1, 2008 to June 30, 2009	1,167	134	131	102%
July 1, 2009 to June 30, 2010	1,152	152	129	118%
July 1, 2010 to June 30, 2011	1,043	111	116	96%
July 1, 2006 to June 30, 2011	**5,641**	**785**	**633**	**124%**

Not all numbers may add due to rounding.

Demographic Assumptions

Discussion

Our analysis of terminations indicates that the current assumption is predicting too few terminations, especially during the initial years of employment. Therefore, we are proposing a change from age related rates to select and ultimate rates. Select rates apply for the first three years of employment, and age related rates apply for the subsequent years.

The proposed withdrawal rates during the three-year select period are as follows:

Years of Service	Proposed Withdrawal Assumption
0	25%
1	20%
2	15%

The proposed ultimate rates are shown in the Appendix on page 32.

The following chart shows the exposures, actual terminations, expected terminations under the proposed assumption and actual to expected ratios for each of the select years in the experience study for withdrawals.

			Proposed Assumption	
Terminations in three-year Select Period	**Exposures**	**Actual Terminations**	**Expected Terminations**	**A/E Ratio**
July 1, 2006 to June 30, 2007	1,158	286	230	124%
July 1, 2007 to June 30, 2008	1,177	281	228	123%
July 1, 2008 to June 30, 2009	1,210	217	234	93%
July 1, 2009 to June 30, 2010	1,020	229	190	121%
July 1, 2010 to June 30, 2011	704	126	131	97%
July 1, 2006 to June 30, 2011	**5,269**	**1,139**	**1,013**	**112%**

Not all numbers may add due to rounding.

Demographic Assumptions

Discussion

The following chart shows the exposures, actual terminations, expected terminations under the proposed ultimate assumption and actual to expected ratios for males and females for each of the years in the experience study for withdrawals.

Terminations beyond three-year Select Period	Exposures	Actual Terminations	Proposed Assumption Expected Terminations	A/E Ratio
Males				
July 1, 2006 to June 30, 2007	1,085	97	62	157%
July 1, 2007 to June 30, 2008	1,062	61	59	103%
July 1, 2008 to June 30, 2009	1,133	61	65	94%
July 1, 2009 to June 30, 2010	1,226	85	71	119%
July 1, 2010 to June 30, 2011	1,279	72	76	95%
July 1, 2006 to June 30, 2011	**5,785**	**376**	**333**	**113%**
Females				
July 1, 2006 to June 30, 2007	693	76	55	137%
July 1, 2007 to June 30, 2008	685	77	55	140%
July 1, 2008 to June 30, 2009	683	49	54	91%
July 1, 2009 to June 30, 2010	740	57	59	97%
July 1, 2010 to June 30, 2011	770	59	62	95%
July 1, 2006 to June 30, 2011	**3,571**	**318**	**285**	**112%**

Not all numbers may add due to rounding.

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Appendix

Data

The experience analysis uses member data from July 1, 2006, through June 30, 2011, which was supplied by PERA. We have not verified the data, but have reviewed the information for internal consistency and have no reason to doubt its substantial accuracy.

The member data was summarized according to the actual and potential member decrements for each year in the study. Actual and potential decrements were grouped according to age or service depending on the demographic assumption.

Appendix

Methods and Procedures

Actuarial Cost Method

Liabilities and contributions are computed using the Individual Entry Age Normal Cost Method. This method is prescribed by Minnesota Statutes and is described on page 6.

Asset Valuation Method

The assets are valued based on a five-year moving average of expected and market values (five-year average actuarial value) determined as follows:

- At the end of each plan year, an average asset value is calculated as the average of the market asset value at the beginning and end of the fiscal year net of investment income for the fiscal year;

- The investment gain or (loss) is taken as the excess of actual investment income over the expected investment income based on the average asset value as calculated above;

- The investment gain or (loss) so determined is recognized over five years at 20% per year;

- The asset value is the sum of the expected asset value plus the scheduled recognition of investment gains or (losses) during the current and the preceding four plan years.

For the purpose of determining the actuarial value of assets, the Post Fund asset loss for the fiscal year ending June 30, 2011 is recognized incrementally over five years at 20% per year, similar to the smoothing of active fund assets. Prior to June 30, 2009, Post Fund asset gains and losses were not smoothed.

Payment on the Unfunded Actuarial Accrued Liability

A level percentage of payroll each year to the statutory amortization date of July 1, 2023 assuming payroll increases of 4.50% per annum. If there is a negative Unfunded Actuarial Accrued Liability, the surplus amount shall be amortized over 30 years as a level percentage of payroll.

Economic Assumptions

Inflation	3.00%
Real wage growth	1.50%
Payroll growth	4.50%
Salary scale	Age related table
Investment Return	8.50%

Appendix

Assumption Tables

The RP 2000 non-annuitant mortality table as published by the Society of Actuaries (SOA) contains mortality rates for ages 15 to 70 and the annuitant mortality table contains mortality rates for ages 50 to 95. Mercer has applied the annuitant mortality table for active members beyond age 70 until the assumed retirement age and the non-annuitant mortality table for annuitants younger than age 50. Similarly, the SOA's white collar adjustment is published for ages 30 to 70 for non-annuitants and ages 50 to 95 for annuitants; we have applied the age 30 adjustment to active members younger than 30 and made no adjustment for annuitants past age 95. Rates shown in the table below under the Proposed Assumption are RP 2000 projected to 2012.

| | **Healthy Post-retirement Mortality** | | | | **Disabled Mortality** | | | |
| | **Current Assumption** | | **Proposed Assumption** | | **Current Assumption** | | **Proposed Assumption** | |
	Male	**Female**	**Male**	**Female**	**Male**	**Female**	**Male**	**Female**
50	0.4755%	0.1948%	0.4811%	0.1992%	1.0350%	1.0350%	2.8975%	1.1535%
51	0.5200%	0.2119%	0.4734%	0.2085%	1.1210%	1.1210%	3.0268%	1.2477%
52	0.5660%	0.2315%	0.4602%	0.2264%	1.2150%	1.2150%	3.1563%	1.3456%
53	0.6131%	0.2541%	0.4486%	0.2507%	1.3160%	1.3160%	3.2859%	1.4465%
54	0.6618%	0.2803%	0.4362%	0.2808%	1.4260%	1.4260%	3.4152%	1.5497%
55	0.7139%	0.3103%	0.4316%	0.3168%	1.5450%	1.5450%	3.5442%	1.6544%
56	0.7719%	0.3442%	0.4348%	0.3582%	1.6730%	1.6730%	3.6732%	1.7598%
57	0.8384%	0.3821%	0.4459%	0.4005%	1.8120%	1.8120%	3.8026%	1.8654%
58	0.9158%	0.4241%	0.4687%	0.4411%	1.9630%	1.9630%	3.9334%	1.9710%
59	1.0064%	0.4702%	0.4990%	0.4838%	2.1260%	2.1260%	4.0668%	2.0768%
60	1.1133%	0.5210%	0.5443%	0.5289%	2.3020%	2.3020%	4.2042%	2.1839%
61	1.2391%	0.5769%	0.6104%	0.5785%	2.4930%	2.4930%	4.3474%	2.2936%
62	1.3868%	0.6385%	0.6840%	0.6342%	2.7000%	2.7000%	4.4981%	2.4080%
63	1.5592%	0.7064%	0.7795%	0.6987%	2.9230%	2.9230%	4.6584%	2.5293%
64	1.7579%	0.7817%	0.8768%	0.7732%	3.1640%	3.1640%	4.8307%	2.6600%
65	1.9804%	0.8681%	0.9823%	0.8578%	3.4250%	3.4250%	5.0174%	2.8026%
66	2.2229%	0.9702%	1.1081%	0.9522%	3.7070%	3.7070%	5.2213%	2.9594%
67	2.4817%	1.0921%	1.2267%	1.0556%	4.0120%	4.0120%	5.4450%	3.1325%
68	2.7530%	1.2385%	1.3369%	1.1670%	4.3410%	4.3410%	5.6909%	3.3234%
69	3.0354%	1.4128%	1.4718%	1.2913%	4.6970%	4.6970%	5.9613%	3.5335%
70	3.3370%	1.6159%	1.6078%	1.4299%	5.0810%	5.0810%	6.2583%	3.7635%
71	3.6680%	1.8481%	1.7851%	1.5694%	5.4950%	5.4950%	6.5841%	4.0140%
72	4.0388%	2.1091%	1.9911%	1.7476%	5.9430%	5.9430%	6.9405%	4.2851%
73	4.4597%	2.3992%	2.2280%	1.9213%	6.4250%	6.4250%	7.3292%	4.5769%
74	4.9388%	2.7184%	2.4997%	2.1341%	6.9450%	6.9450%	7.7512%	4.8895%
75	5.4758%	3.0672%	2.8399%	2.3354%	7.5060%	7.5060%	8.2067%	5.2230%
76	6.0678%	3.4459%	3.1902%	2.5871%	8.1090%	8.1090%	8.6951%	5.5777%
77	6.7125%	3.8549%	3.6201%	2.8997%	8.7590%	8.7590%	9.2149%	5.9545%
78	7.4070%	4.2945%	4.1080%	3.2137%	9.4580%	9.4580%	9.7640%	6.3545%
79	8.1484%	4.7655%	4.6567%	3.5633%	10.2100%	10.2100%	10.3392%	6.7793%
80	8.9320%	5.2691%	5.2662%	3.9598%	11.0180%	11.0180%	10.9372%	7.2312%
81	9.7525%	5.8071%	5.9916%	4.4061%	11.8860%	11.8860%	11.5544%	7.7135%
82	10.6047%	6.3807%	6.8047%	4.9053%	12.8170%	12.8170%	12.1877%	8.2298%
83	11.4836%	6.9918%	7.6260%	5.4695%	13.8140%	13.8140%	12.8343%	8.7838%
84	12.4170%	7.6570%	8.6210%	6.1022%	14.8830%	14.8830%	13.4923%	9.3794%

Appendix

	Healthy Post-retirement Mortality				Disabled Mortality			
	Current Assumption		Proposed Assumption		Current Assumption		Proposed Assumption	
	Male	Female	Male	Female	Male	Female	Male	Female
85	13.3870%	8.3870%	9.6204%	6.9024%	16.0270%	16.0270%	14.1603%	10.0203%
86	14.4073%	9.1935%	10.7339%	7.7999%	17.2490%	17.2490%	14.8374%	10.7099%
87	15.4859%	10.1354%	12.1122%	8.8141%	18.5530%	18.5530%	15.5235%	11.4512%
88	16.6307%	11.1750%	13.6411%	9.8174%	19.9440%	19.9440%	16.2186%	12.2464%
89	17.8214%	12.3076%	15.1690%	11.0222%	21.4250%	21.4250%	16.9233%	13.0972%
90	19.0460%	13.5630%	16.9901%	12.1684%	22.9990%	22.9990%	18.3408%	14.0049%
91	20.3007%	14.9577%	18.5819%	13.3625%	24.6690%	24.6690%	19.9769%	14.9698%
92	21.7904%	16.5103%	20.4547%	14.5651%	26.4390%	26.4390%	21.6605%	15.9924%
93	23.4086%	18.2419%	22.1331%	15.9565%	28.3100%	28.3100%	23.3662%	17.0433%
94	24.8436%	20.1757%	23.7705%	17.1321%	30.2850%	30.2850%	25.0693%	18.2799%
95	26.3954%	22.2043%	25.6963%	18.2486%	32.3640%	32.3640%	26.7491%	19.4509%
96	28.0803%	24.3899%	27.7166%	20.0504%	34.5480%	34.5480%	28.3905%	20.5379%
97	29.9154%	26.8185%	29.2734%	21.2671%	36.8350%	36.8350%	29.9852%	21.5240%
98	31.9185%	29.5187%	31.1533%	22.1274%	39.2250%	39.2250%	31.5296%	22.3947%
99	34.1086%	32.5225%	32.6266%	22.8626%	41.7120%	41.7120%	33.0207%	23.1387%
100	36.5052%	35.8897%	34.0444%	23.4633%	44.2940%	44.2940%	34.4556%	23.7467%

Appendix

Healthy Pre-retirement Mortality

	Current Assumption		Proposed Assumption	
Age	Male	Female	Male	Female
30	0.0572%	0.0342%	0.0332%	0.0252%
31	0.0607%	0.0364%	0.0366%	0.0295%
32	0.0645%	0.0388%	0.0406%	0.0330%
33	0.0687%	0.0414%	0.0453%	0.0360%
34	0.0734%	0.0443%	0.0503%	0.0385%
35	0.0785%	0.0476%	0.0556%	0.0408%
36	0.0860%	0.0502%	0.0611%	0.0430%
37	0.0907%	0.0535%	0.0666%	0.0451%
38	0.0966%	0.0573%	0.0713%	0.0474%
39	0.1039%	0.0617%	0.0760%	0.0500%
40	0.1128%	0.0665%	0.0808%	0.0538%
41	0.1238%	0.0716%	0.0860%	0.0583%
42	0.1370%	0.0775%	0.0918%	0.0636%
43	0.1527%	0.0841%	0.0984%	0.0698%
44	0.1715%	0.0919%	0.1060%	0.0769%
45	0.1932%	0.1010%	0.1147%	0.0837%
46	0.2183%	0.1117%	0.1231%	0.0911%
47	0.2471%	0.1237%	0.1321%	0.0988%
48	0.2790%	0.1366%	0.1410%	0.1081%
49	0.3138%	0.1505%	0.1501%	0.1177%
50	0.3513%	0.1647%	0.1590%	0.1293%
51	0.3909%	0.1793%	0.1678%	0.1417%
52	0.4324%	0.1948%	0.1765%	0.1573%
53	0.4755%	0.2119%	0.1882%	0.1744%
54	0.5200%	0.2315%	0.2010%	0.1938%
55	0.5660%	0.2541%	0.2182%	0.2156%
56	0.6131%	0.2803%	0.2395%	0.2410%
57	0.6618%	0.3103%	0.2643%	0.2667%
58	0.7139%	0.3442%	0.2921%	0.2925%
59	0.7719%	0.3821%	0.3201%	0.3216%
60	0.8384%	0.4241%	0.3513%	0.3535%
61	0.9158%	0.4702%	0.3906%	0.3890%
62	1.0064%	0.5210%	0.4290%	0.4275%
63	1.1133%	0.5769%	0.4760%	0.4688%
64	1.2391%	0.6385%	0.5204%	0.5127%
65	1.3868%	0.7064%	0.5678%	0.5596%
66	1.5592%	0.7817%	0.6244%	0.6090%
67	1.7579%	0.8681%	0.6753%	0.6608%
68	1.9804%	0.9702%	0.7198%	0.7148%
69	2.2229%	1.0921%	0.7741%	0.7708%
70	2.4817%	1.2385%	0.8193%	0.8287%

Appendix

Select Withdrawal Rates

Years of Service	Current Assumption	Proposed Assumption
0	N/A	25%
1	N/A	20%
2	N/A	15%

Ultimate Withdrawal Rates

Age	Current Assumption		Proposed Assumption	
	Male	Female	Male	Female
20	24.00%	16.00%	14.70%	14.20%
21	22.00%	15.60%	14.70%	14.20%
22	20.00%	15.20%	14.70%	14.20%
23	18.10%	14.80%	14.70%	14.20%
24	16.30%	14.50%	14.70%	14.20%
25	14.70%	14.20%	14.70%	14.20%
26	13.30%	14.00%	13.30%	13.60%
27	12.10%	13.80%	12.10%	13.10%
28	11.00%	13.70%	11.00%	12.50%
29	10.00%	13.60%	10.00%	12.00%
30	9.10%	13.50%	9.10%	11.40%
31	8.30%	13.40%	8.30%	10.80%
32	7.60%	13.30%	7.60%	10.30%
33	7.00%	13.20%	7.00%	9.70%
34	6.50%	13.10%	6.50%	9.20%
35	6.00%	12.90%	6.00%	8.60%
36	5.60%	12.60%	5.60%	8.40%
37	5.20%	12.20%	5.20%	8.10%
38	4.90%	11.70%	4.90%	7.80%
39	4.60%	11.10%	4.60%	7.40%
40	4.40%	10.40%	4.40%	6.90%
41	4.20%	9.60%	4.20%	6.40%
42	4.00%	8.70%	4.00%	5.80%
43	3.80%	7.80%	3.80%	5.20%
44	3.60%	7.00%	3.60%	4.70%
45	3.40%	6.40%	3.40%	4.30%
46	3.20%	5.90%	3.20%	3.90%
47	3.00%	5.60%	3.00%	3.70%
48	2.80%	5.30%	2.80%	3.50%
49	2.60%	5.00%	2.60%	3.30%
50	2.40%	4.70%	2.40%	3.10%
51	2.20%	4.40%	2.20%	2.90%
52	2.00%	4.10%	2.00%	2.70%
53	1.80%	3.90%	1.80%	2.60%
54	1.60%	3.60%	1.60%	2.40%
55	1.40%	3.30%	1.40%	2.20%
56	1.20%	2.90%	1.20%	1.90%
57	1.00%	2.30%	1.00%	1.50%
58	0.70%	1.70%	0.70%	1.10%
59	0.40%	0.90%	0.40%	0.60%
60+	0.00%	0.00%	0.00%	0.00%

Appendix

Active Retirement Rates

Age	Current Assumption	Proposed Assumption
50	2%	3%
51	2%	2%
52	2%	2%
53	2%	2%
54	5%	5%
55	25%	20%
56	10%	8%
57	10%	8%
58	10%	8%
59	10%	8%
60	20%	15%
61	20%	15%
62	40%	30%
63	40%	30%
64	40%	30%
65	50%	40%
66	50%	40%
67	50%	40%
68	50%	40%
69	50%	40%
70+	100%	100%

Appendix

Disability Retirement Rates

Age	Current Assumption		Proposed Assumption	
	Male	Female	Male	Female
20	0.04%	0.04%	0.04%	0.04%
21	0.04%	0.04%	0.04%	0.04%
22	0.05%	0.05%	0.05%	0.05%
23	0.05%	0.05%	0.05%	0.05%
24	0.06%	0.06%	0.06%	0.06%
25	0.06%	0.06%	0.06%	0.06%
26	0.06%	0.06%	0.06%	0.06%
27	0.07%	0.07%	0.07%	0.07%
28	0.07%	0.07%	0.07%	0.07%
29	0.08%	0.08%	0.08%	0.08%
30	0.08%	0.08%	0.10%	0.08%
31	0.09%	0.09%	0.12%	0.09%
32	0.09%	0.09%	0.14%	0.09%
33	0.10%	0.10%	0.14%	0.10%
34	0.10%	0.10%	0.16%	0.10%
35	0.11%	0.11%	0.18%	0.11%
36	0.12%	0.12%	0.18%	0.12%
37	0.13%	0.13%	0.20%	0.13%
38	0.15%	0.15%	0.20%	0.15%
39	0.16%	0.16%	0.21%	0.16%
40	0.18%	0.18%	0.23%	0.18%
41	0.20%	0.20%	0.25%	0.20%
42	0.22%	0.22%	0.27%	0.22%
43	0.24%	0.24%	0.29%	0.24%
44	0.26%	0.26%	0.31%	0.26%
45	0.29%	0.29%	0.34%	0.39%
46	0.32%	0.32%	0.37%	0.42%
47	0.36%	0.36%	0.41%	0.46%
48	0.41%	0.41%	0.46%	0.51%
49	0.46%	0.46%	0.51%	0.56%
50	0.50%	0.50%	0.55%	0.70%
51	0.57%	0.57%	0.62%	0.77%
52	0.64%	0.64%	0.69%	0.84%
53	0.72%	0.72%	0.77%	0.92%
54	0.80%	0.80%	0.85%	1.00%
55	0.88%	0.88%	0.88%	1.18%
56	0.98%	0.98%	0.98%	1.28%
57	1.08%	1.08%	1.08%	1.38%
58	1.18%	1.18%	1.18%	1.48%
59	1.29%	1.29%	1.29%	1.59%
60	1.41%	1.41%	1.41%	2.41%
61	1.54%	1.54%	1.54%	2.54%
62+	1.67%	1.67%	1.67%	2.67%

Appendix

Salary Scale			
Current Assumption		**Proposed Assumption**	
Age	**Rate**	**Age**	**Rate**
20	7.75%	20	9.00%
21	7.15%	21	8.75%
22	7.11%	22	8.50%
23	7.07%	23	8.25%
24	7.04%	24	8.00%
25	7.00%	25	7.75%
26	7.00%	26	7.50%
27	7.00%	27	7.25%
28	7.00%	28	7.00%
29	7.00%	29	6.75%
30	7.00%	30	6.75%
31	7.00%	31	6.50%
32	7.00%	32	6.50%
33	7.00%	33	6.50%
34	7.00%	34	6.25%
35	7.00%	35	6.25%
36	6.90%	36	6.00%
37	6.81%	37	6.00%
38	6.71%	38	6.00%
39	6.61%	39	5.75%
40	6.50%	40	5.75%
41	6.35%	41	5.75%
42	6.21%	42	5.50%
43	6.06%	43	5.25%
44	5.90%	44	5.25%
45	5.75%	45-54	5.00%
46	5.69%	55	4.75%
47	5.64%	56	4.75%
48	5.58%	57	4.50%
49	5.54%	58-64	4.25%
50	5.50%	65+	4.00%
51	5.44%		
52	5.38%		
53	5.32%		
54	5.28%		
55+	5.25%		

Appendix

Detailed Experience Analysis

Salary Increases

2006-2011 Experience

Age Group	Observed Average	Expected Average
<25	8.33%	7.07%
25 – 29	7.14%	7.00%
30 – 34	6.34%	7.00%
35 – 39	5.37%	6.80%
40 – 44	4.92%	6.21%
45 – 49	4.42%	5.64%
50 – 54	4.29%	5.39%
55 – 59	4.05%	5.25%
60 – 64	3.38%	5.25%
65 – 69	5.45%	5.25%
70 – 74	-0.71%	5.25%
75+	1.40%	5.25%
Total	**5.33%**	**6.26%**

2006-2007 Experience

Age Group	Observed Average	Expected Average
<25	12.82%	7.08%
25 – 29	7.80%	7.00%
30 – 34	7.06%	7.00%
35 – 39	5.97%	6.81%
40 – 44	5.82%	6.21%
45 – 49	5.40%	5.64%
50 – 54	4.26%	5.39%
55 – 59	4.08%	5.25%
60 – 64	4.38%	5.25%
65 – 69	7.32%	5.25%
70 – 74	-16.23%	5.25%
75+	0.60%	5.25%
Total	**6.01%**	**6.26%**

Appendix

Salary Increases

2007-2008 Experience

Age Group	Observed Average	Expected Average
<25	10.52%	7.07%
25 – 29	9.22%	7.00%
30 – 34	8.22%	7.00%
35 – 39	6.69%	6.81%
40 – 44	6.21%	6.20%
45 – 49	5.89%	5.64%
50 – 54	6.11%	5.39%
55 – 59	5.87%	5.25%
60 – 64	4.29%	5.25%
65 – 69	11.16%	5.25%
70 – 74	5.04%	5.25%
75+	0.00%	0.00%
Total	**7.00%**	**6.26%**

2008-2009 Experience

Age Group	Observed Average	Expected Average
<25	8.50%	7.07%
25 – 29	7.88%	7.00%
30 – 34	7.36%	7.00%
35 – 39	6.31%	6.80%
40 – 44	5.64%	6.20%
45 – 49	5.63%	5.65%
50 – 54	4.67%	5.38%
55 – 59	4.69%	5.25%
60 – 64	3.34%	5.25%
65 – 69	4.55%	5.25%
70 – 74	22.24%	5.25%
75+	0.00%	0.00%
Total	**6.13%**	**6.26%**

Appendix

Salary Increases

2009-2010 Experience

Age Group	Observed Average	Expected Average
<25	4.69%	7.06%
25 – 29	4.78%	7.00%
30 – 34	3.95%	7.00%
35 – 39	3.84%	6.80%
40 – 44	3.32%	6.22%
45 – 49	2.29%	5.65%
50 – 54	3.32%	5.39%
55 – 59	2.15%	5.25%
60 – 64	2.74%	5.25%
65 – 69	1.91%	5.25%
70 – 74	-4.76%	5.25%
75+	0.00%	0.00%
Total	**3.46%**	**6.26%**

2010-2011 Experience

Age Group	Observed Average	Expected Average
<25	5.42%	7.07%
25 – 29	6.53%	7.00%
30 – 34	5.44%	7.00%
35 – 39	4.15%	6.80%
40 – 44	3.74%	6.20%
45 – 49	3.24%	5.64%
50 – 54	3.23%	5.39%
55 – 59	3.71%	5.25%
60 – 64	2.82%	5.25%
65 – 69	5.73%	5.25%
70 – 74	1.09%	5.25%
75+	2.20%	5.25%
Total	**4.32%**	**6.24%**

Appendix

Retirement

2006-2011 Experience

Age	Actual Retirements	Expected Retirements	Actual/Expected
50	14	6.98	200.6%
51	6	6.56	91.5%
52	8	6.62	120.8%
53	8	6.38	125.4%
54	11	15.15	72.6%
55	28	73.00	38.4%
56	18	26.50	67.9%
57	19	24.70	76.9%
58	14	21.20	66.0%
59	14	18.50	75.7%
60	20	31.60	63.3%
61	11	23.80	46.2%
62	29	38.40	75.5%
63	12	24.80	48.4%
64	13	16.40	79.3%
65	11	15.50	71.0%
66	10	12.00	83.3%
67	4	7.50	53.3%
68	4	5.50	72.7%
69	1	3.50	28.6%
70+	5	23.00	21.7%
Total	**260**	**407.59**	**63.8%**

Not all numbers may add due to rounding.

Appendix

Retirement

2006-2007 Experience

Age	Actual Retirements	Expected Retirements	Actual/Expected
50	2	1.18	169.5%
51	1	1.32	75.8%
52	1	1.38	72.5%
53	1	1.12	89.3%
54	1	2.85	35.1%
55	4	13.75	29.1%
56	4	4.60	87.0%
57	6	4.80	125.0%
58	1	2.60	38.5%
59	3	3.10	96.8%
60	2	4.00	50.0%
61	1	3.80	26.3%
62	3	5.20	57.7%
63	3	3.60	83.3%
64	1	3.20	31.3%
65	1	1.00	100.0%
66	2	1.50	133.3%
67	1	1.50	66.7%
68	0	0.50	0.0%
69	0	0.00	N/A
70+	0	4.00	0.0%
Total	**38**	**65.00**	**58.5%**

Not all numbers may add due to rounding.

Appendix

Retirement

2007-2008 Experience

Age	Actual Retirements	Expected Retirements	Actual/Expected
50	3	1.50	200.0%
51	1	1.16	86.2%
52	4	1.28	312.5%
53	5	1.40	357.1%
54	2	2.75	72.7%
55	6	14.25	42.1%
56	0	5.00	0.0%
57	3	4.60	65.2%
58	3	4.30	69.8%
59	1	2.60	38.5%
60	3	5.80	51.7%
61	1	3.40	29.4%
62	5	7.20	69.4%
63	1	3.60	27.8%
64	2	2.80	71.4%
65	0	3.50	0.0%
66	1	1.00	100.0%
67	0	0.50	0.0%
68	1	1.00	100.0%
69	1	1.00	100.0%
70+	2	4.00	50.0%
Total	**45**	**72.64**	**61.9%**

Not all numbers may add due to rounding.

Appendix

Retirement

2008-2009 Experience

Age	Actual Retirements	Expected Retirements	Actual/Expected
50	3	1.30	230.8%
51	1	1.38	72.5%
52	0	1.26	0.0%
53	1	1.20	83.3%
54	2	3.40	58.8%
55	6	13.00	46.2%
56	5	5.30	94.3%
57	4	5.30	75.5%
58	3	4.50	66.7%
59	3	4.00	75.0%
60	5	5.40	92.6%
61	2	5.00	40.0%
62	7	6.80	102.9%
63	1	5.60	17.9%
64	4	3.60	111.1%
65	2	3.00	66.7%
66	1	4.50	22.2%
67	0	0.50	0.0%
68	0	0.50	0.0%
69	0	1.00	0.0%
70+	2	5.00	40.0%
Total	**52**	**81.54**	**63.8%**

Not all numbers may add due to rounding.

Appendix

Retirement

2009-2010 Experience

Age	Actual Retirements	Expected Retirements	Actual/Expected
50	3	1.38	217.4%
51	2	1.32	151.5%
52	2	1.42	140.8%
53	0	1.22	0.0%
54	5	3.15	158.7%
55	8	17.25	46.4%
56	2	4.90	40.8%
57	4	5.20	76.9%
58	4	4.60	87.0%
59	4	4.60	87.0%
60	3	7.80	38.5%
61	4	5.00	80.0%
62	4	9.20	43.5%
63	4	4.40	90.9%
64	4	4.40	90.9%
65	5	4.50	111.1%
66	2	2.00	100.0%
67	2	4.00	50.0%
68	0	0.50	0.0%
69	0	0.50	0.0%
70+	1	5.00	20.0%
Total	**63**	**92.34**	**68.2%**

Not all numbers may add due to rounding.

Appendix

Retirement

2010-2011 Experience

Age	Actual Retirements	Expected Retirements	Actual/Expected
50	3	1.62	185.2%
51	1	1.38	72.5%
52	1	1.28	78.1%
53	1	1.44	69.4%
54	1	3.00	33.3%
55	4	14.75	27.1%
56	7	6.70	104.5%
57	2	4.80	41.7%
58	3	5.20	57.7%
59	3	4.20	71.4%
60	7	8.60	81.4%
61	3	6.60	45.5%
62	10	10.00	100.0%
63	3	7.60	39.5%
64	2	2.40	83.3%
65	3	3.50	85.7%
66	4	3.00	133.3%
67	1	1.00	100.0%
68	3	3.00	100.0%
69	0	1.00	0.0%
70+	0	5.00	0.0%
Total	**62**	**96.07**	**64.5%**

Not all numbers may add due to rounding.

Appendix

Disability Retirements

2006-2011 Experience

Age Group	Males			Females			Total		
	Actual Disabilities	Expected Disabilities	Actual/ Expected	Actual Disabilities	Expected Disabilities	Actual/ Expected	Actual Disabilities	Expected Disabilities	Actual/ Expected
<25	0	0.36	0.0%	0	0.24	0.0%	0	0.61	0.0%
25-29	1	1.21	82.8%	1	0.92	109.0%	2	2.12	94.1%
30-34	3	1.46	205.0%	1	0.91	109.7%	4	2.78	168.4%
35-39	4	2.28	175.8%	2	1.28	156.7%	6	3.55	168.9%
40-44	5	3.58	139.7%	2	1.90	105.0%	7	5.48	127.7%
45-49	8	4.95	161.6%	6	3.24	185.3%	14	8.19	171.0%
50-54	9	7.41	121.4%	7	4.34	161.4%	16	11.75	136.2%
55-59	9	9.22	97.6%	8	4.85	165.1%	17	14.07	120.9%
60-64	5	4.03	124.1%	5	2.12	236.0%	10	6.15	162.7%
Total	**44**	**34.50**	**127.5%**	**32**	**19.79**	**161.7%**	**76**	**54.29**	**140.0%**

2006-2007 Experience

Age Group	Males			Females			Total		
	Actual Disabilities	Expected Disabilities	Actual/ Expected	Actual Disabilities	Expected Disabilities	Actual/ Expected	Actual Disabilities	Expected Disabilities	Actual/ Expected
<25	0	0.09	0.0%	0	0.06	0.0%	0	0.14	0.0%
25-29	1	0.22	446.8%	1	0.19	535.6%	2	0.41	487.2%
30-34	0	0.29	0.0%	0	0.19	0.0%	0	0.48	0.0%
35-39	2	0.48	416.0%	0	0.23	0.0%	2	0.71	280.3%
40-44	1	0.67	149.3%	0	0.41	0.0%	1	1.08	92.3%
45-49	3	0.95	315.9%	2	0.60	335.9%	5	1.55	323.6%
50-54	3	1.43	209.2%	1	0.81	123.8%	4	2.24	178.5%
55-59	3	1.61	186.6%	2	0.85	235.5%	5	2.46	203.5%
60-64	2	0.58	345.6%	2	0.27	735.3%	4	0.85	470.2%
Total	**15**	**6.32**	**237.3%**	**8**	**3.61**	**221.9%**	**23**	**9.93**	**231.7%**

Not all numbers may add due to rounding.

Appendix

Disability Retirements

2007-2008 Experience

Age Group	Males			Females			Total		
	Actual Disabilities	Expected Disabilities	Actual/ Expected	Actual Disabilities	Expected Disabilities	Actual/ Expected	Actual Disabilities	Expected Disabilities	Actual/ Expected
<25	0	0.08	0.0%	0	0.05	0.0%	0	0.13	0.0%
25-29	0	0.23	0.0%	0	0.19	0.0%	0	0.42	0.0%
30-34	0	0.29	0.0%	0	0.19	0.0%	0	0.48	0.0%
35-39	1	0.46	217.2%	0	0.25	0.0%	1	0.71	141.0%
40-44	2	0.69	291.5%	0	0.39	0.0%	2	1.07	186.3%
45-49	1	0.96	104.0%	1	0.64	155.5%	2	1.60	124.6%
50-54	1	1.46	68.4%	0	0.85	0.0%	1	2.31	43.2%
55-59	2	1.78	112.6%	0	0.85	0.0%	2	2.63	76.2%
60-64	1	0.70	143.0%	0	0.35	0.0%	1	1.05	95.3%
Total	**8**	**6.65**	**120.4%**	**1**	**3.75**	**26.6%**	**9**	**10.40**	**86.5%**

2008-2009 Experience

Age Group	Males			Females			Total		
	Actual Disabilities	Expected Disabilities	Actual/ Expected	Actual Disabilities	Expected Disabilities	Actual/ Expected	Actual Disabilities	Expected Disabilities	Actual/ Expected
<25	0	0.08	0.0%	0	0.06	0.0%	0	0.14	0.0%
25-29	0	0.25	0.0%	0	0.19	0.0%	0	0.43	0.0%
30-34	0	0.30	0.0%	0	0.18	0.0%	0	0.48	0.0%
35-39	0	0.47	0.0%	0	0.27	0.0%	0	0.73	0.0%
40-44	1	0.75	133.9%	1	0.37	269.4%	2	1.12	178.9%
45-49	4	0.97	410.8%	0	0.68	0.0%	4	1.65	242.2%
50-54	1	1.56	63.9%	2	0.85	234.1%	3	2.42	124.0%
55-59	1	1.83	54.6%	1	1.06	93.9%	2	2.90	69.0%
60-64	1	0.85	118.3%	1	0.36	276.4%	2	1.21	165.7%
Total	**8**	**7.06**	**113.3%**	**5**	**4.02**	**124.4%**	**13**	**11.08**	**117.3%**

Not all numbers may add due to rounding.

Appendix

Disability Retirements

2009-2010 Experience

Age Group	Males			Females			Total		
	Actual Disabilities	Expected Disabilities	Actual/ Expected	Actual Disabilities	Expected Disabilities	Actual/ Expected	Actual Disabilities	Expected Disabilities	Actual/ Expected
<25	0	0.06	0.0%	0	0.05	0.0%	0	0.11	0.0%
25-29	0	0.26	0.0%	0	0.19	0.0%	0	0.46	0.0%
30-34	3	0.30	1,015.6%	0	0.17	0.0%	3	0.47	644.5%
35-39	0	0.44	0.0%	1	0.27	366.3%	1	0.71	139.9%
40-44	1	0.74	134.4%	1	0.36	274.1%	2	1.11	180.4%
45-49	0	1.06	0.0%	1	0.68	146.8%	1	1.74	57.4%
50-54	3	1.50	199.5%	4	0.88	452.2%	7	2.39	293.1%
55-59	1	1.98	50.4%	2	1.11	180.7%	3	3.09	97.1%
60-64	0	0.94	0.0%	1	0.51	194.4%	1	1.46	68.6%
Total	**8**	**7.30**	**109.6%**	**10**	**4.24**	**235.9%**	**18**	**11.54**	**156.0%**

2010-2011 Experience

Age Group	Males			Females			Total		
	Actual Disabilities	Expected Disabilities	Actual/ Expected	Actual Disabilities	Expected Disabilities	Actual/ Expected	Actual Disabilities	Expected Disabilities	Actual/ Expected
<25	0	0.05	0.0%	0	0.03	0.0%	0	0.08	0.0%
25-29	0	0.24	0.0%	0	0.16	0.0%	0	0.40	0.0%
30-34	0	0.29	0.0%	1	0.18	549.5%	1	0.47	211.9%
35-39	1	0.42	235.6%	1	0.26	390.6%	2	0.68	293.9%
40-44	0	0.73	0.0%	0	0.37	0.0%	0	1.10	0.0%
45-49	0	1.00	0.0%	2	0.64	312.1%	2	1.64	121.6%
50-54	1	1.45	69.1%	0	0.94	0.0%	1	2.39	41.9%
55-59	2	2.02	99.0%	3	0.98	307.4%	5	3.00	166.9%
60-64	1	0.96	103.9%	1	0.62	161.4%	2	1.58	126.4%
Total	**5**	**7.17**	**69.7%**	**8**	**4.18**	**191.6%**	**13**	**11.35**	**114.6%**

Not all numbers may add due to rounding.

Appendix

Terminations

2006-2011 Experience

Age Group	Males			Females			Total		
	Actual Terminations	Expected Terminations	Actual/ Expected	Actual Terminations	Expected Terminations	Actual/ Expected	Actual Terminations	Expected Terminations	Actual/ Expected
<25	167	123.52	135.2%	114	67.15	169.8%	281	190.68	147.4%
25-29	310	218.12	142.1%	271	187.58	144.5%	581	405.70	143.2%
30-34	188	122.98	152.9%	130	132.40	98.2%	318	255.38	124.5%
35-39	146	88.69	164.6%	103	116.18	88.7%	249	204.87	121.5%
40-44	113	65.59	172.3%	84	75.22	111.7%	197	140.81	139.9%
45-49	77	41.01	187.8%	54	50.77	106.4%	131	91.78	142.7%
50-54	30	2.47	1,215.6%	18	3.09	582.1%	48	5.56	863.3%
55-59	11	0.85	1,295.6%	9	1.08	833.3%	20	1.93	1,036.8%
60+	6	0.00	N/A	2	0.00	N/A	8	0.00	N/A
Total	**1,048**	**663.23**	**158.0%**	**785**	**633.46**	**123.9%**	**1,833**	**1,296.69**	**141.4%**

2006-2007 Experience

Age Group	Males			Females			Total		
	Actual Terminations	Expected Terminations	Actual/ Expected	Actual Terminations	Expected Terminations	Actual/ Expected	Actual Terminations	Expected Terminations	Actual/ Expected
<25	46	30.88	149.0%	29	15.37	188.7%	75	46.24	162.2%
25-29	81	41.04	197.4%	70	38.76	180.6%	151	79.79	189.2%
30-34	49	24.09	203.4%	26	27.66	94.0%	75	51.75	144.9%
35-39	47	19.06	246.6%	27	21.56	125.2%	74	40.62	182.2%
40-44	23	12.34	186.4%	23	16.37	140.5%	46	28.70	160.3%
45-49	10	7.74	129.2%	11	9.48	116.0%	21	17.23	121.9%
50-54	9	0.59	1,535.8%	4	0.60	664.5%	13	1.19	1,094.3%
55-59	3	0.19	1,562.5%	1	0.21	483.1%	4	0.40	1,002.5%
60+	0	0.00	N/A	0	0.00	N/A	0	0.00	N/A
Total	**268**	**135.92**	**197.2%**	**191**	**130.00**	**146.9%**	**459**	**265.93**	**172.6%**

Not all numbers may add due to rounding.

Appendix

Terminations

2007-2008 Experience

Age Group	Males Actual Terminations	Males Expected Terminations	Males Actual/ Expected	Females Actual Terminations	Females Expected Terminations	Females Actual/ Expected	Total Actual Terminations	Total Expected Terminations	Total Actual/ Expected
<25	42	27.35	153.5%	26	13.03	199.6%	68	40.38	168.4%
25-29	63	41.82	150.6%	65	39.28	165.5%	128	81.10	157.8%
30-34	42	24.51	171.3%	39	26.97	144.6%	81	51.48	157.3%
35-39	32	18.09	176.9%	26	22.86	113.7%	58	40.95	141.6%
40-44	14	12.67	110.5%	20	15.12	132.3%	34	27.79	122.3%
45-49	19	8.06	235.7%	15	10.24	146.5%	34	18.30	185.8%
50-54	3	0.56	537.6%	4	0.45	885.0%	7	1.01	693.1%
55-59	5	0.21	2,336.4%	1	0.16	625.0%	6	0.37	1,604.3%
60+	2	0.00	N/A	1	0.00	N/A	3	0.00	N/A
Total	**222**	**133.27**	**166.6%**	**197**	**128.11**	**153.8%**	**419**	**261.39**	**160.3%**

2008-2009 Experience

Age Group	Males Actual Terminations	Males Expected Terminations	Males Actual/ Expected	Females Actual Terminations	Females Expected Terminations	Females Actual/ Expected	Total Actual Terminations	Total Expected Terminations	Total Actual/ Expected
<25	37	28.46	130.0%	19	16.29	116.7%	56	44.74	125.2%
25-29	55	45.63	120.5%	44	37.98	115.8%	99	83.62	118.4%
30-34	40	25.04	159.7%	25	26.22	95.3%	65	51.26	126.8%
35-39	21	18.10	116.0%	16	24.27	65.9%	37	42.37	87.3%
40-44	20	13.55	147.6%	15	14.37	104.4%	35	27.92	125.4%
45-49	16	8.00	199.9%	11	10.65	103.3%	27	18.65	144.8%
50-54	2	0.57	349.7%	4	0.82	485.4%	6	1.40	429.8%
55-59	1	0.20	497.5%	0	0.25	0.0%	1	0.45	222.7%
60+	1	0.00	N/A	0	0.00	N/A	1	0.00	N/A
Total	**193**	**139.56**	**138.3%**	**134**	**130.84**	**102.4%**	**327**	**270.40**	**120.9%**

Not all numbers may add due to rounding.

Appendix

Terminations

2009-2010 Experience

Age Group	Males Actual Terminations	Expected Terminations	Actual/ Expected	Females Actual Terminations	Expected Terminations	Actual/ Expected	Total Actual Terminations	Expected Terminations	Actual/ Expected
<25	25	20.98	119.2%	25	13.77	181.5%	50	34.75	143.9%
25-29	64	46.71	137.0%	60	39.02	153.8%	124	85.73	144.6%
30-34	32	24.88	128.6%	17	24.77	68.6%	49	49.64	98.7%
35-39	27	17.02	158.6%	19	24.70	76.9%	46	41.71	110.3%
40-44	34	13.77	247.0%	12	14.64	82.0%	46	28.40	162.0%
45-49	23	8.92	257.7%	11	10.69	102.9%	34	19.61	173.4%
50-54	10	0.45	2,212.4%	2	0.74	270.6%	12	1.19	1,007.6%
55-59	2	0.17	1,204.8%	6	0.31	1,935.5%	8	0.48	1,680.7%
60+	2	0.00	N/A	0	0.00	N/A	2	0.00	N/A
Total	**219**	**132.89**	**164.8%**	**152**	**128.63**	**118.2%**	**371**	**261.52**	**141.9%**

2010-2011 Experience

Age Group	Males Actual Terminations	Expected Terminations	Actual/ Expected	Females Actual Terminations	Expected Terminations	Actual/ Expected	Total Actual Terminations	Expected Terminations	Actual/ Expected
<25	17	15.85	107.2%	15	8.70	172.3%	32	24.56	130.3%
25-29	47	42.93	109.5%	32	32.53	98.4%	79	75.46	104.7%
30-34	25	24.46	102.2%	23	26.79	85.9%	48	51.25	93.7%
35-39	19	16.42	115.7%	15	22.79	65.8%	34	39.21	86.7%
40-44	22	13.27	165.8%	14	14.72	95.1%	36	27.99	128.6%
45-49	9	8.28	108.7%	6	9.71	61.8%	15	17.99	83.4%
50-54	6	0.30	2,000.0%	4	0.48	842.1%	10	0.78	1,290.3%
55-59	0	0.08	0.0%	1	0.16	645.2%	1	0.23	432.9%
60+	1	0.00	N/A	1	0.00	N/A	2	0.00	N/A
Total	**146**	**121.58**	**120.1%**	**111**	**115.88**	**95.8%**	**257**	**237.46**	**108.2%**

Not all numbers may add due to rounding.

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