

November 19, 2002

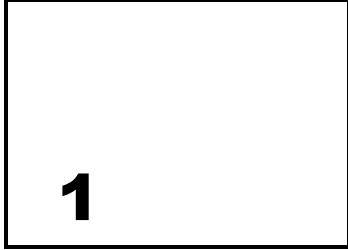
**Active and Retired  
Experience Analysis**  
San Mateo County Employees'  
Retirement Association

**MERCER**

Human Resource Consulting

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## **Summary of Results**

## Noneconomic and Economic Assumptions

Changes were recommended for most of the assumptions. The following list gives a brief description of the recommended changes:

### **Pre-Retirement Assumptions:**

- **Withdrawal** – Some changes were made to General Plans 2 and 4, Female Plan 3 and Safety and Probation withdrawal assumptions to more closely match the observed experience. In general, we observed more withdrawals than expected. The modifications to assumptions were slight and decreased costs slightly.
- **Termination with Vested Benefit** – In General Plans 2, 3 and 4, more members than expected left and maintained a benefit in the System. For Safety and Probation, fewer than expected left. The assumptions were revised to reflect these trends. This change also decreased costs slightly.
- **Disability** – More duty-related disabilities than expected were observed among all the General Plans. The assumptions were increased to reflect this revised data. No change was made to the Safety and Probation assumption. This change increased plan costs.
- **Service Retirement Rates** – Service Retirement was higher than expected in all plans except Female General Plan 3. We made some changes to service retirement assumptions. We will continue to monitor this assumption for the impact of the new benefit formulas.
- **Ordinary Death** – We made some changes to the ordinary death rates for female general members so that the tables match the tables used for post-retirement mortality. In the past, we have observed that pre-retirement mortality is lower than post-retirement mortality. That evidence did not continue to hold this year for female general members. As a result, we changed the ordinary death assumption to match the post-retirement assumption.

### **Salary Increase**

- **Salary Increase** – The merit and longevity salary increase assumptions were left unchanged.

### **Post-Retirement Mortality**

- **Post-Retirement Mortality** – The mortality tables for retired healthy male and female General members and disabled General and Safety retirees reflect lower than expected deaths over the experience study period. Adjustments were made to reflect the improvement in life expectancy for this group.

These and other assumption changes are detailed in Sections 3 and 4.

## Investment Return Assumption

We recommend maintaining the current investment return assumption of 8.25% and the current inflation assumption of 4.25%.

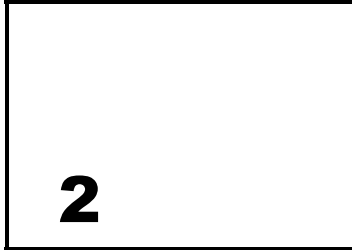
## Impact on Contribution Rates

The proposed changes outlined in this report increase the average contribution rate for employers by 1.94%. This number is based on the current plan design and will change based on the new plan design.

In addition, employer contributions before assumption changes increased by 2.09% as a result of plan experience, particularly investment return.

## Member Contribution Rates

The changes in mortality rates increased the average member contribution rates by 0.07%.



## **Discussion of Plan Assumptions as Reviewed in Experience Analysis**

## Noneconomic Assumptions

The purpose of this study is to recommend noneconomic and economic assumptions to be used in the June 30, 2002 actuarial valuation. The noneconomic assumptions can be categorized as follows:

### Active Members

- Withdrawal of Member Contributions
- Termination with Vested Benefit
- Duty Death
- Ordinary Death
- Service Retirement
- Disability Retirement
- Percentage of members married (for survivor benefits)
- Percentage of Terminated Vested Members who go on to work for a reciprocal entity

### Retired Members

- Mortality After Service Retirement
- Mortality After Disability Retirement

Noneconomic assumptions for active members are custom-designed to be reflective of SamCERA's unique experience by category of member by age and/or service group.

Post-retirement mortality tables typically are some variation of standard industry-wide tables developed from a much wider base of data. Some modifications to the standard tables are made to reflect SamCERA's unique experience.

## Economic Assumptions

The economic assumptions studied are:

- Inflation
- Investment Return
- Salary Increase

### Salary Increase Assumption

We have reviewed the salary increases of members over the study period to evaluate the need for modifications. In this review we focused on the actual versus expected real salary increases (i.e., increases over inflation). Real salary increases have two components:

- General salary increases which exceed inflation (“Real Across-the-Board Salary Increases”); and
- Merit and Longevity Increases.

An analysis of both components is included in this report.

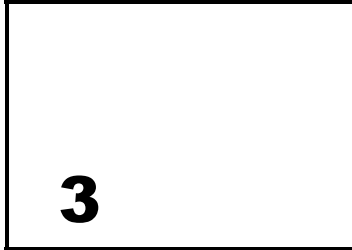
### **Cost-of-Living Increase Assumption**

This assumption is used to determine the value of the COLA benefits that will be paid to current and future retirees.

### **Member Data**

The experience data used in the noneconomic assumptions and salary increase study was developed from the member data files for the June 30, 1999 through June 30, 2002 valuations. Changes in demographics which occurred over this period were categorized by cause. This experience was analyzed by membership, gender, age and service categories, as appropriate.





## **Review of Economic Assumptions**

## Economic Actuarial Assumptions

### Introduction

Economic actuarial assumptions are of three types:

1. *Inflation* results from increases in prices of goods and services. Inflation drives employee salary increases, retiree cost-of-living increases and the returns that investors demand from securities markets and other investments. For those reasons the inflation assumption underlies all economic actuarial assumptions. This assumption also determines the rate at which payments to the Unfunded Actuarial Accrued Liability increase each year.
2. *Investment Return* has a powerful influence on a retirement system's cost to employers and members. The more money earned from investments, the less needs to be contributed. Assuming a typical new member's pension is funded over a 25 year career and that member receives pension checks for 20 years after retirement, a 1% higher rate of investment return will reduce required contributions by about 20% (all else remaining equal). For this reason, setting the investment return assumption is an important decision.
3. *Salary Increases* have a significant impact on the benefit members will receive at retirement. This assumption contains two components -- cost-of-living (inflation) increases plus pay raises that members receive as a result of promotions and step increases.

### Setting Economic Assumptions

The Actuarial Standards Board has issued a practice standard entitled "Selection of Economic Assumptions for Measuring Pension Obligations". This Actuarial Standard of Practice (SOP) is designed to provide pension actuaries guidance in setting the economic assumptions. Section 3.4 of the SOP provides the following general steps for selecting economic assumptions for a specific measurement:

1. Identify components, if any, of each assumption and evaluate relevant data;
2. Develop a best-estimate range for each economic assumption required for the measurement, reflecting appropriate measurement factors; and
3. Further evaluate measurement-specific factors and select a specific point within the best estimate range.

After completing these steps for each assumption, the actuary should review the set of economic assumptions for reasonableness and consistency and make any needed changes.

The relevant data referred to in step 1 should consist of appropriate historical and recent economic data. In Section 3.3, the SOP recommends that the actuary consider recent economic data, “however, the actuary should not give undue weight to recent experience.”

The remainder of this Section provides the analytical development behind each of the three economic assumptions.

### Inflation

#### Recommendation

We recommend that the Board retain the current inflation assumption of 4.25%.

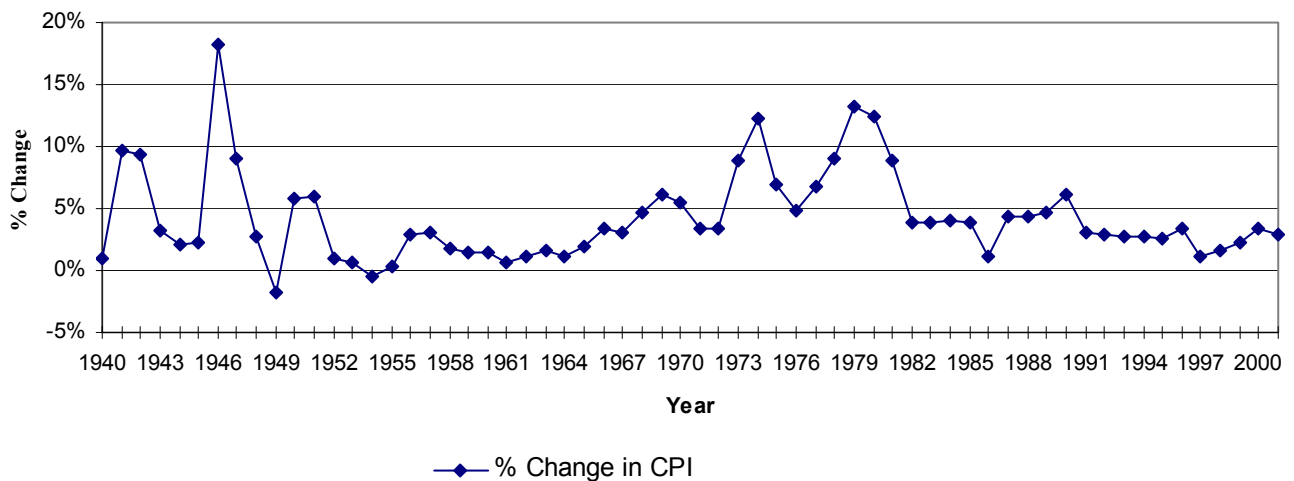
The analysis supporting our recommendation follows.

#### Setting the Assumption

The rate of inflation has varied significantly over time. The following chart shows the annual increases in the Consumer Price Index over the last 61 years:

Chart 1

Annual Increase in CPI (1940 Through 2001)



The actuarial SOP specifies the following data to be considered in setting the inflation assumption (Section 3.5.1):

- Consumer Price Indices (CPI)
- The Gross Domestic Product Implicit Price Deflator (IPD)
- Forecasts of inflation
- Yields on government securities of various maturities

Because the CPI and IPD have not differed significantly over the last 60 years, we will focus our analysis on the CPI.

CPI History

Table 1 provides the annualized increases in the Consumer Price Index for recent and extended periods over the last 60 years.

**Table 1**  
**History of CPI Increases**  
**Expressed as an Annualized Average\***

Number of Years <u>Ending 12/31/2001:</u>	<u>CPI</u>
10	2.53%
20	3.22%
30	4.99%
40	4.53%
50	3.87%
60	4.15%

\*Geometric Average. CPI data is based on US All City Average, CPI-U for years after 1979.

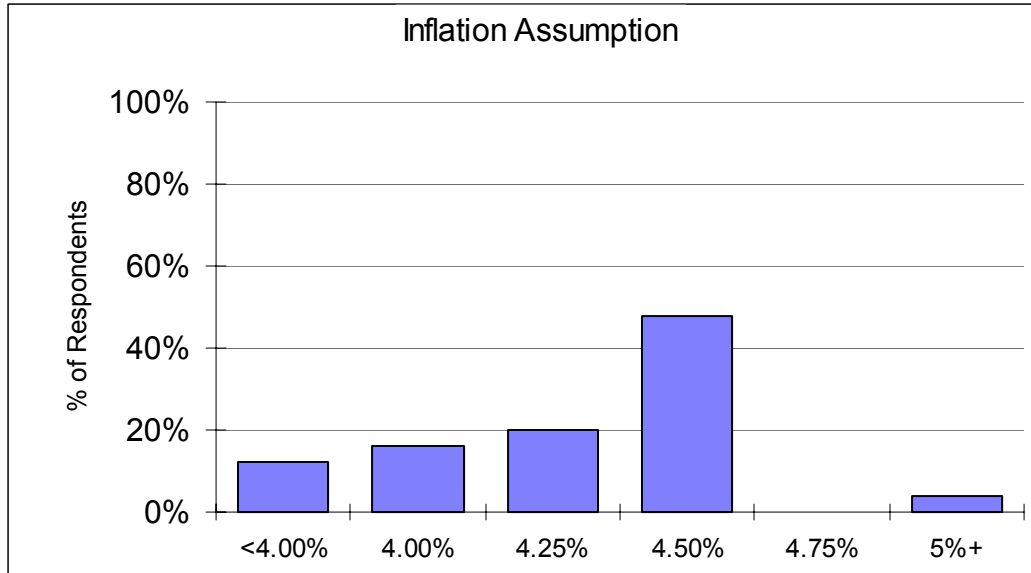
With the exception of the last 30-year period, which is heavily influenced by the high inflationary period between 1972 and 1981 and the low inflation levels experienced over the last 10 years, inflation has typically ranged between about 3.00% and 4.50%. The Bay Area CPI was approximately 4.10% over the last 5 years. After considering both long-term historical and recent trends, we have concluded that an appropriate range for long-term inflation is 3.50% to 4.50%.

## Forecasts of Inflation

We believe it is valuable to examine inflation assumptions adopted by similarly situated public retirement systems as an indicator of their long-term inflation expectations. Charts 2 and 3 provide the inflation assumptions used by the 25 California public retirement systems who responded to Mercer's 2001 survey of economic actuarial assumptions, and the 15 1937 Act respondents, respectively.

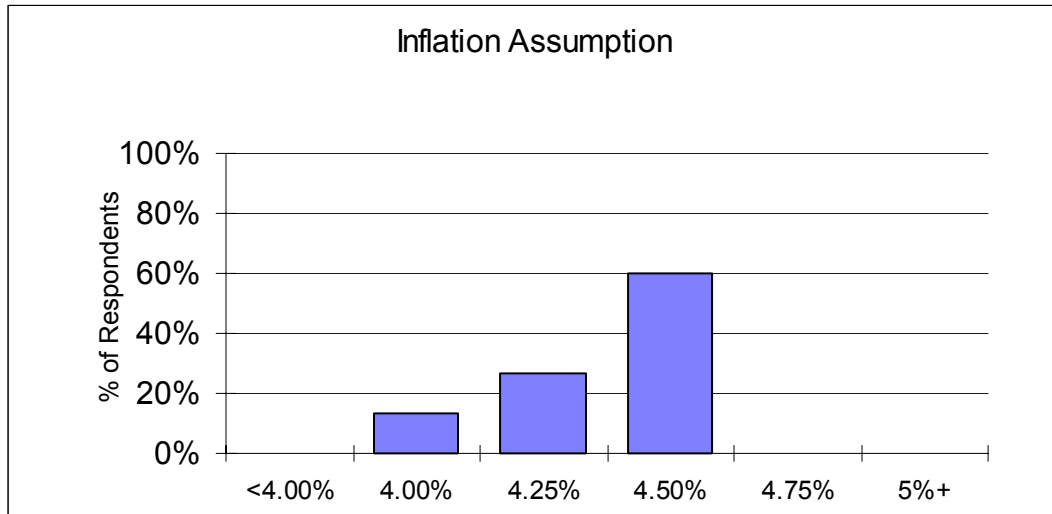
Based on this survey, the average inflation assumptions for the California Systems is about 4.25%.

**Chart 2 - Comparisons of Economic Actuarial Assumptions  
All Respondents  
(based on 25 responses)**



Average	4.25%
25th Percentile	4.13%
50th Percentile	4.50%
75th Percentile	4.50%

**Chart 3 - Comparison of Economic Actuarial Assumptions  
37 Act County Respondents  
(based on 15 responses)**



Average	4.36%
25 <sup>th</sup> Percentile	4.25%
50 <sup>th</sup> Percentile	4.50%
75 <sup>th</sup> Percentile	4.50%

## Treasury Yield Curves

Inflation expectations implicit in Treasury yield curves can vary widely over a relatively short period of time. One might average Treasury yield data over some period of time; however, we question whether utilizing inflation explications implicit in 2- to 3-year-old Treasury yields would be meaningful. Also, the usefulness of this data is hampered by the Federal Reserves use of interest rates as a means of controlling the economy. As a result, we have not included a treasury yield analysis as part of our inflation assumption development.

## Summary

We conclude from our analysis that:

1. Historical inflation data indicates an assumption range of 3.5% to 4.5%;
2. The Bay Area CPI on which benefit increases are based has been around 4.1%; and
3. Inflation forecasts inherent in inflation assumptions adopted by similarly situated retirement systems are about 4.25%.

Based on this data, we believe a 4.25% long-term inflation assumption remains reasonable.

## Investment Return

### Recommendation

We recommend that the Board retain the current investment return assumption of 8.25%. However, we recommend that the Board continue to monitor investment expectations.

### Setting the Assumption

The actuarial SOP specifies that in addition to historical plan performance, the following data may be considered in setting the investment return assumption (Section 3.6.1):

- Forecasts of inflation
- Historical risk-free returns
- Real return or risk premium for each asset class
- Yields to maturity on fixed income government securities and corporate bonds

The first item has already been addressed in the previous section. The second item is the historical return on short term Treasury bills, such as 30 days, and is used to develop risk premiums for other asset classes. The fourth item relates primarily to corporate pension plans. Our analysis will focus on the third item.

Section 3.6.3 of the actuarial SOP includes the following measurement-specific factors that should be considered in selecting the investment return assumption:

- Investment policy or asset allocation
- Expenses
- Investment manager performance

Each of these items will be addressed in the context of our analysis.

### Real Rate of Return on Investments

The real rate of return on investments is a function of:

- The real rates of return on individual classes of assets within the investment portfolio;
- The relative proportion of the fund's total investments held in each class of securities (the "Asset Allocation");
- Expenses to be paid from earnings; and
- Reasonable risk (variability) adjustments.

Each of these four components are addressed separately.

### Real Returns on Classes of Securities

Empirical studies of total real rates of return are available on most classes of securities in which the Association invests. These studies are used to develop historical average real rates of return. These historical averages are adjusted considering any fundamental changes in the economy, changes in government regulation, and any other factors which might affect their continued applicability.

Mercer Investment Consulting (MICI) has developed the following detailed rate of return assumptions by asset class. These expected real rates of return are taken from a number of sources which include consideration of future expectations as well as historical data. In addition, we included the expectations developed by the Board's investment consultants, Strategic Investment Solutions, Inc.(SIS).



**Table 2**  
**Asset Class Returns Net of Inflation (Real)**

<u>Asset Class</u>	<u>MICI</u> <u>Total Real Return</u>	<u>SIS</u> <u>Total Real Return</u>
Large Cap Stocks	6.0%	6.3%
Small Cap Stocks	6.5%	7.2%
International Stocks	6.2%	6.7%
Long-Term Bonds	3.5%	2.5%
Real Estate	5.4%	4.7%

**Asset Allocation**

SamCERA employs an independent investment consultant, SIS, to assist in establishing a target asset allocation and investment policy. The target asset allocation reflects the consultant’s professional opinion on expected returns, SamCERA’s risk profile, prudent diversification, asset/liability matching, cash flow needs and other investment considerations. This target allocation is designed as a guidepost for balancing investments among asset classes. As such, it is the best indicator of SamCERA’s actual long-term asset allocation. The target asset allocation is combined with the real rates of return on classes of securities to develop the expected gross real rate of return assumption for the Association’s portfolio.

The current and target SamCERA asset allocations are shown in Table 3.

**Table 3**  
**SamCERA Asset Allocation At Market Value**

	<u>Current</u>	<u>Target</u>
Large Cap Domestic Stocks	46%	40%
Small Cap Domestic Stocks		10%
International Stocks	14%	15%
Bonds and Fixed Income	33%	29%
Real Estate	7%	6%
Cash and Equivalents	0%	0%

Applying the target asset allocation (Table 3) to Mercer's assumptions in Table 2 results in a real return of approximately 5.13%. If we apply the target asset allocation to the SIS assumptions, the result is a real rate of return of approximately 5.25%. There are a number of additional factors that must be considered before arriving at an appropriate rate for actuarial valuation purposes. These are discussed below.

### Expenses to be Paid from Earnings

The expected gross real rate of return must be reduced to reflect expenses to be charged against investment earnings. To the extent such charges are expected to be made in the future, the expense margin will be sufficient to cover:

- Administrative expenses (Section 31580.2);
- The cost of actuarial valuations (Section 31596.1(a));
- The cost of bank custodial services (Section 31596.1(b));
- Fees related to investment in deeds of trust or mortgages (Section 31596.1(c));
- Investment expenses (Section 31529.5); and
- The cost of legal counsel (Section 31529.5).

(References are to sections of the County Employees' Retirement Law of 1937.)

An expense assumption of 0.40% was used as an estimate of future expenses.

### Risk Adjustment

The net real rate of return assumption should reflect the risk associated with not achieving expectations. This is developed by considering:

- The probability that actual future returns within asset classes will deviate statistically from historical averages;
- The effect that asset diversification will have on dampening statistical fluctuations of future returns; and
- The expectation that fund managers will underperform or outperform the general market indices upon which the real rates of return on individual classes of securities are measured.

Annual real rates of return have varied substantially over the years. For example, even if we expect the averages displayed in Table 2 to be a reasonable estimate of real returns in the future, we know there is some likelihood that future real rates will be more or less than historical averages. The most critical risk lies in setting too high an investment earnings assumption, which leads to future losses and higher employer contributions. The risk adjustment helps protect against such an occurrence.



## Development of Recommendation

Based on the above analysis, we arrive at a real rate of return assumption of 3.57% (average gross real rate of return of 5.13% minus 0.40% expenses minus a risk adjustment of 1.16%). Combining this rate and the inflation assumption of 4.25% results in an expected return of 7.82%.

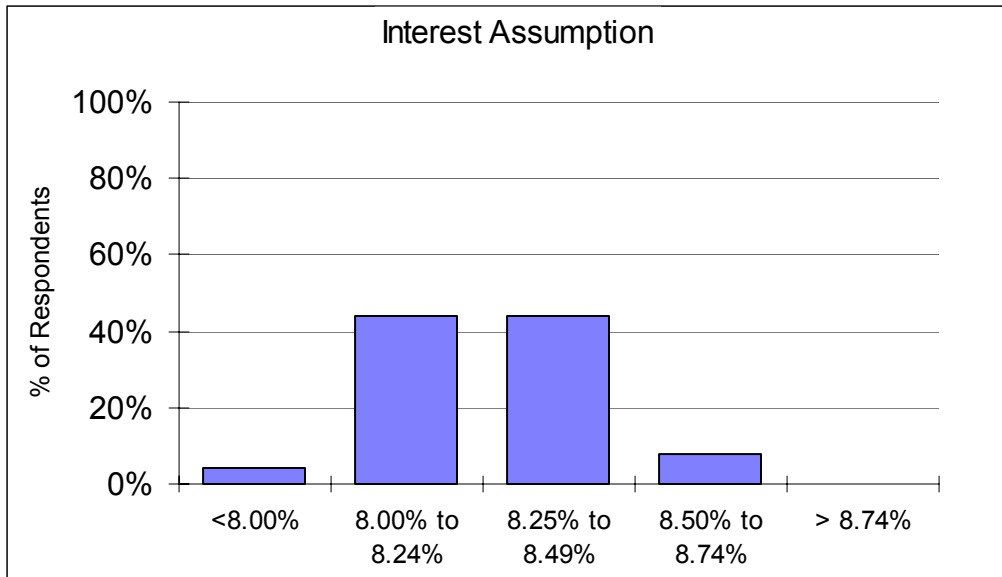
If you maintain the investment return assumption of 8.25%, the risk adjustment is 0.47%. While this is significantly lower than the average risk adjustment for California retirement systems, this assumption is still within a reasonable range of assumptions.

We also ran the Mercer Investment Consulting assumed rates of return through a proprietary Mercer program that adjusts expected rates of return based on the risk characteristics of each investment class, the correlation between expected returns for different asset classes, and the underlying inflation rate. Using this system and the same 0.4% assumption for investment expenses produces a reasonable range of investment return assumptions from 6.77% to 8.59% with a median 7.69% expected rate of return for the Association. The range provides returns from the 35th to the 65th percentile. The current assumption of 8.25% is at approximately the 60th percentile. As you know, there is no single rate that is appropriate for the investment return assumption. Because the Board's current assumption is higher than the midpoint of the acceptable range, if future expectations for returns decline, you may be required to lower the interest rate assumption. However, if expectations for future returns increase, the assumption will continue to be within the acceptable range of assumptions.

## Comparison with Similarly Situated Associations

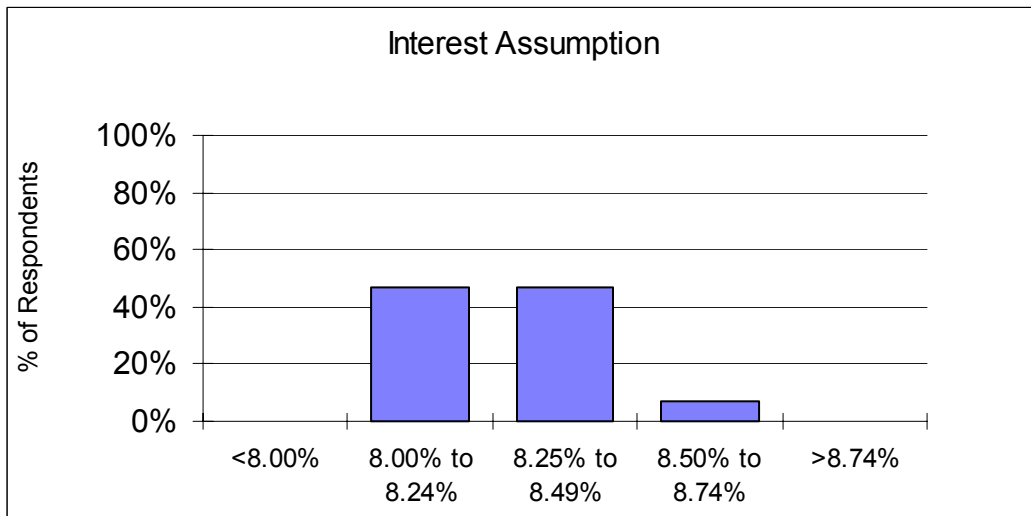
It is informational to compare the assumptions used by similarly situation retirement associations. Charts 5 and 6 provide the investment return assumptions used by the 25 California public retirement systems who responded to Mercer's 2001 survey of the economic actuarial assumptions, and the 15 1937 Act respondents, respectively.

**Chart 5 - Comparison of Economic Actuarial Assumptions  
All Respondents  
(based on 25 responses)**



Average	8.18%
25th Percentile	8.00%
50th Percentile	8.25%
75th Percentile	8.25%

**Chart 6 - Comparison of Economic Actuarial Assumptions  
37 Act County Respondents  
(based on 15 responses)**



Average	8.16%
25th Percentile	8.00%
50th Percentile	8.13%
75th Percentile	8.25%

The average investment return rates from the survey for the groups surveyed is approximately 8.18%. As you can see, an investment return assumption between 8.25% and 8.49% is quite common among 1937 Act counties.

## Summary

We conclude from our analysis that:

- Expected future return data suggests a reasonable range of between 6.77% and 8.59% for the investment return assumption, and
- Investment return assumptions adopted by similarly situated retirement systems are about 8.18%.

Based on this data, we believe an 8.25% investment return assumption remains reasonable.

## Outlook for the Next Valuation

As you can see from the analysis above, the current investment return assumption is on the high side of the range we expect. We will be monitoring this assumption taking into consideration the trend towards lowering the forward looking rates of return expectations (for investment horizon of 10 years or more) which has taken place over the last few years.

The following charts provide a comparison of the investment return assumptions utilized by California Public Retirement Systems and the change in the rates of return expectations prepared by Mercer. There is some movement in the survey toward lower investment return assumptions. However, as you can see from the graph, the movement is still small.

Chart 7

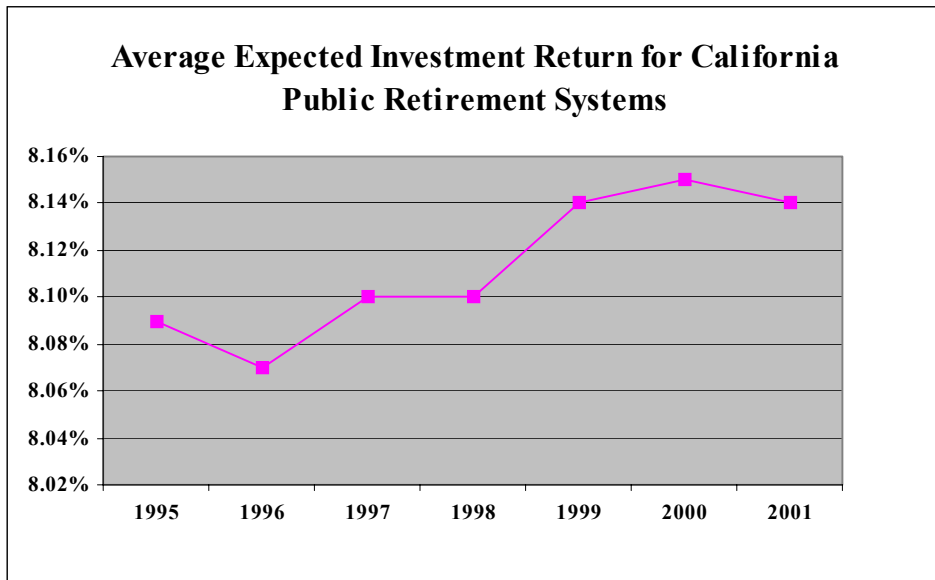
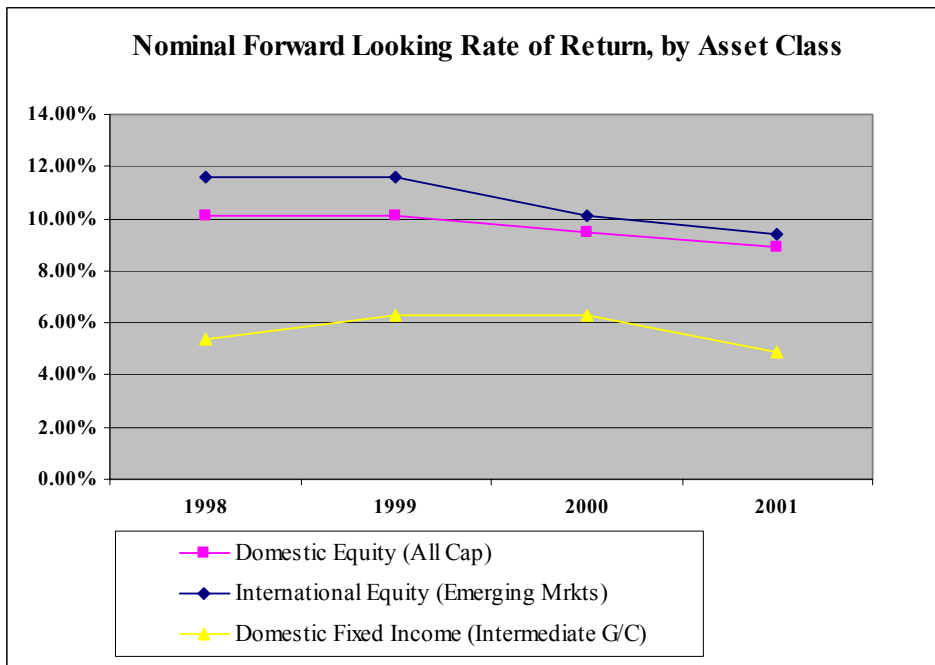


Chart 8



## Salary Increase Assumptions

### Recommendations

We recommend that the Board retain the current salary scale assumption.

### General Information

The Association's salary increase assumptions are comprised of two components:

- Inflation Rate
- Salary Scale

Salary increases are provided to employees in the form of cost-of-living adjustments to offset the debasement of pay levels caused by inflation. In addition to inflationary increases, active members will receive "real" salary increases (i.e., over inflation) as they advance through salary grades and receive promotions over their career.

As part of our analysis we have reviewed real salary increases received by members over the three years ending June 30, 2002. Members were grouped by service and age to determine how salary increases vary across these groups. We also reviewed the merit and longevity assumptions for other 1937 Act counties as a scale of reasonableness for the new assumptions. We recommend that the real salary increases be continued as a function of age rather than both age and years of service. Also, years of service based salary increase assumptions are uncommon in California county retirement systems. We are recommending that the current salary increase assumptions be maintained based on the following analysis.

### Setting the Assumption

The Actuarial Standards Board has specified the following data be considered in setting the salary increase assumptions (Section 3.7):

- Employer's current compensation practice and any anticipated changes in this practice;
- Current compensation distributions by service or age;
- Historical compensation increases of employer and other employers in the same industry or geographic area; and
- Historical national wage and productivity increases.

In addition, the Standard of Practice states that the actuary should consider employer-specific compensation data, but the actuary must carefully weigh the credibility of this data when selecting the salary increase assumption.

The methodology used to construct the assumption is to utilize the inflation assumption as a base salary increase assumption. There is a sound economic reason for doing this. This is a long-term assumption and represents the expected annual increases in the cost of goods and services. In



order for a member to maintain the same standard of living in the future as he or she does today, wages must at least keep up with inflation. If they do not, members will suffer a continuously eroding standard of living, which in turn will increase member turnover as workers seek jobs elsewhere that offer more competitive salaries. This creates obvious instability, which may occur for a short while, but eventually will have to return to equilibrium if the County and special districts are to continue as ongoing operating entities.

Once the inflation component of the salary increase assumption is set, the process turns to the selection of the real (inflation-free) salary increase assumption component.

### Real Salary Increases

In addition to inflation, member salaries are expected to increase due to:

- General increases which exceeded inflation (“Real Across-the-Board Salary Increases”); and
- Merit and longevity increases.

### Real Across-the-Board Salary Increases

These are generally categorized as productivity increases because, in theory, they are generated from any activity that allows workers to produce goods and services more efficiently, thus cheaper. If these efficiencies result in increased revenues to the employer and are passed along as salary increases, Real Across-the-Board Salary Increases will result.

There is currently no Real Across-the-Board Salary Increase assumption for the Association. We believe that the 4.25% inflation increase is sufficient to cover Real Across-the-Board salary increase.

Merit and Longevity Salary Increases

Merit and longevity increases reflect the promotional grade increase an individual member is expected to receive over his or her career. This assumption is based on observed experience of real salary increases by category of member by age and/or service group. This assumption is reviewed at the time of the triennial experience investigation.

Following are the average nominal (inflation plus real) annual salary increases received by members over the three years ending June 30, 2002.

<u>Age Bracket</u>	<u>General Members Average Annual Increase</u>	<u>Safety Members Average Annual Increase</u>
20-24	12.55%	11.68%
25-29	11.42%	11.13%
30-34	9.04%	9.51%
35-39	8.02%	7.12%
40-44	7.72%	6.79%
45-49	6.93%	7.24%
50-54	6.72%	7.49%
55-59	6.38%	8.40%
60-64	6.59%	7.51%
65-69	5.96%	8.55%
70+	6.12%	—

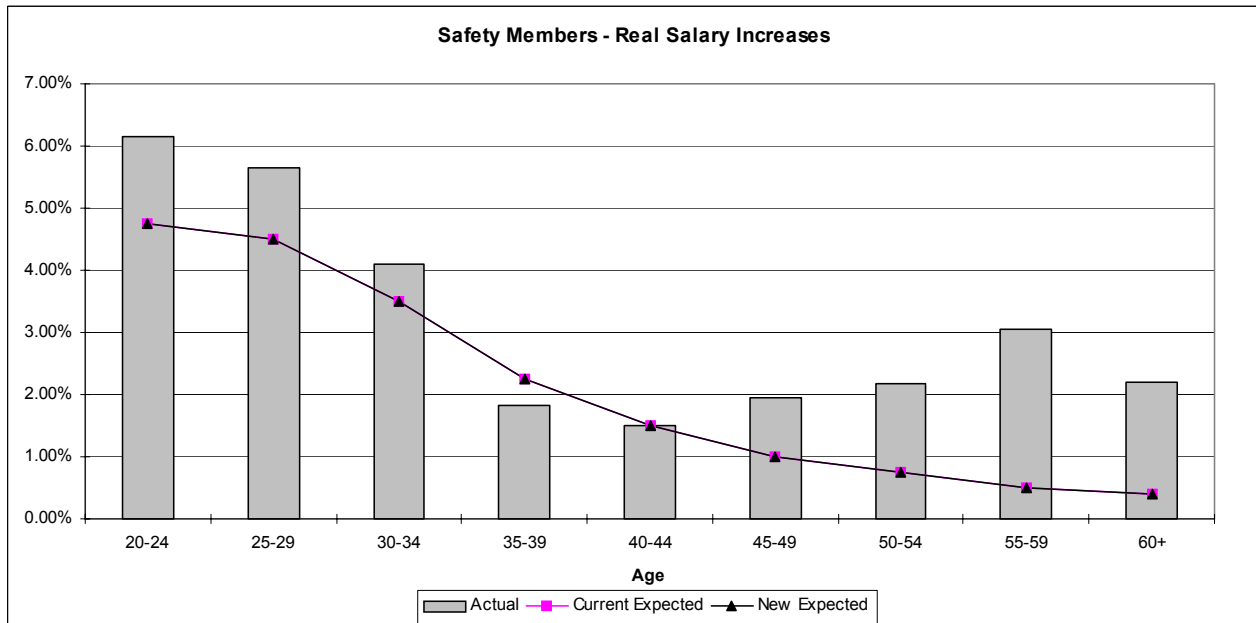
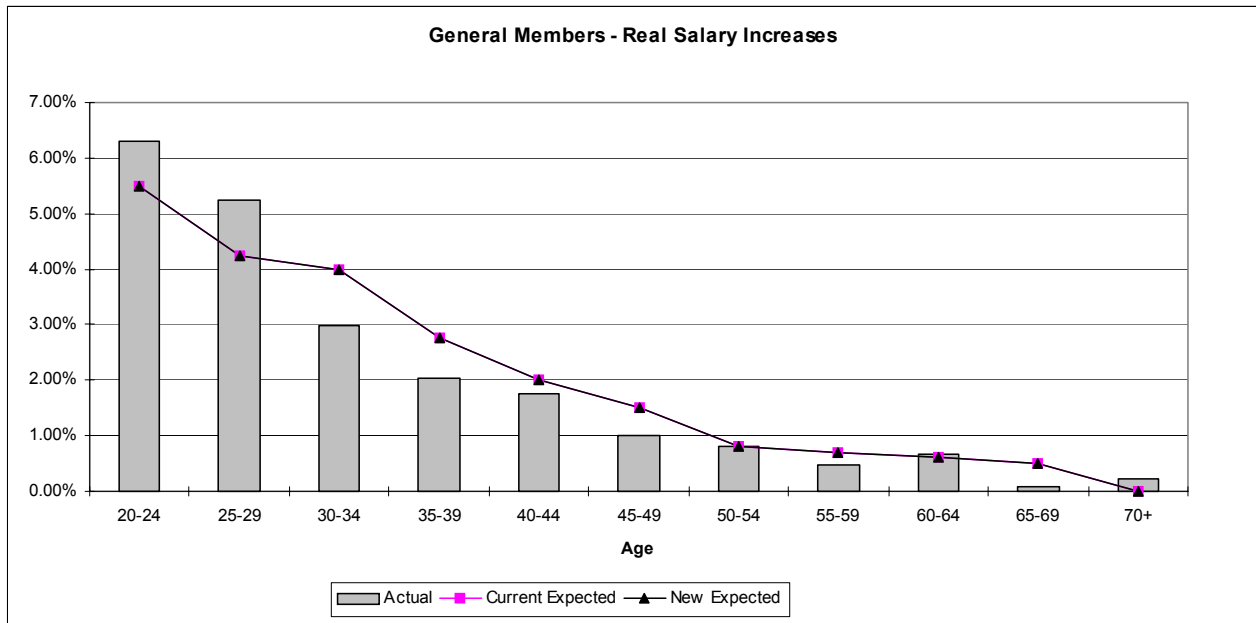
The increase in average annual salary for active members annualized over this three year period was about 5.87% for General Members and 5.20% for Safety members. Removing these average increases provides the following real increases over the three years.

<u>Age Bracket</u>	<u>General Members Average Annual Increase</u>	<u>Safety Members Average Annual Increase</u>
20-24	6.68%	6.48%
25-29	5.55%	5.93%
30-34	3.17%	4.31%
35-39	2.15%	1.92%
40-44	1.85%	1.59%
45-49	1.06%	2.04%
50-54	0.85%	2.29%
55-59	0.51%	3.20%
60-64	0.72%	2.31%
65-69	0.09%	3.35%
70+	0.25%	—

A comparison of our recommended salary increase assumptions and those used by other California counties served by Mercer is provided below.

	<b>Real Salary Increase Assumptions</b>			
	<b>General Members</b>		<b>Safety Members</b>	
	Average California Counties Salary Increase Assumptions	Recommended Salary Increase Assumptions	Average California Counties Salary Increase Assumptions	Recommended Salary Increase Assumptions
Ages 20-24	5.40%	5.50%	4.3%	4.75%
Ages 25-29	3.90%	4.25%	3.6%	4.50%
Ages 30-34	2.90%	4.00%	2.4%	3.50%
Ages 35-39	2.10%	2.75%	1.4%	2.25%
Ages 40-44	1.70%	2.00%	1.2%	1.50%
Ages 45-49	1.30%	1.50%	1.0%	1.00%
Ages 50-54	1.00%	0.80%	0.7%	0.75%
Ages 55-59	0.80%	0.70%	0.7%	0.50%
Ages 60-64	0.70%	0.60%	0.5%	0.40%
Ages 65-69	0.60%	0.50%	0.0%	0.00%
Age 70+	0.30%	0.00%	0.0%	0.00%

The following graphs summarize the actual (over the 3 years study period), current expected and new expected and (recommended) real salary increase assumptions.



**Real Salary Increases**

	<b>General Members</b>	<b>Safety Members</b>
	Recommended Salary Increase Assumptions	Recommended Salary Increase Assumptions
Ages 20-24	5.50%	4.75%
Ages 25-29	4.25%	4.50%
Ages 30-34	4.00%	3.50%
Ages 35-39	2.75%	2.25%
Ages 40-44	2.00%	1.50%
Ages 45-49	1.50%	1.00%
Ages 50-54	0.80%	0.75%
Ages 55-59	0.70%	0.50%
Ages 60-64	0.60%	0.40%
Ages 65-69	0.50%	0.00%
Age 70+	0.00%	0.00%

**Total Salary Increase Assumptions  
(Inflation plus Merit and Longevity)**

	<b>General Members</b>	<b>Safety Members</b>
	Recommended Salary Increase Assumptions	Recommended Salary Increase Assumptions
Ages 20-24	9.75%	9.00%
Ages 25-29	8.50%	8.75%
Ages 30-34	8.25%	7.75%
Ages 35-39	7.00%	6.50%
Ages 40-44	6.25%	5.75%
Ages 45-49	5.75%	5.25%
Ages 50-54	5.05%	5.00%
Ages 55-59	4.95%	4.75%
Ages 60-64	4.85%	4.65%
Ages 65-69	4.75%	—
Age 70+	4.25%	—



**Detail of Results**  
**Noneconomic Assumptions**

## Index of Analysis

### I. Active Member Noneconomic Assumptions

- A. Withdrawal of Member Contributions
- B. Termination with Vested Benefit
- C. Duty Death
- D. Ordinary Death
- E. Duty Disability
- F. Ordinary Disability
- G. Service Retirement
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- J. Summary

### II. Retired Member Noneconomic Assumptions

- A. Retiree Mortality
- B. Mortality for Members after Disability Retirement

## **I. Active Member Noneconomic Assumptions**

Our experience results are presented primarily in graphical form to allow the reader to capture a “big picture” of both experience and assumption changes.

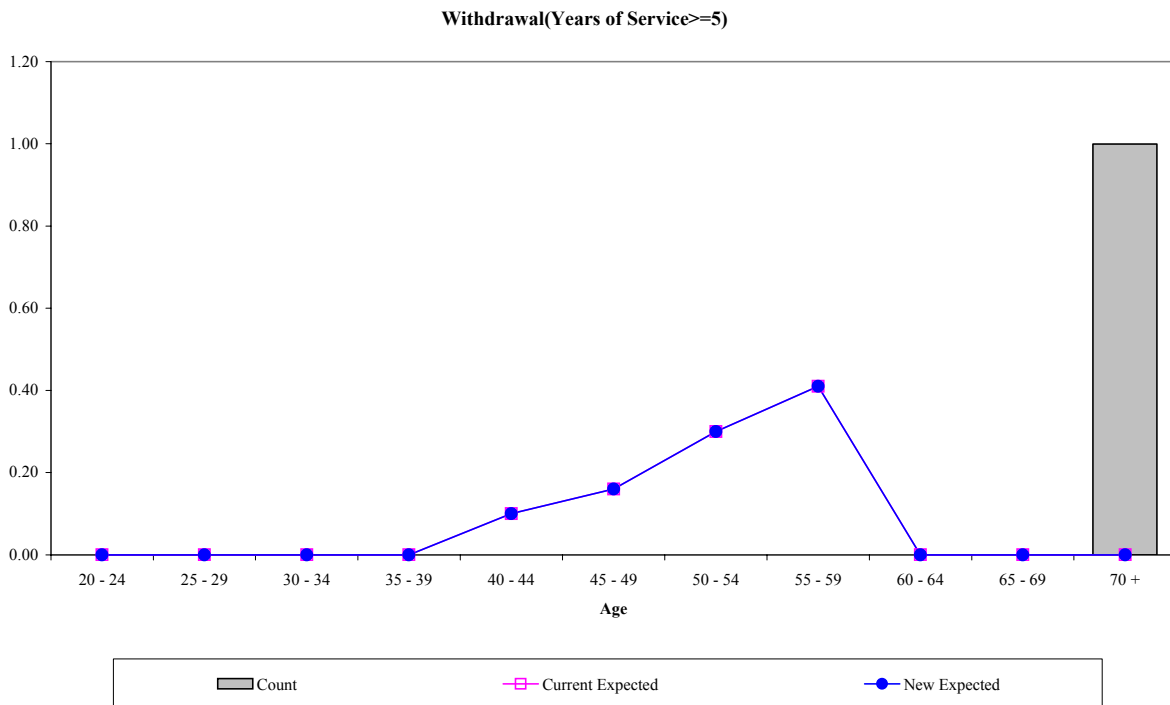


A. Withdrawal of Member Contributions

**Male — General Plan 1**

Members with 5 or more Years of Service

Actual number = 1  
 Expected number = 1  
 New expected number = 1

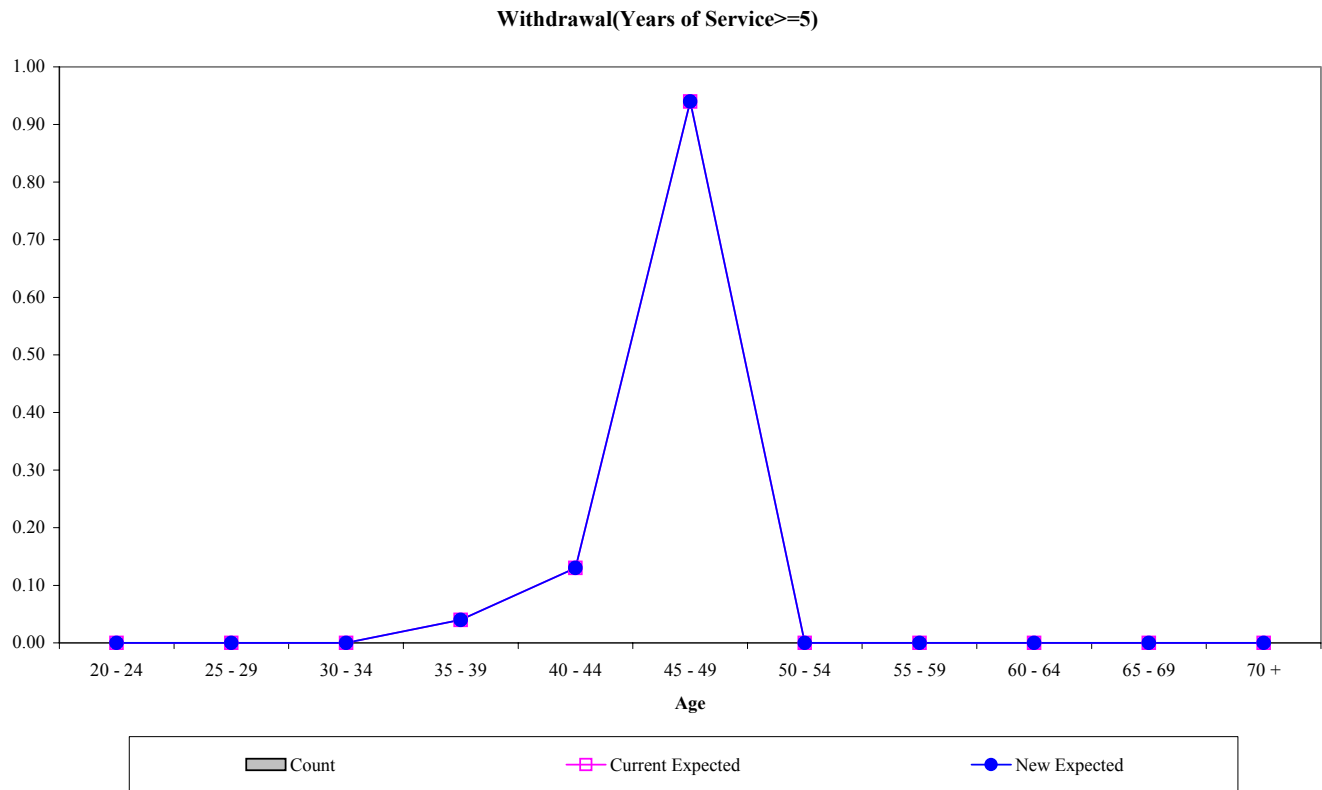


A. Withdrawal of Member Contributions (continued)

**Female — General Plan 1**

Members with 5 or more Years of Service

Actual number = 0  
 Expected number = 1  
 New expected number = 1

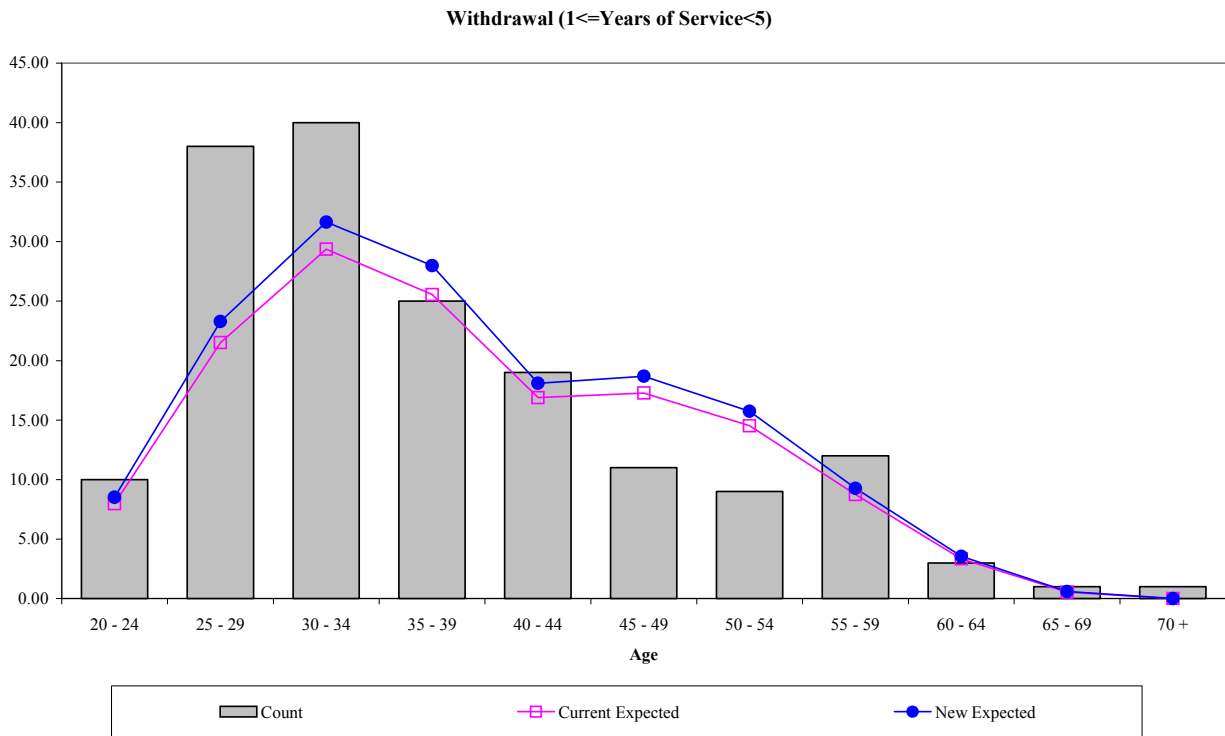


A. Withdrawal of Member Contributions (continued)

**Male — General Plans 2 and 4**

Members with less than 5 Years of Service

Actual number = 169  
 Expected number = 146  
 New expected number = 157

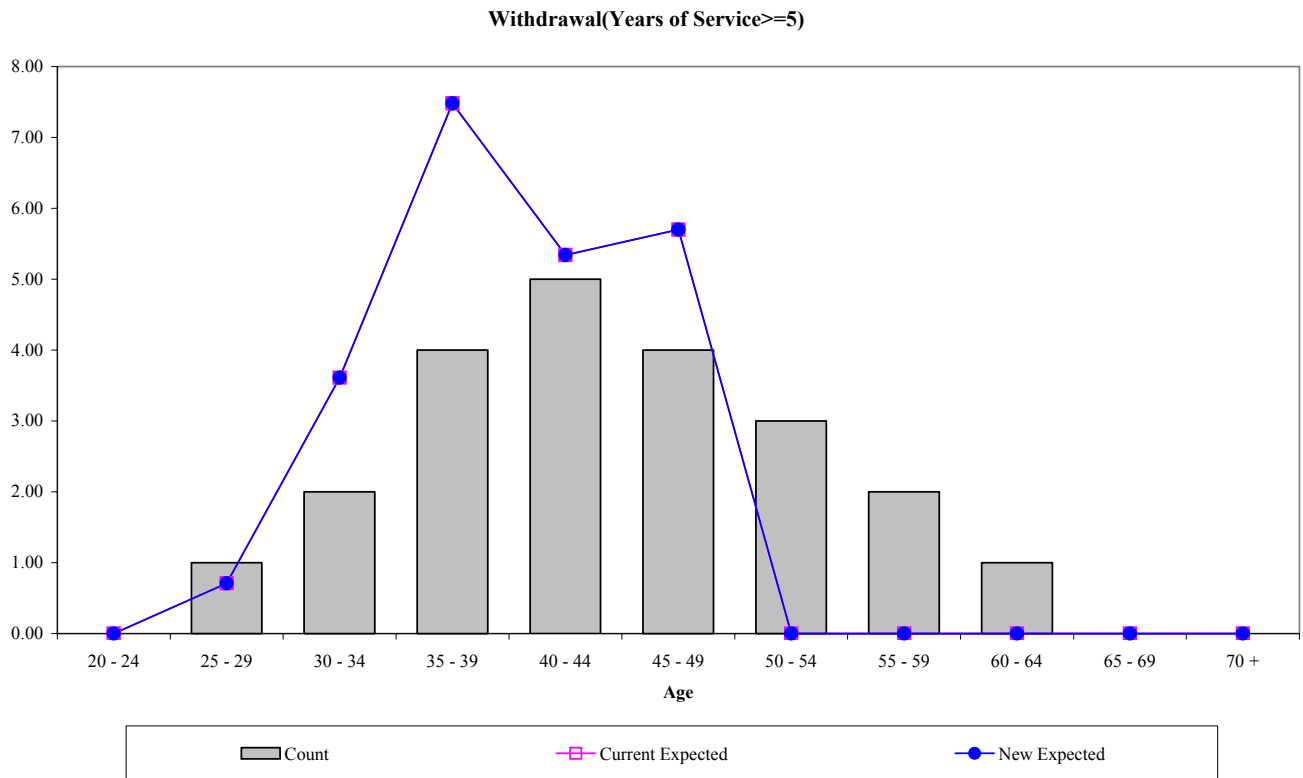


A. Withdrawal of Member Contributions (continued)

**Male — General Plans 2 and 4**

Members with 5 or more Years of Service

Actual number = 22  
 Expected number = 23  
 New expected number = 23

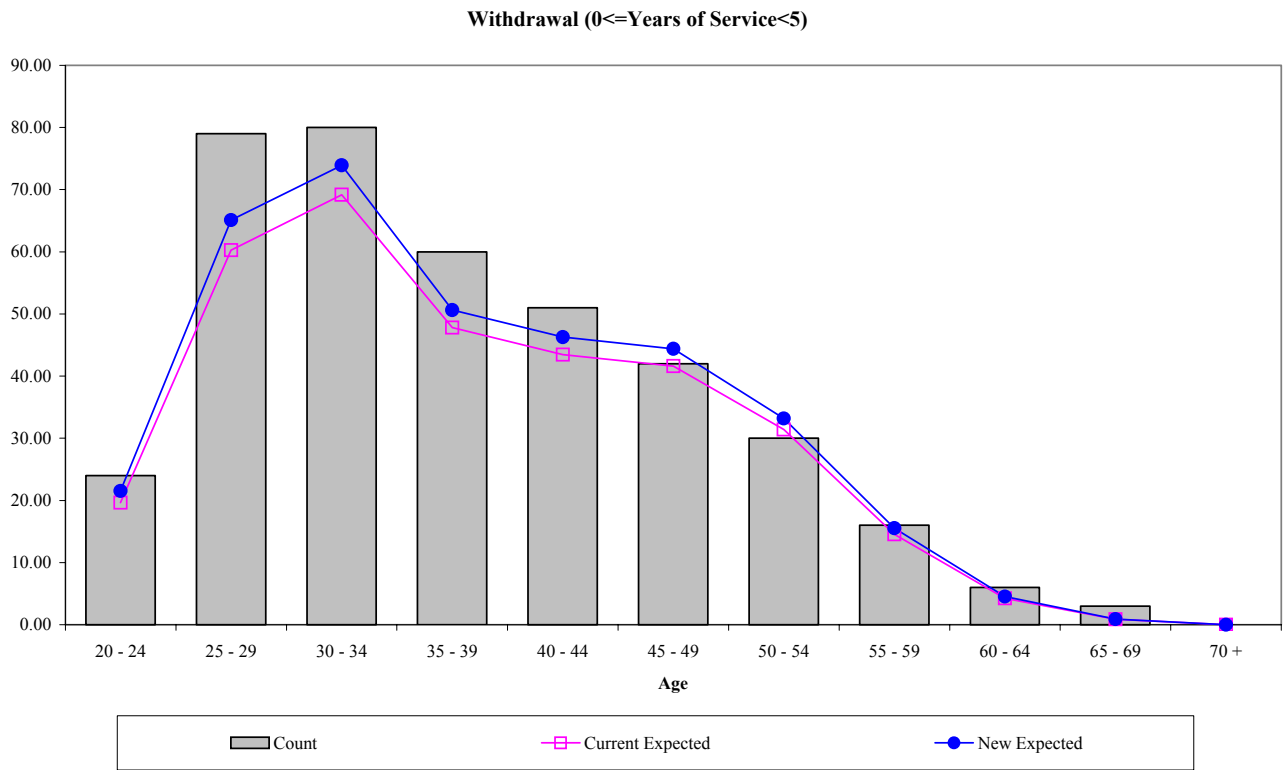


A. Withdrawal of Member Contributions (continued)

**Female — General Plans 2 and 4**

Members with less than 5 Years of Service

Actual number = 391  
 Expected number = 333  
 New expected number = 356

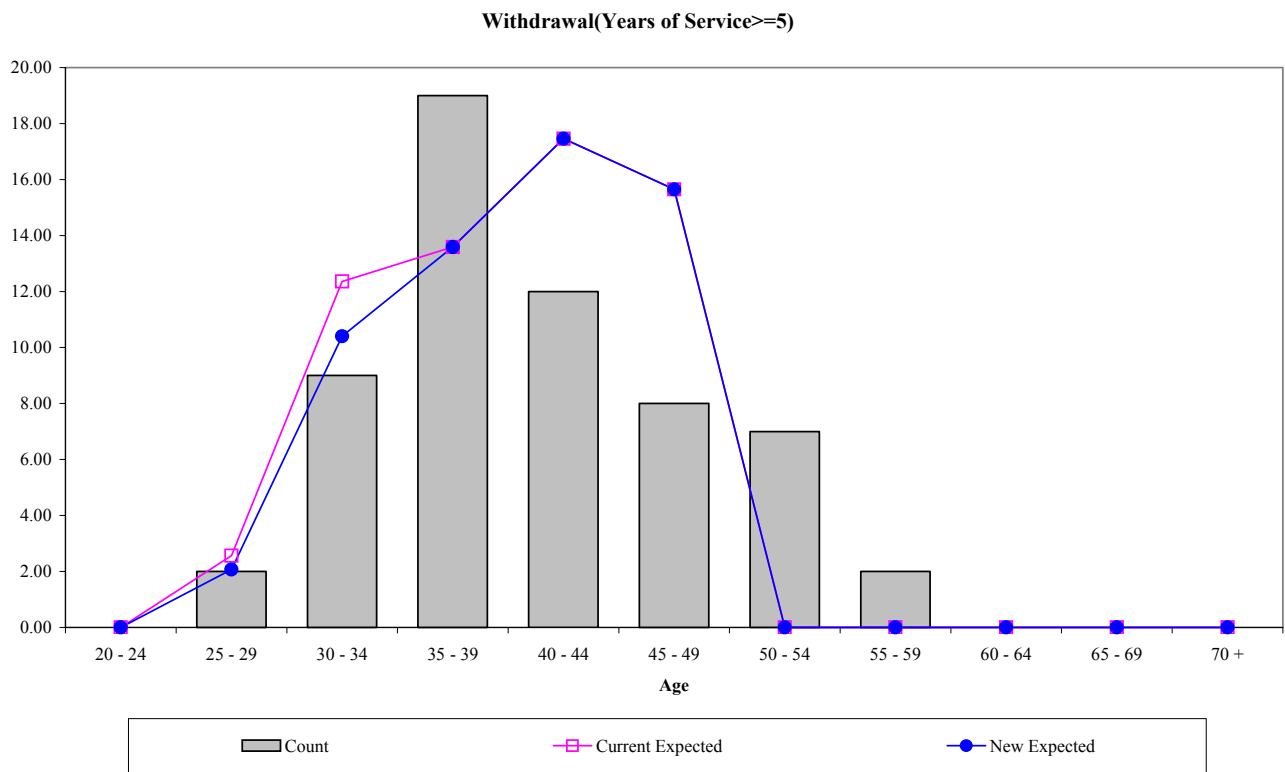


A. Withdrawal of Member Contributions (continued)

**Female — General Plans 2 and 4**

Members with 5 or more Years of Service

Actual number = 59  
 Expected number = 62  
 New expected number = 59

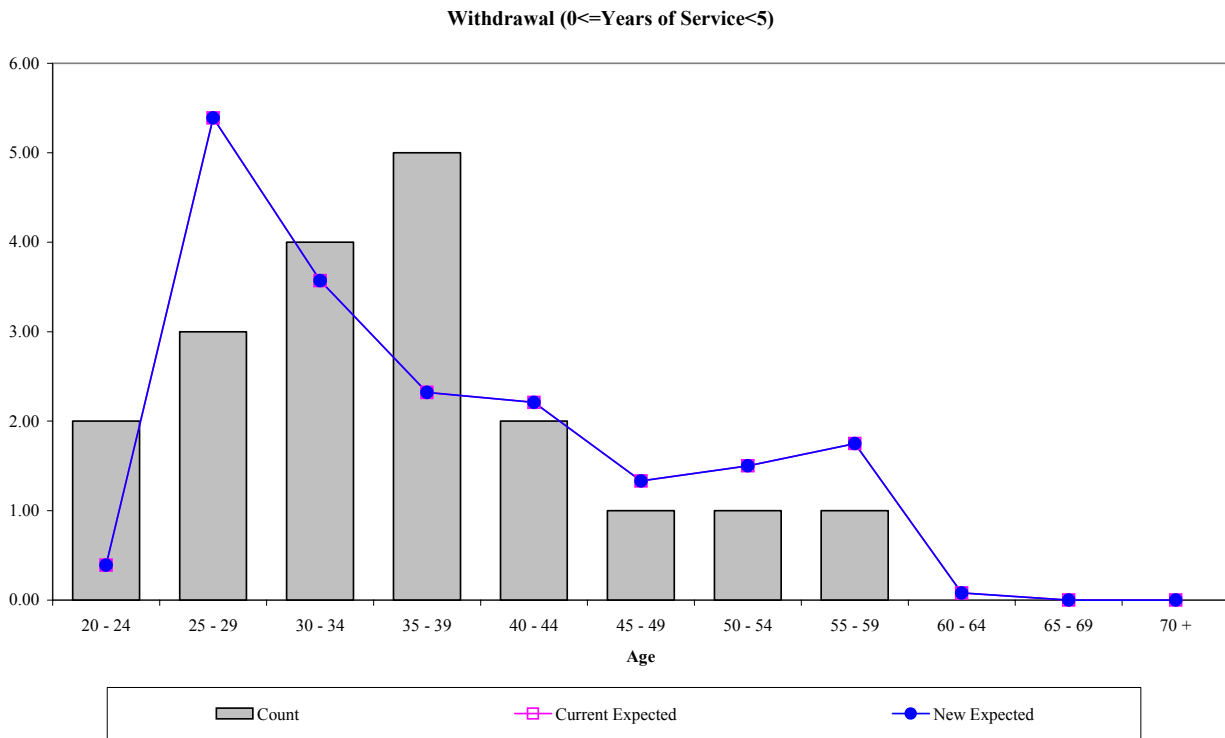


A. Withdrawal of Member Contributions (continued)

**Male — General Plan 3**

Members with less than 5 Years of Service

Actual number = 19  
 Expected number = 19  
 New expected number = 19

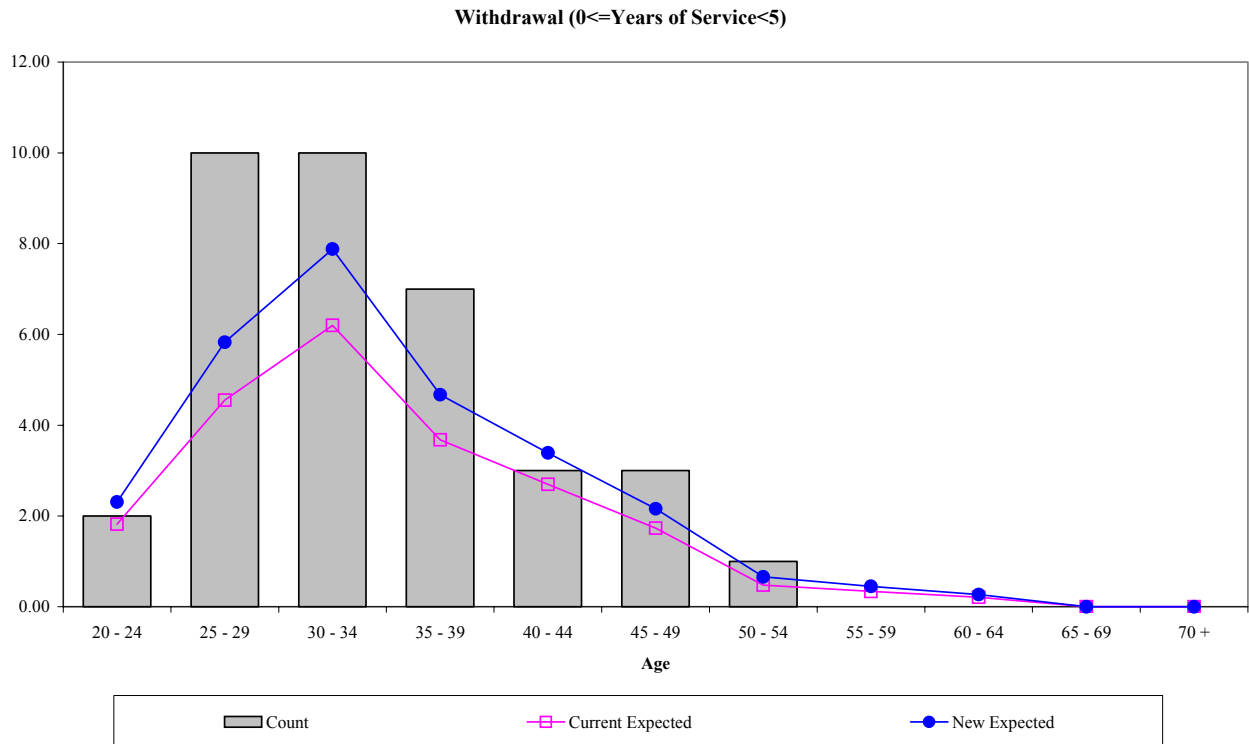


A. Withdrawal of Member Contributions (continued)

**Female — General Plan 3**

Members with less than 5 Years of Service

Actual number = 36  
 Expected number = 22  
 New expected number = 28





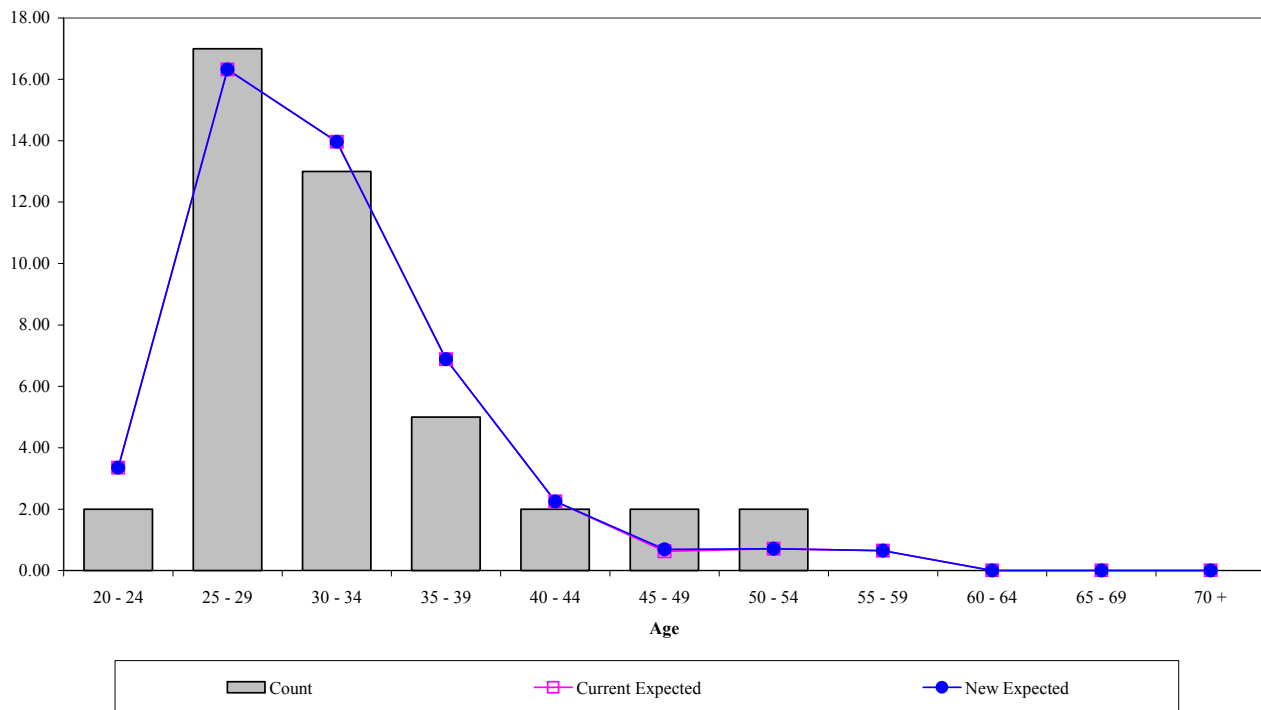
A. Withdrawal of Member Contributions (continued)

**Safety and Probation — Male & Female**

Members with less than 5 Years of Service

Actual number = 43  
 Expected number = 45  
 New expected number = 45

Withdrawal (0<=Years of Service<5)

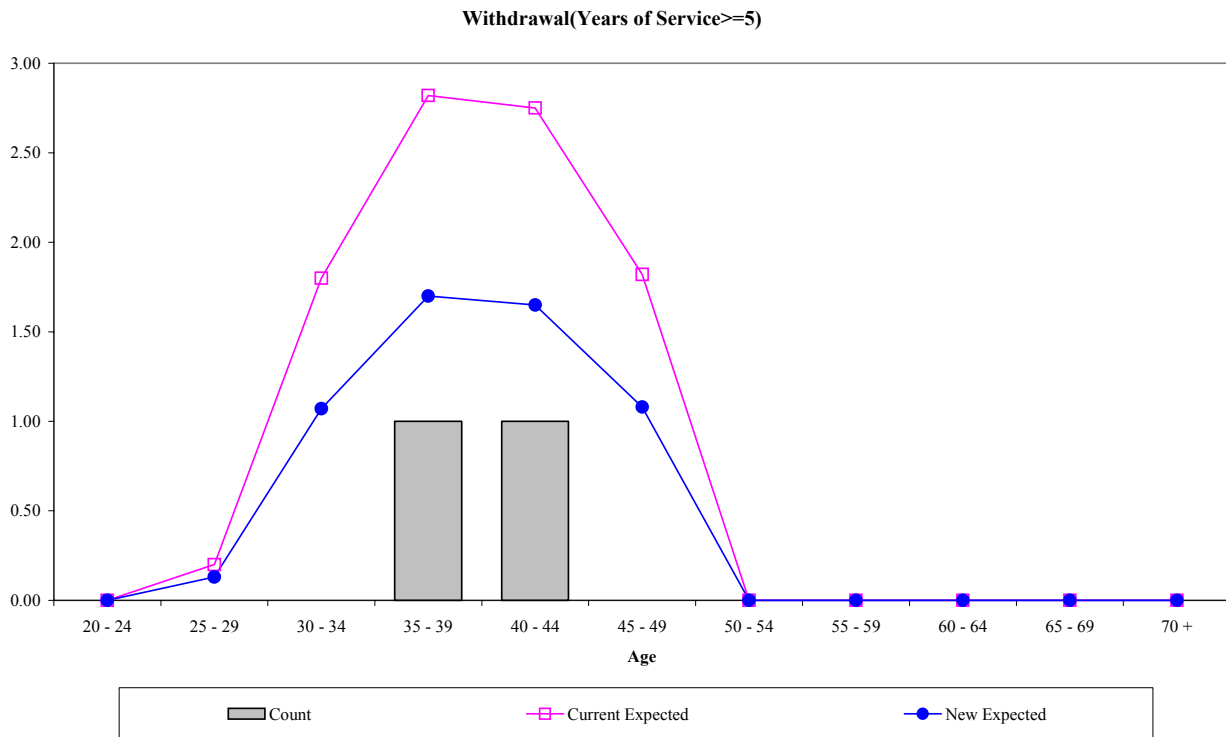


A. Withdrawal of Member Contributions (continued)

**Safety and Probation — Male & Female**

Members with 5 or more Years of Service

Actual number = 2  
 Expected number = 9  
 New expected number = 6



A. Withdrawal of Member Contributions (continued)

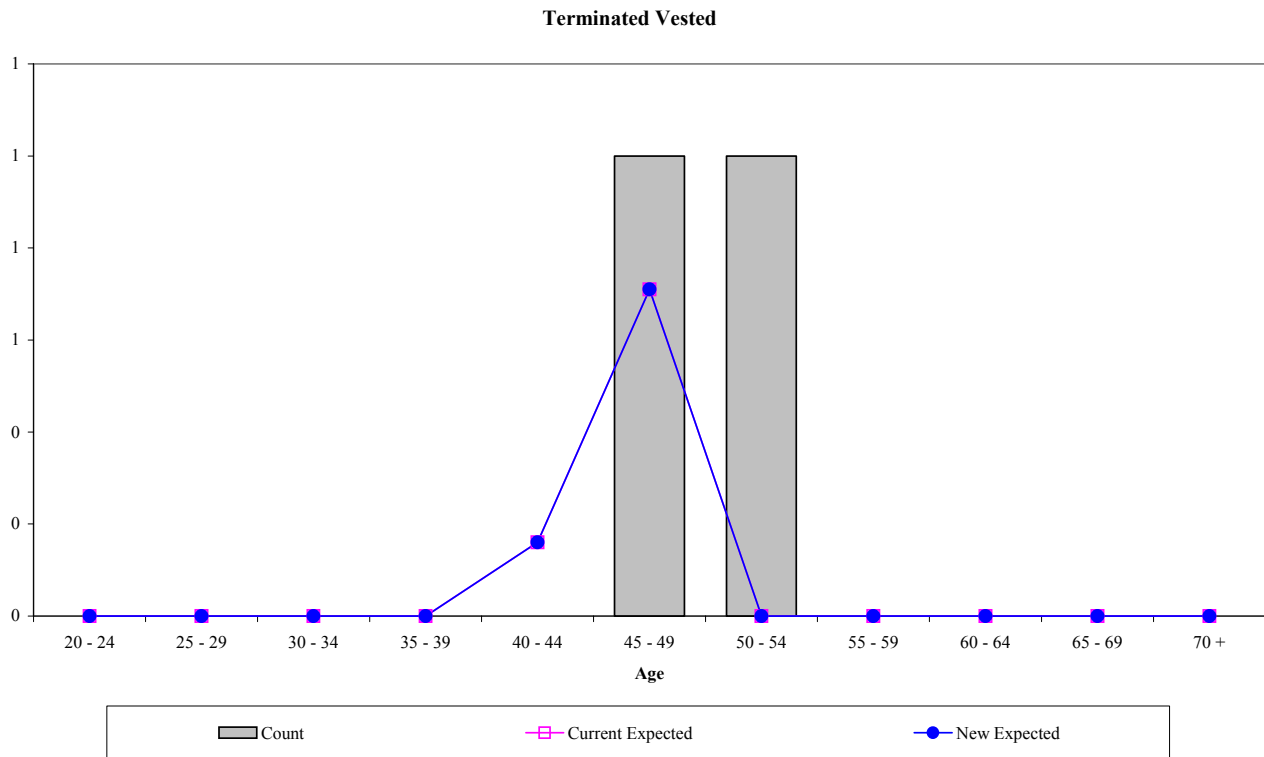
Following is a comparison of the current experience results with the most recent experience study.

Withdrawal	General								Safety & Probation	Total
	Female				Male					
	Plan 1	Plans 2 & 4	Plan 3	Total	Plan 1	Plans 2 & 4	Plan 3	Total		
1999-2002	0	450	36	486	1	191	19	211	45	742
1996-99	3	344	63	410	0	132	28	160	45	615
Prior Expected	1	395	22	418	1	169	19	189	54	661
Revised Expected	1	415	28	444	1	180	19	200	51	695

B. Termination with Vested Benefit

**General — Male Plan 1**

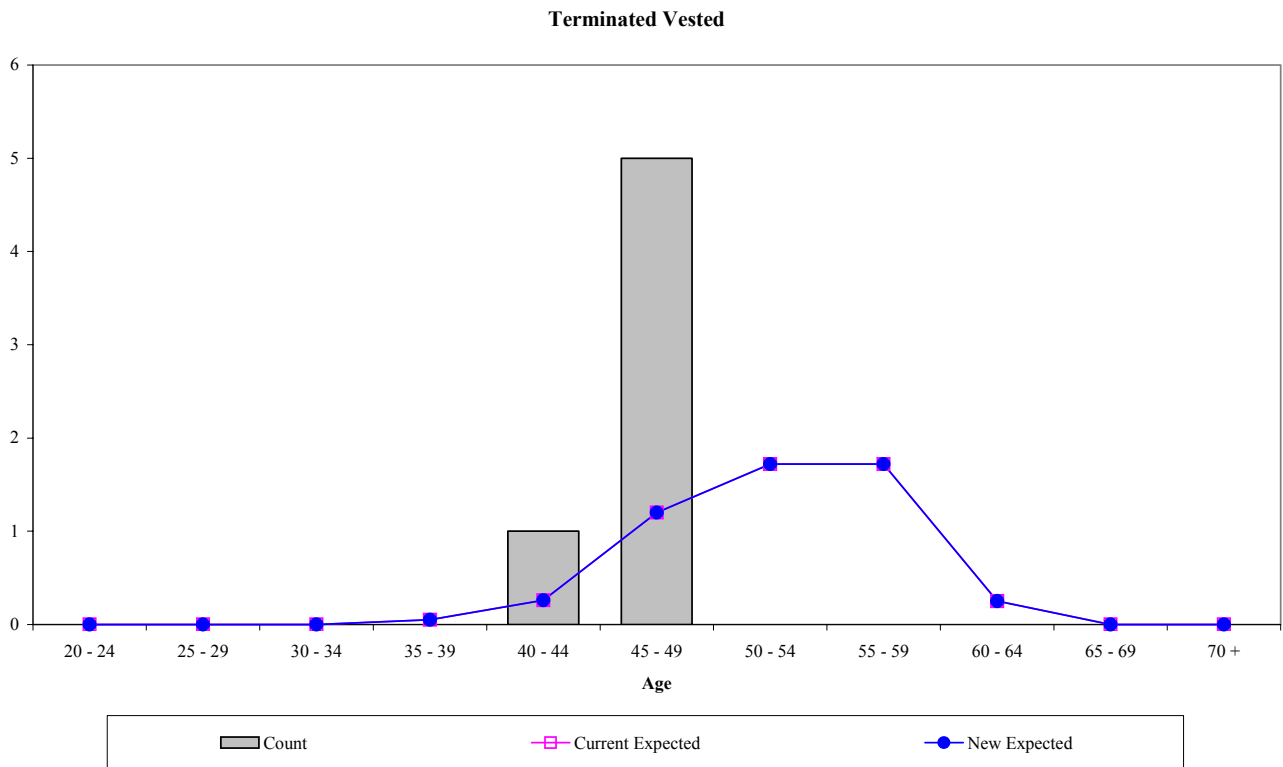
Actual number = 2  
 Expected number = 1  
 New expected number = 1



B. Termination with Vested Benefit (continued)

**General — Female Plan 1**

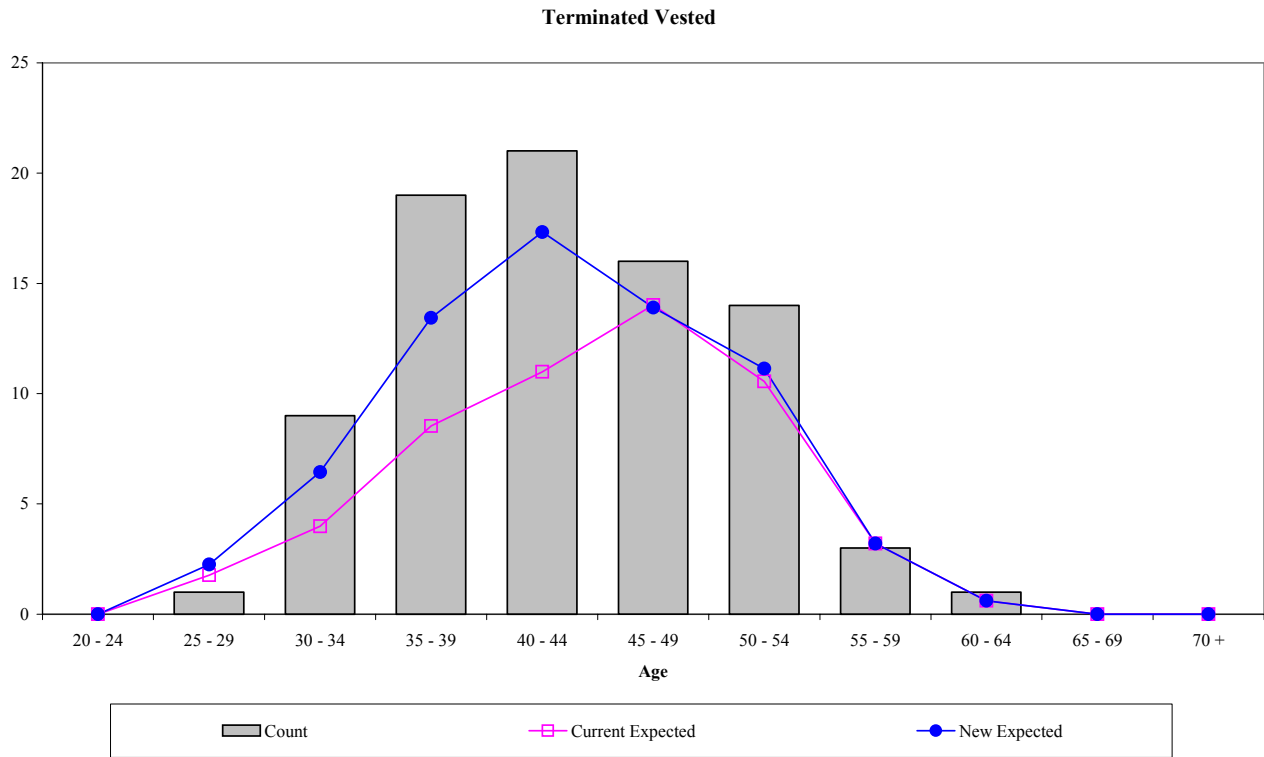
Actual number = 6  
 Expected number = 5  
 New expected number = 5



B. Termination with Vested Benefit (continued)

**General — Male Plans 2 & 4**

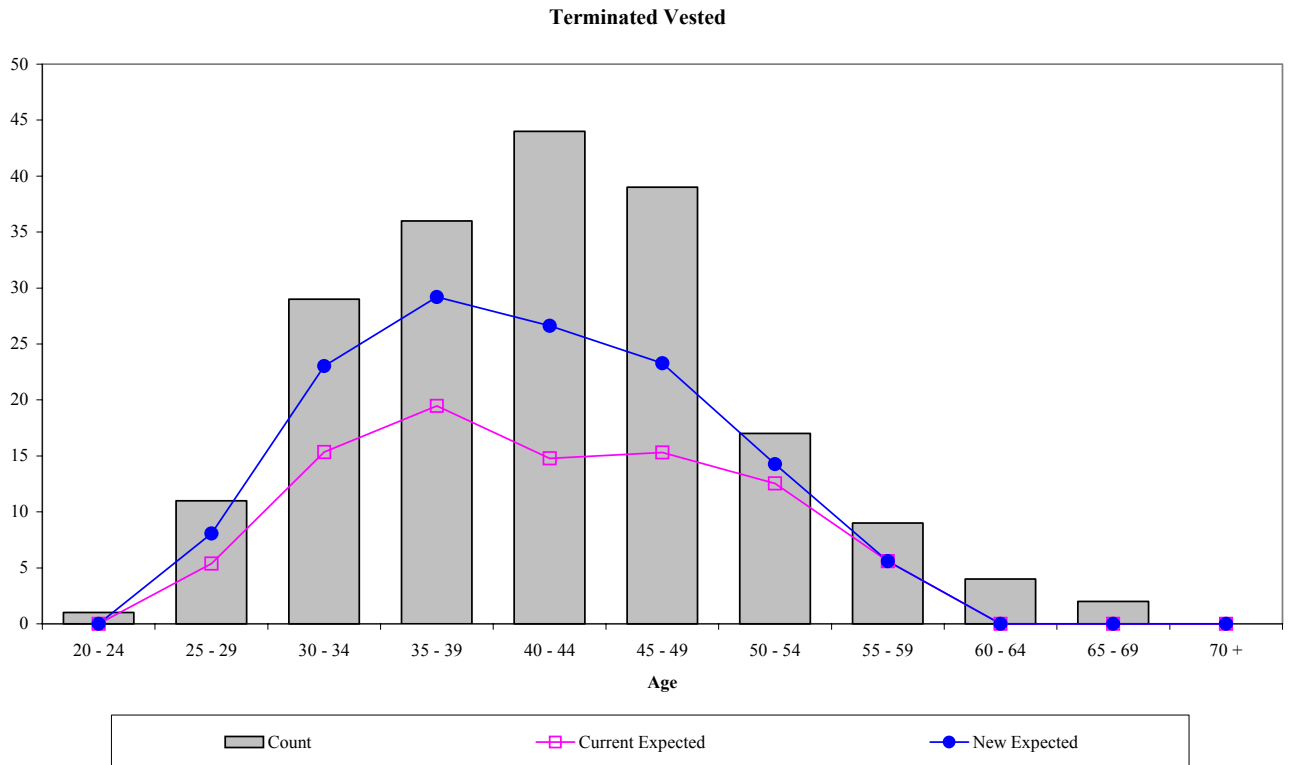
Actual number = 84  
 Expected number = 54  
 New expected number = 68



B. Termination with Vested Benefit (continued)

**General — Female Plans 2 & 4**

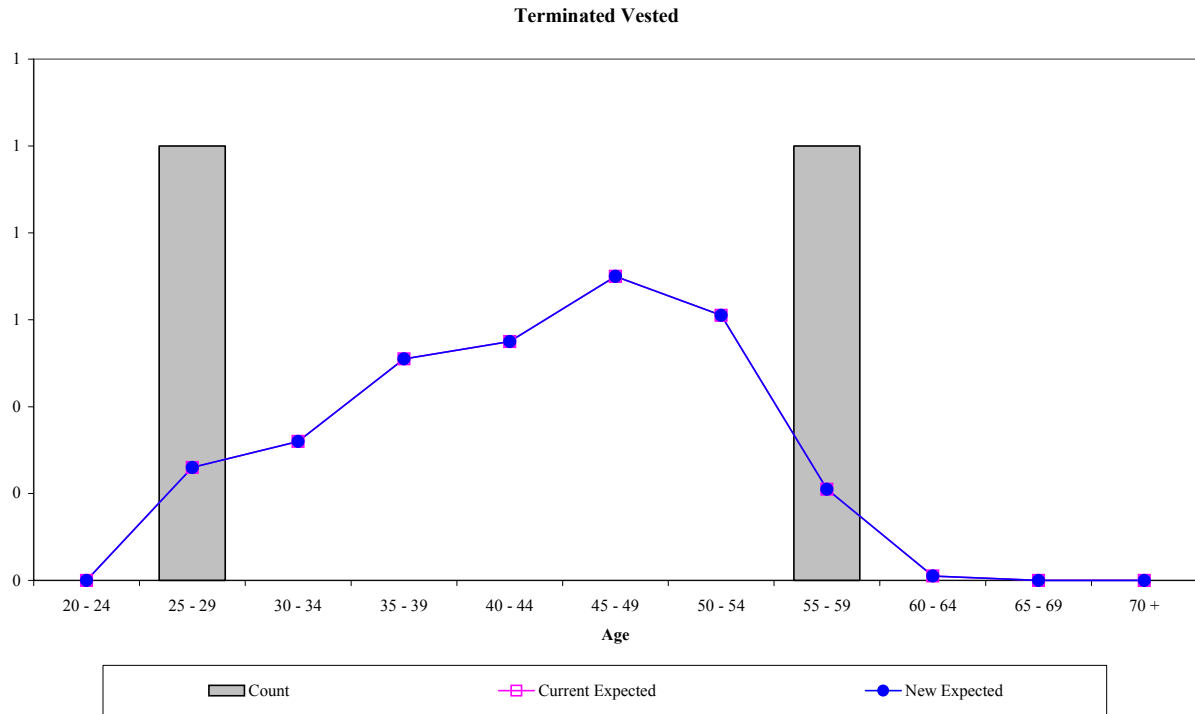
Actual number = 192  
 Expected number = 88  
 New expected number = 130



B. Termination with Vested Benefit (continued)

**General — Male Plan 3**

Actual number = 2  
Expected number = 3  
New expected number = 3



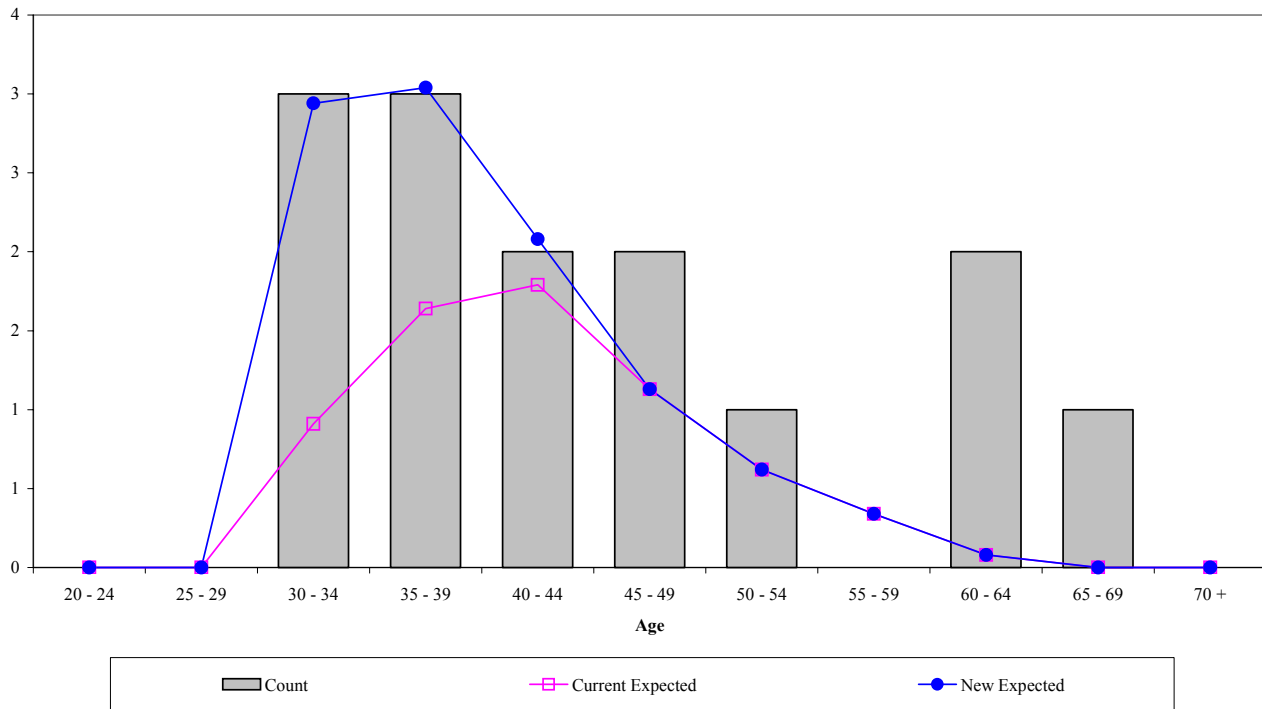


B. Termination with Vested Benefit (continued)

**General — Female Plan 3**

Actual number = 14  
 Expected number = 7  
 New expected number = 10

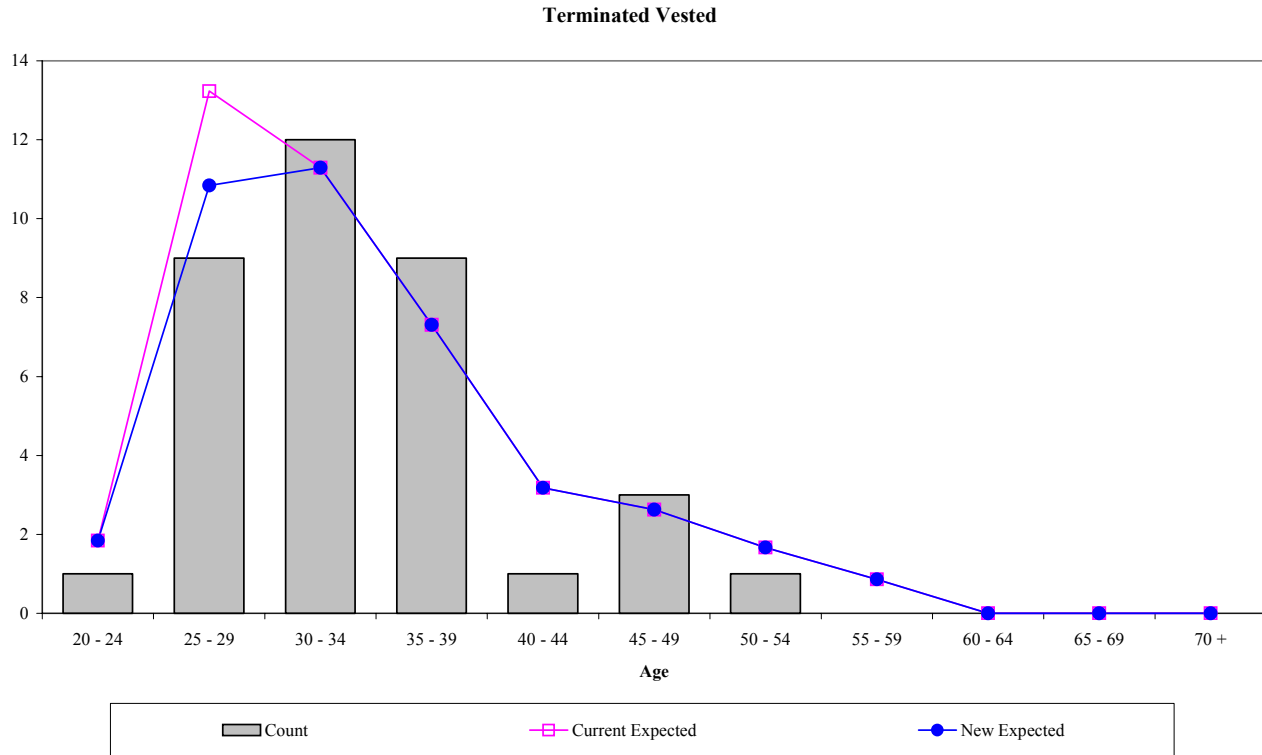
Terminated Vested



B. Termination with Vested Benefit (continued)

**Safety and Probation — Male & Female**

Actual number = 36  
 Expected number = 42  
 New expected number = 40



B. Termination with Vested Benefit (continued)

Following is a comparison of the current experience results with the prior years.

Terminate	General								Safety & Probation	Total
	Female				Male					
	Plan 1	Plans 2 & 4	Plan 3	Total	Plan 1	Plans 2 & 4	Plan 3	Total		
1999-2002	6	192	14	212	2	84	2	88	36	336
1996-99	6	73	12	91	2	51	6	59	31	181
Prior Expected	5	88	7	100	1	54	3	58	42	200
Revised Expected	5	130	10	145	1	68	3	72	40	257

### C. Duty Death

No changes were made to the duty death assumptions for active members. Following is a tabulation by member category:

	<u>Actual</u>	<u>Expected</u>	<u>New Expected</u>
General Male Plan 1	0	0.17	0.17
General Female Plan 1	0	0.00	0.00
General Male Plans 2 & 4	0	0.54	0.54
General Female Plans 2 & 4	0	0.00	0.00
General Male Plan 3	0	0.00	0.00
General Female Plan 3	0	0.00	0.00
Safety & Probation Male & Female	0	1.29	1.29

### D. Ordinary Death

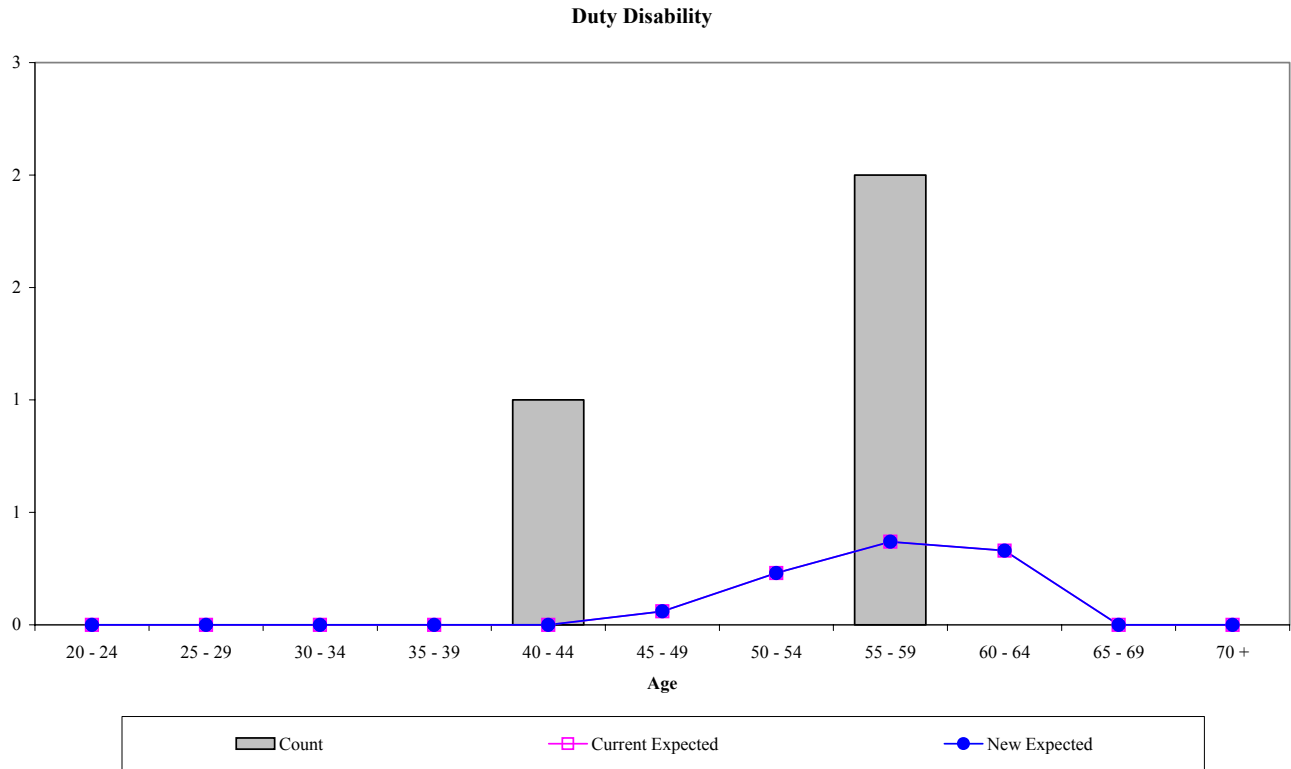
Some changes were made to the ordinary death assumptions for active members. Following is a tabulation by categories:

	<u>Actual</u>	<u>Expected</u>	<u>New Expected</u>
General Male Plan 1	1	1.90	1.90
General Female Plan 1	3	1.32	2.02
General Male Plans 2 & 4	6	3.31	3.31
General Female Plans 2 & 4	11	4.01	5.89
General Male Plan 3	0	0.15	0.15
General Female Plan 3	0	0.51	0.39
Safety & Probation Male & Female	2	0.93	0.93

E. Duty Disability

**General — Male Plan 1**

Actual number = 3  
 Expected number = 1  
 New expected number = 1

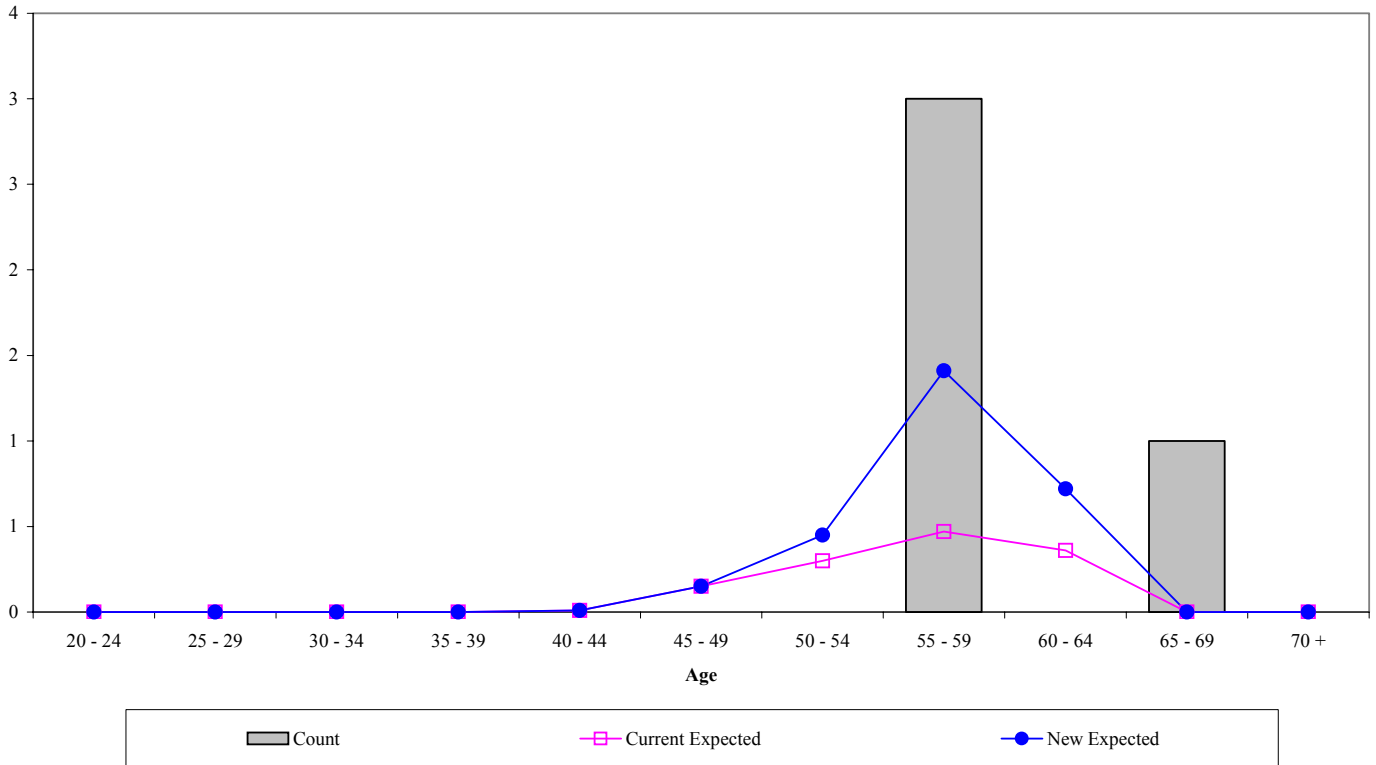


E. Duty Disability (continued)

**General — Female Plan 1**

Actual number = 4\*  
 Expected number = 1  
 New expected number = 3

**Duty Disability**



**\*Note:**

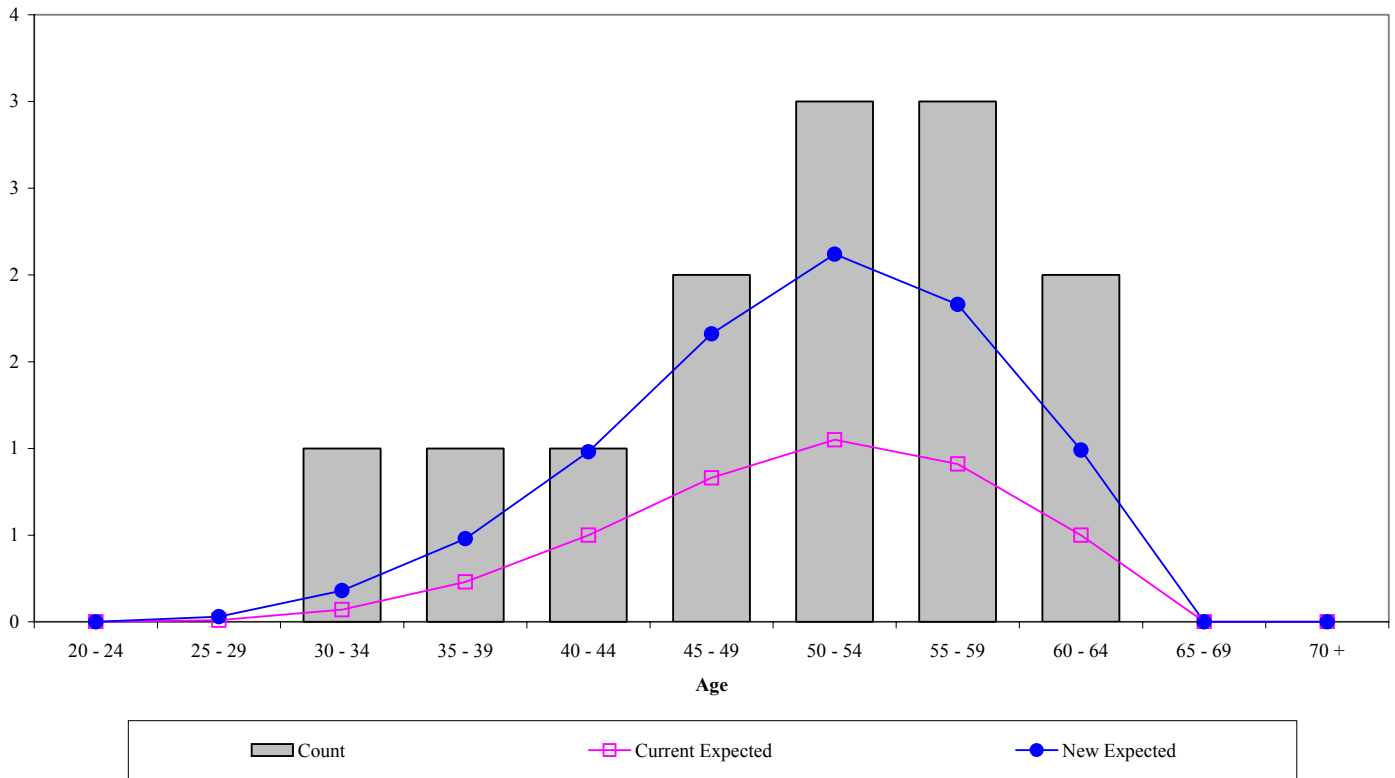
*There was one pending disability as of July 1, 1999, which was not included in the previous experience study, but was considered in the new assumptions.*

E. Duty Disability (continued)

**General — Male Plans 2 & 4**

Actual number = 13  
 Expected number = 4  
 New expected number = 8

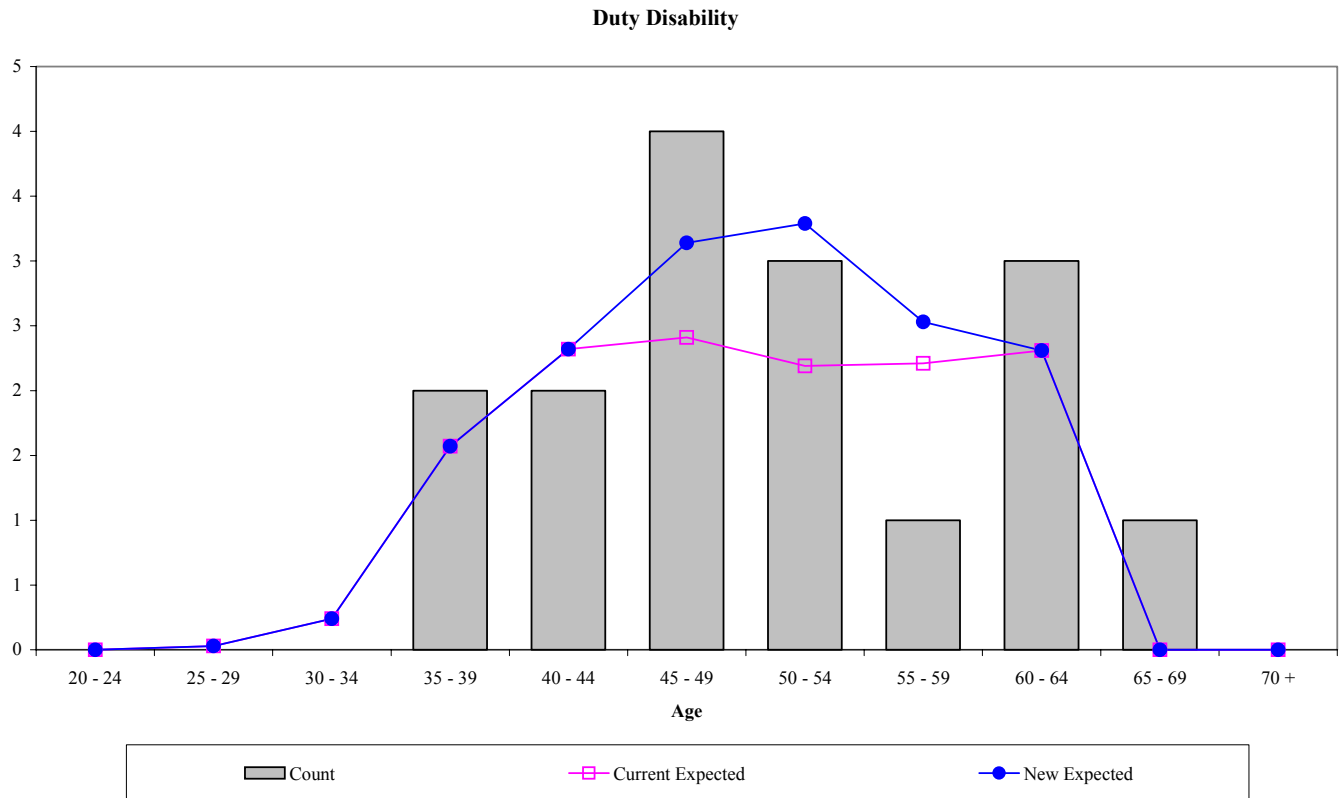
**Duty Disability**



E. Duty Disability (continued)

**General — Female Plans 2 & 4**

Actual number = 16\*  
 Expected number = 13  
 New expected number = 15



**\*Note:**

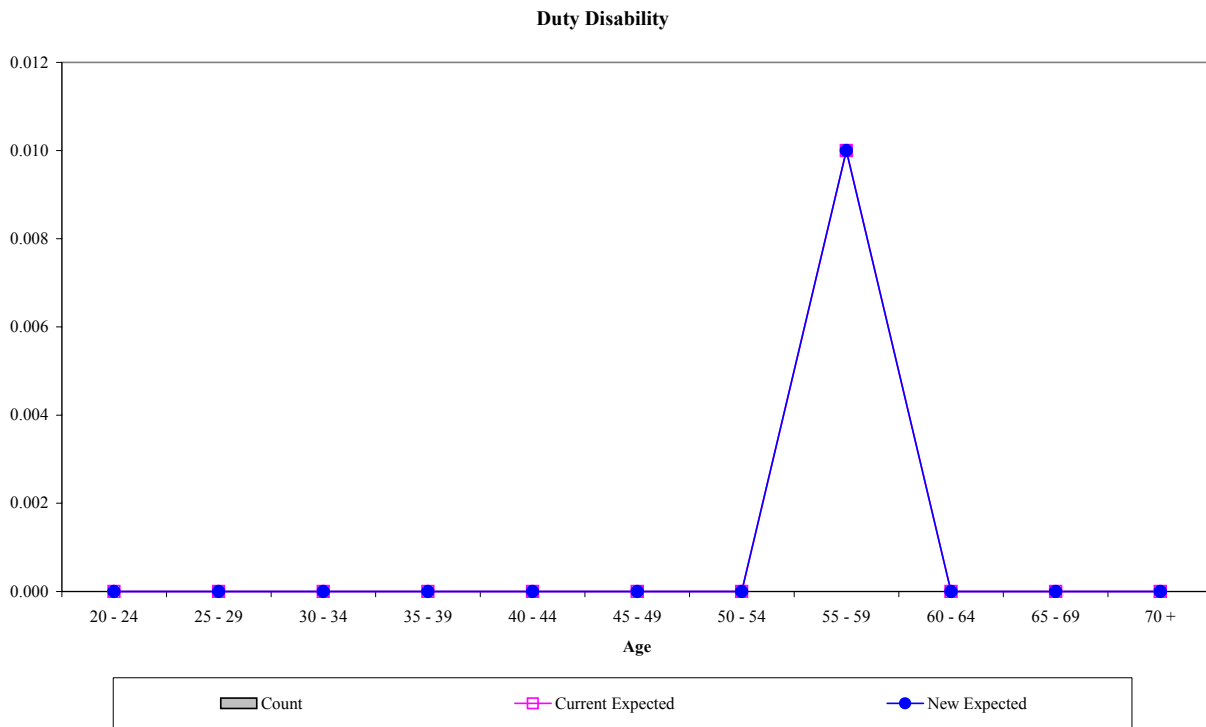
*There was one pending disability as of July 1, 1999, which was not included in the previous experience study, but was considered in the new assumptions.*



E. Duty Disability (continued)

**General — Male Plan 3**

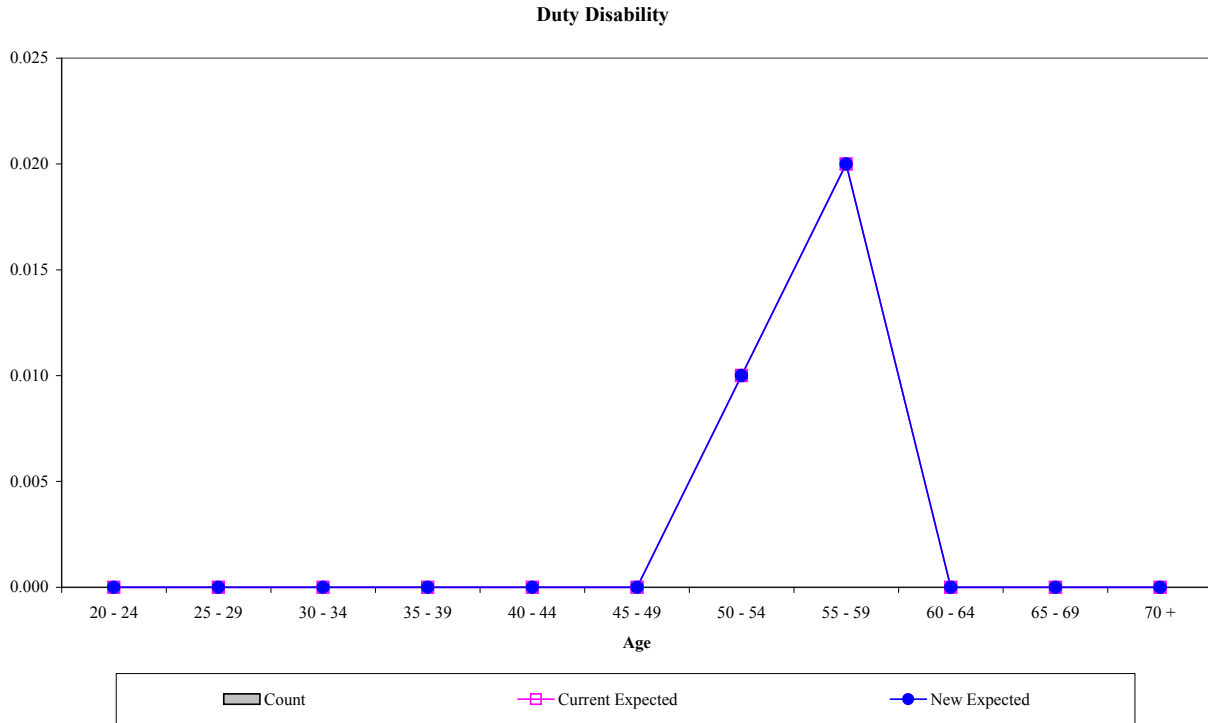
Actual number = 0  
Expected number = 0  
New expected number = 0



E. Duty Disability (continued)

**General — Female Plan 3**

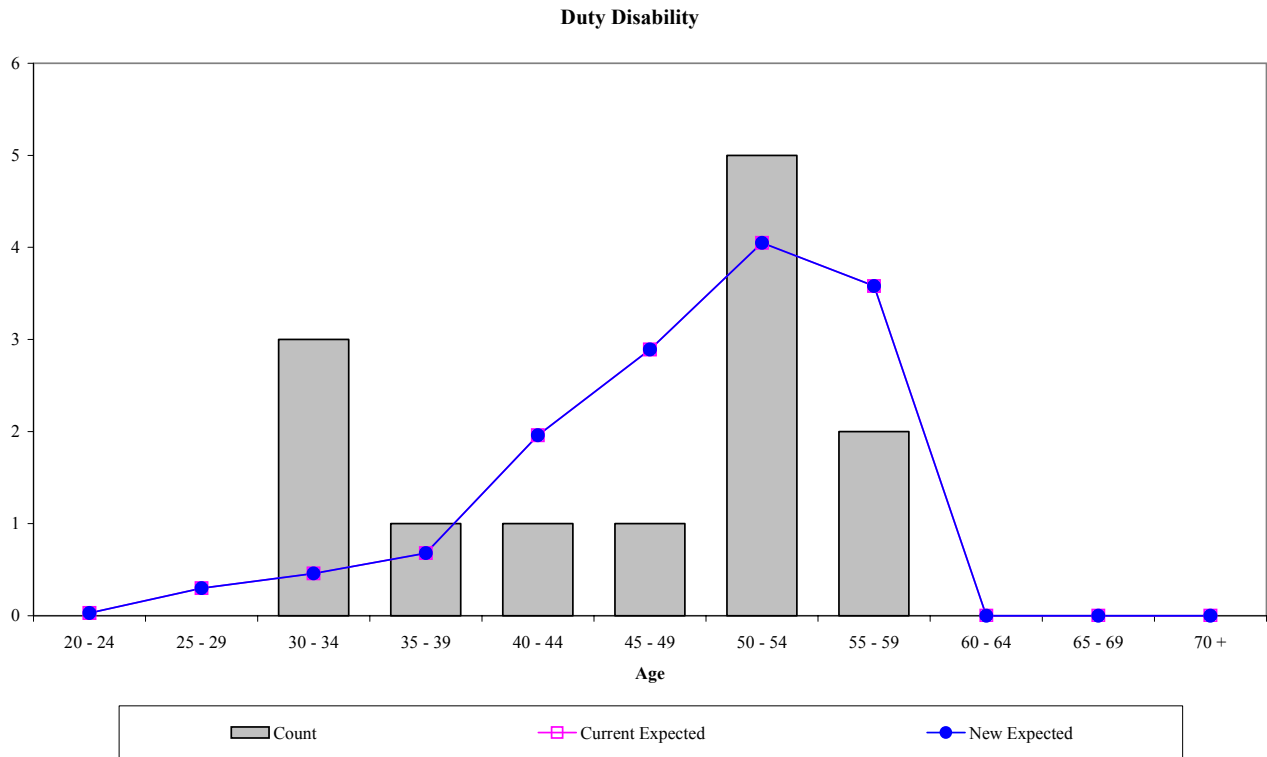
Actual number = 0  
Expected number = 0  
New expected number = 0



E. Duty Disability (continued)

**Safety and Probation — Male & Female**

Actual number = 13\*  
 Expected number = 14  
 New expected number = 14



**\*Note:**

*There were two pending disabilities as of July 1, 1999, which were not included in the previous experience study, but were considered in the new assumptions.*

E. Duty Disability (continued)

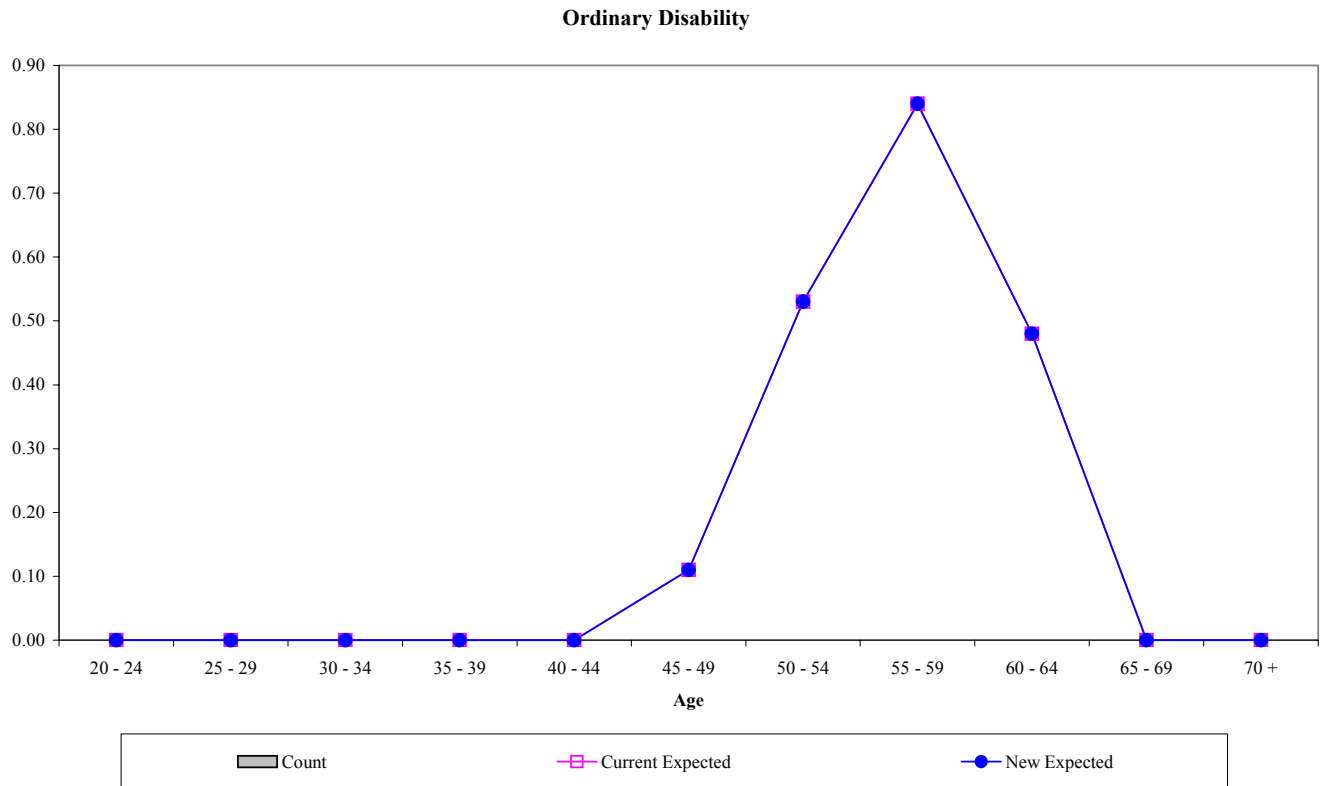
Following is a comparison of the current experience results with the prior years.

Duty Disability	General								Safety & Probation	Total
	Female				Male					
	Plan 1	Plans 2 & 4	Plan 3	Total	Plan 1	Plans 2 & 4	Plan 3	Total		
1999-2002	4	16	0	20	3	13	0	16	13	49
1996-99	1	13	0	17	0	4	0	4	16	37
Prior Expected	1	13	0	14	1	4	0	5	14	33
Revised Expected	3	15	0	18	1	8	0	9	14	41

F. Ordinary Disability

**General — Male Plan 1**

Actual number = 0  
 Expected number = 2  
 New expected number = 2

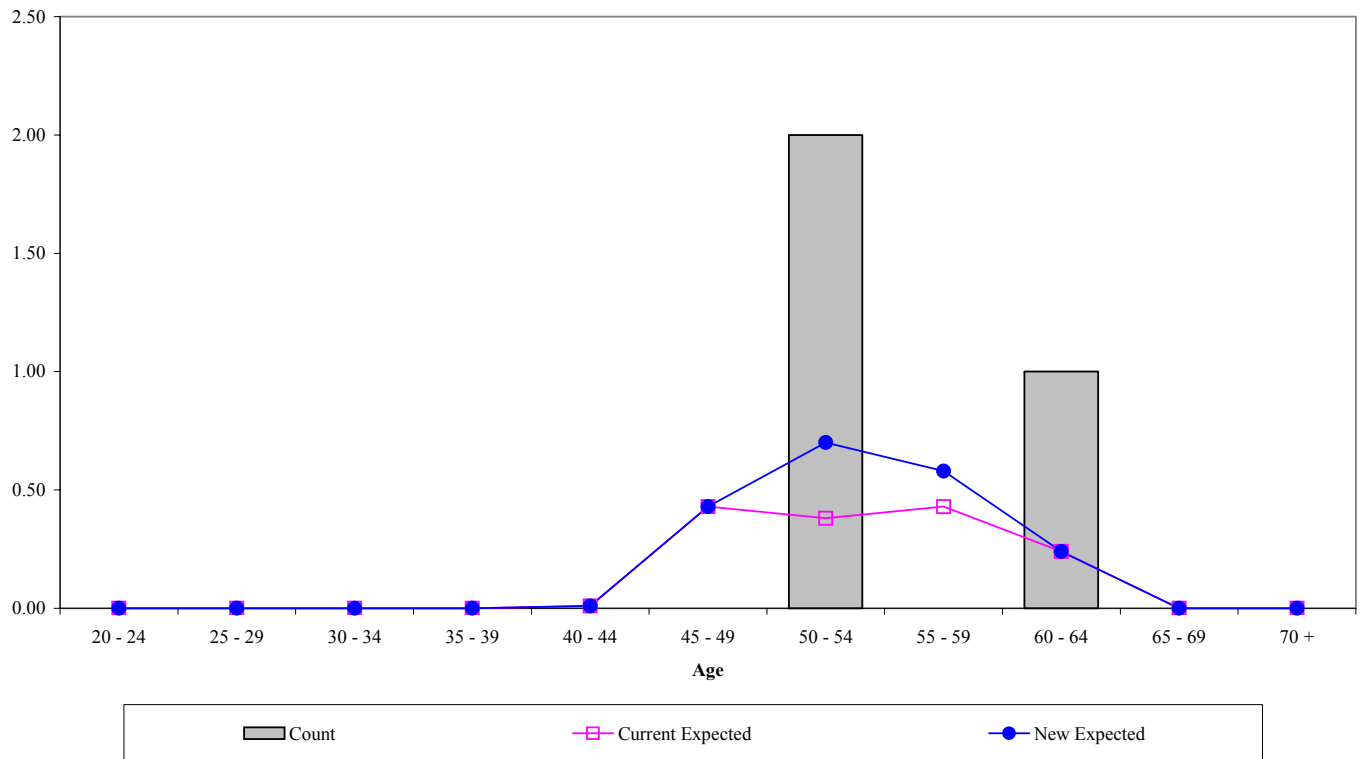


F. Ordinary Disability (continued)

**General — Female Plan 1**

Actual number = 3\*  
 Expected number = 1  
 New expected number = 2

Ordinary Disability



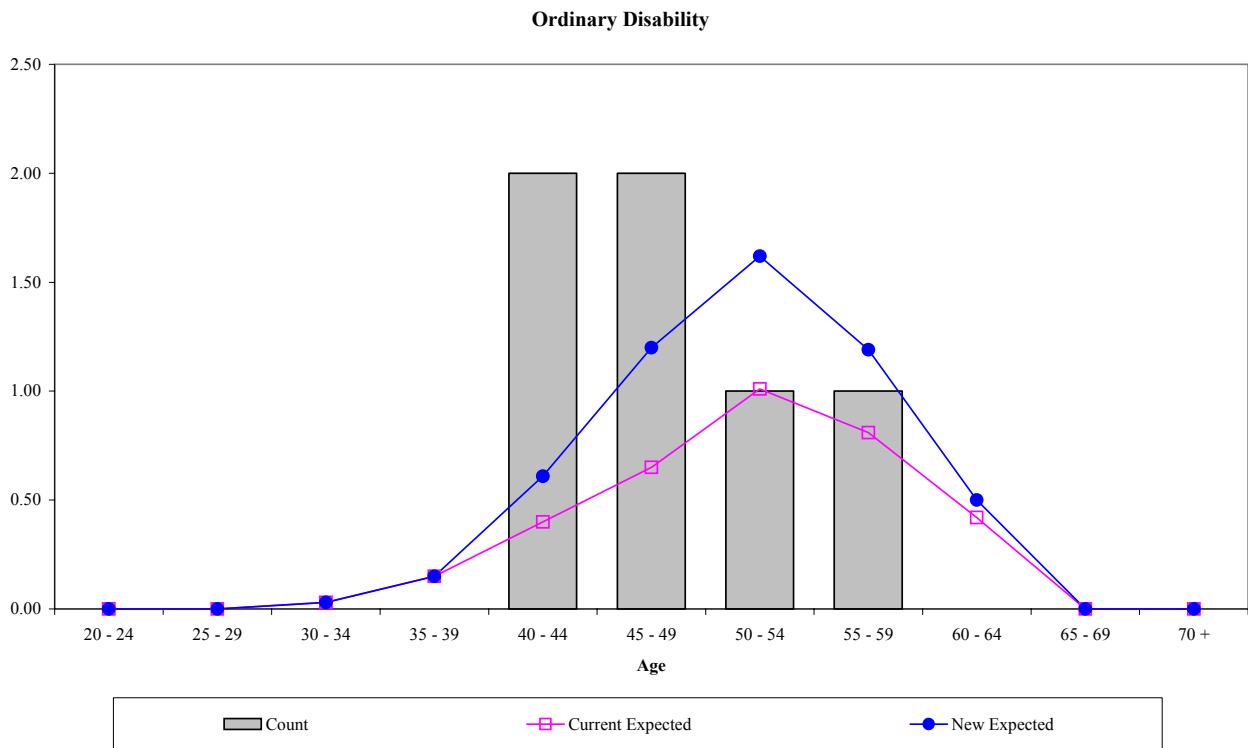
**\*Note:**

*There was one pending disability as of July 1, 1999, which was not included in the previous experience study, but was considered in the new assumptions.*

F. Ordinary Disability

**General — Male Plans 2 & 4**

Actual number = 6\*  
 Expected number = 3  
 New expected number = 5



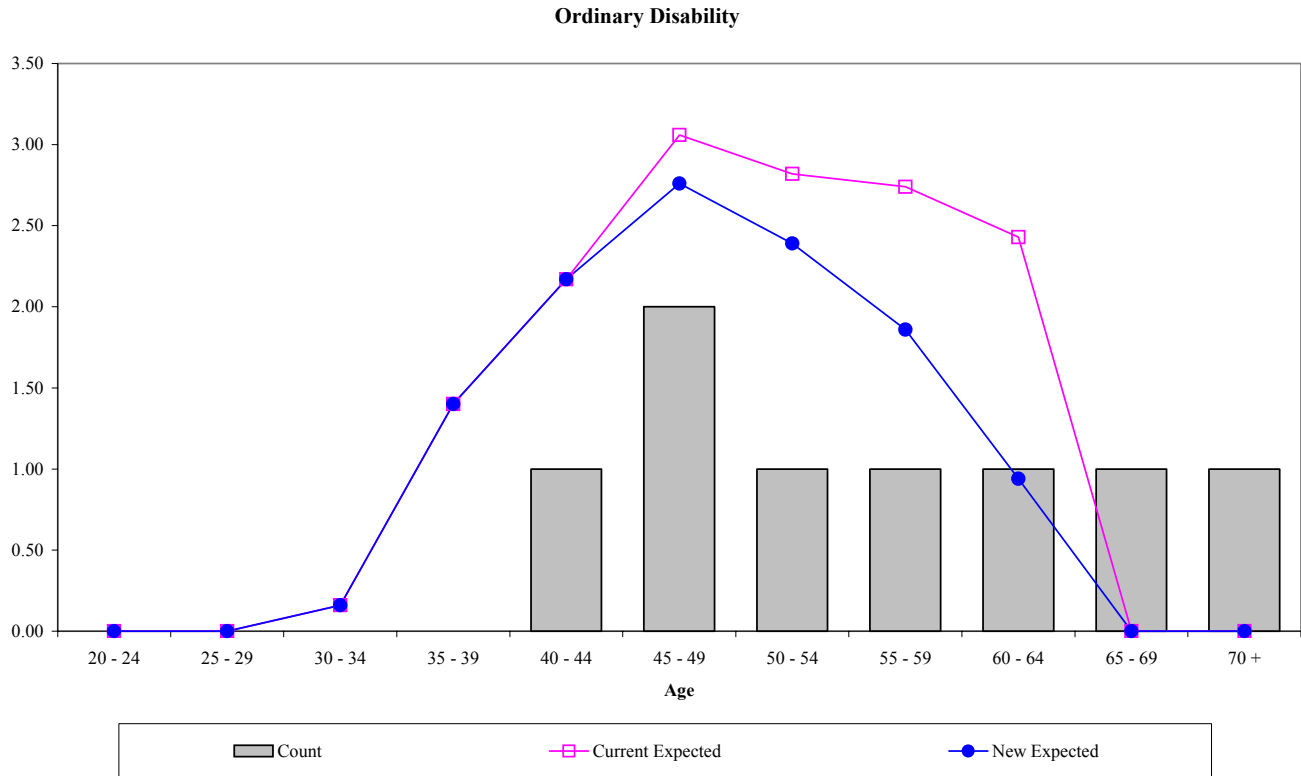
**\*Note:**

*There was one pending disability as of July 1, 1999, which was not included in the previous experience study, but was considered in the new assumptions.*

F. Ordinary Disability (continued)

**General — Female Plans 2 & 4**

Actual number = 8\*  
 Expected number = 15  
 New expected number = 12



**\*Note:**

*There were three pending disabilities as of July 1, 1999, which were not included in the previous experience study, but were considered in the new assumptions.*

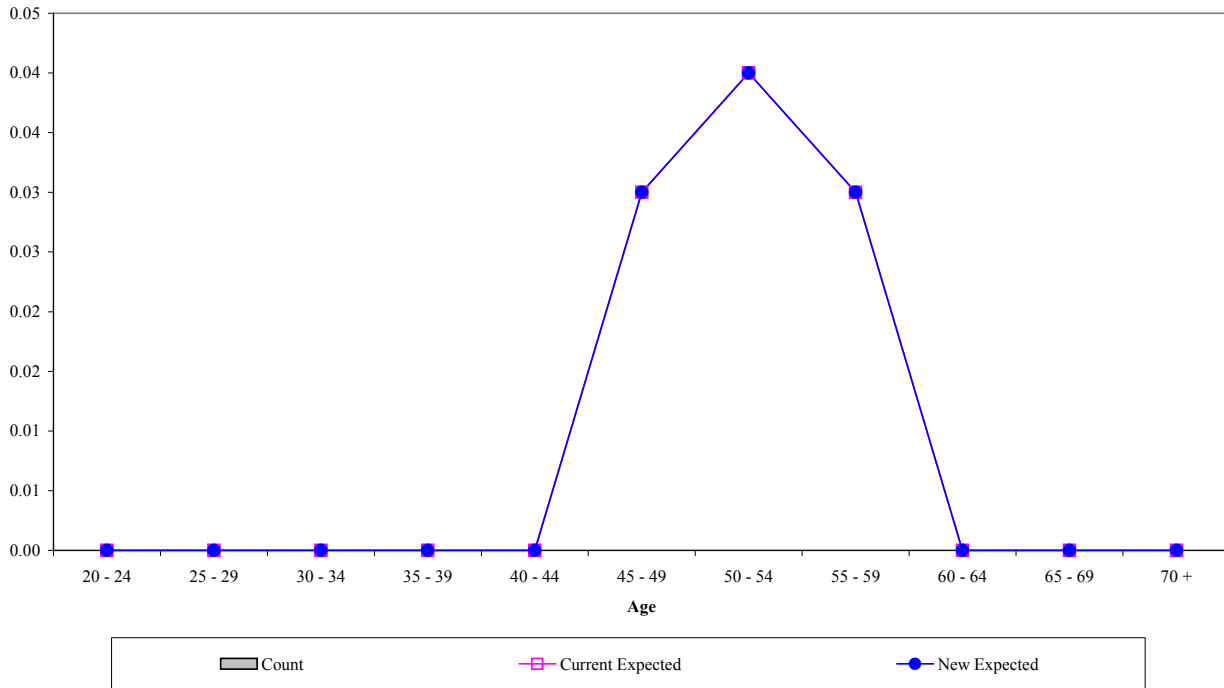


F. Ordinary Disability

General — Male Plan 3

Actual number = 0  
Expected number = 0  
New expected number = 0

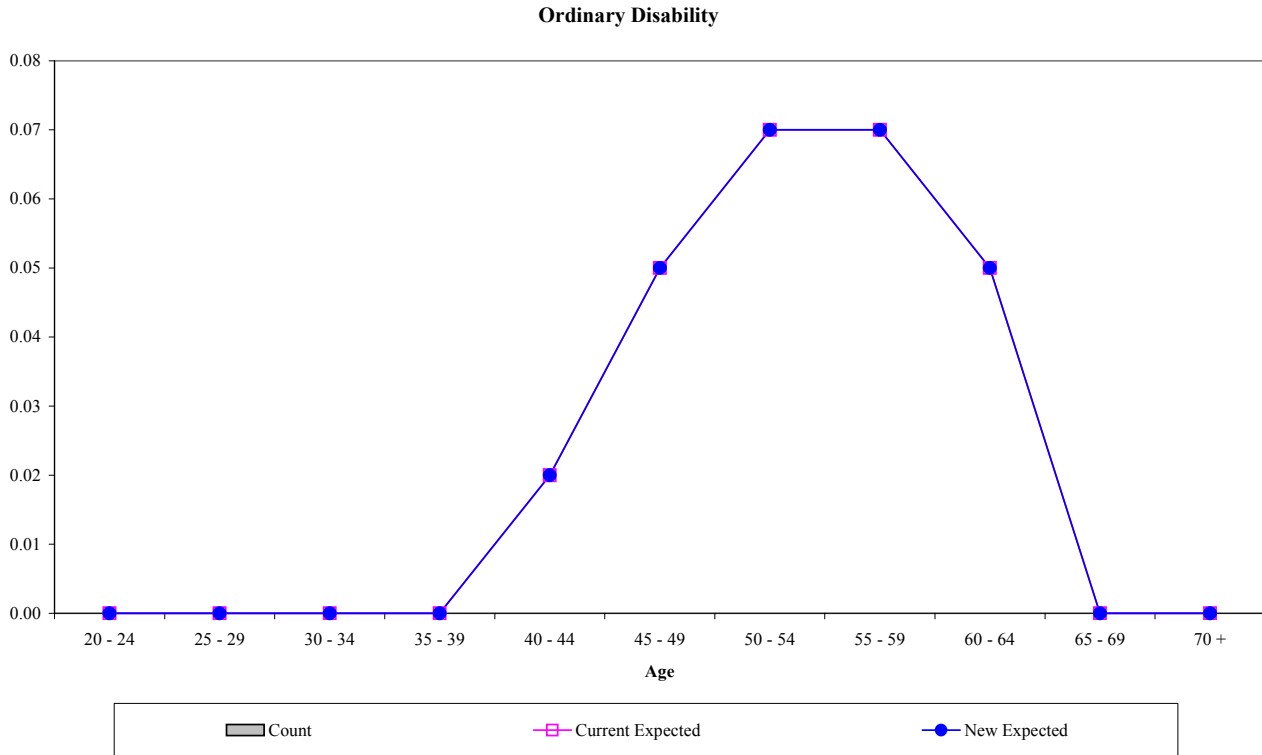
Ordinary Disability



F. Ordinary Disability

**General — Female Plan 3**

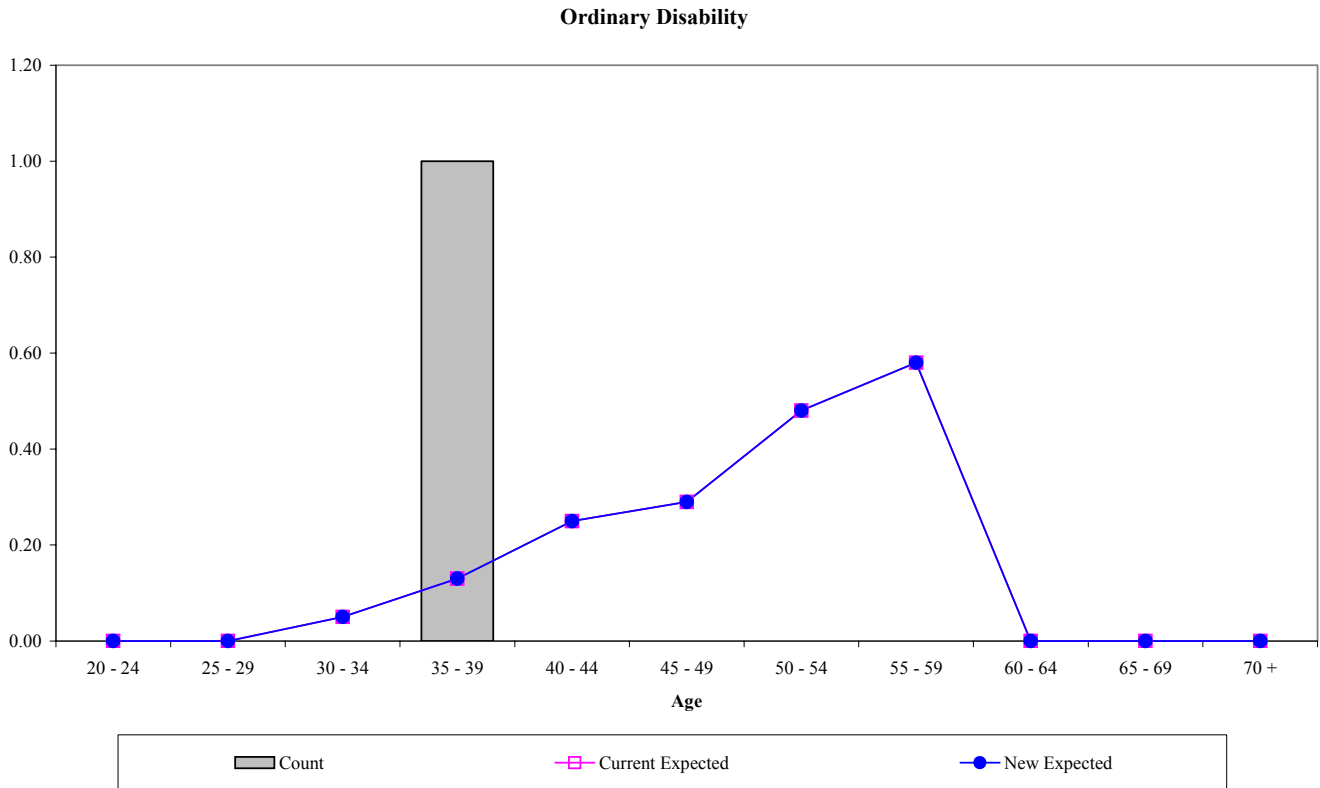
Actual number = 0  
Expected number = 0  
New expected number = 0



F. Ordinary Disability (continued)

**Safety and Probation — Male & Female**

Actual number = 1  
Expected number = 2  
New expected number = 2



F. Ordinary Disability (continued)

Following is a comparison of the current experience results with the prior years.

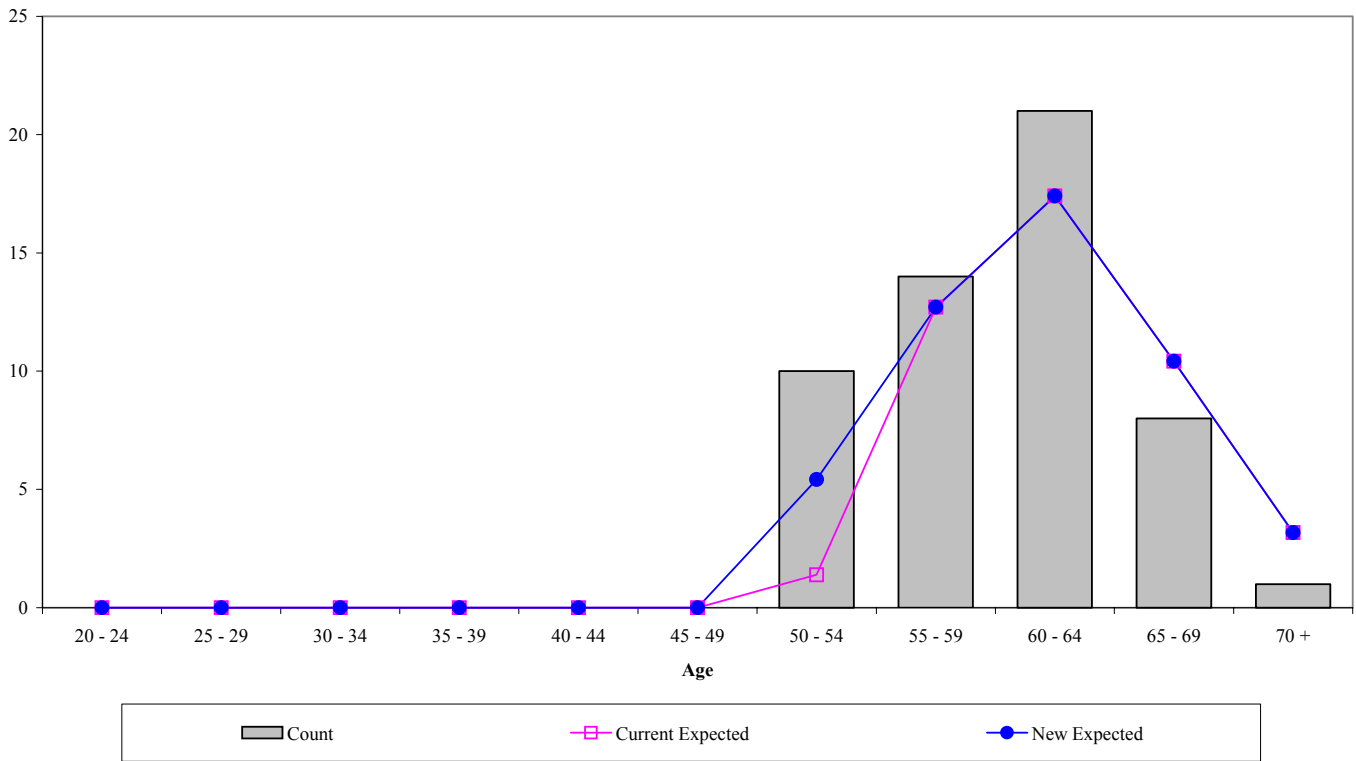
Ordinary Disability	General								Safety & Probation	Total
	Female				Male					
	Plan 1	Plans 2 & 4	Plan 3	Total	Plan 1	Plans 2 & 4	Plan 3	Total		
1999-2002	3	8	0	11	0	6	0	6	1	18
1996-99	1	14	0	15	2	3	0	5	1	21
Prior Expected	1	15	0	16	2	3	0	5	2	23
Revised Expected	2	12	0	14	2	5	0	7	2	23

G. Service Retirement

**General — Male Plan 1**

Actual number = 54  
 Expected number = 45  
 New expected number = 49

Service Retirement

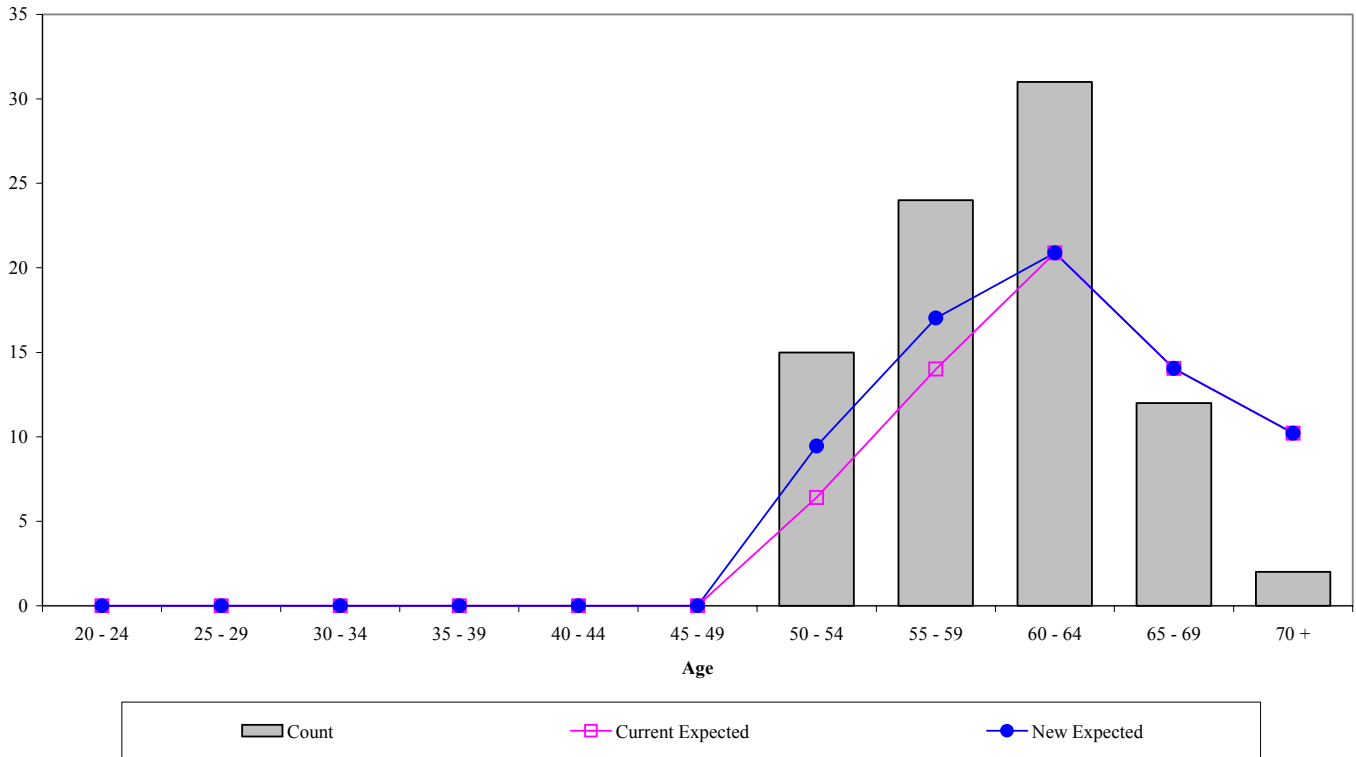


G. Service Retirement (continued)

**General — Female Plan 1**

Actual number = 84  
 Expected number = 66  
 New expected number = 72

Service Retirement



G. Service Retirement (continued)

**General — Male Plans 2 & 4**

Actual number = 42  
 Expected number = 30  
 New expected number = 37

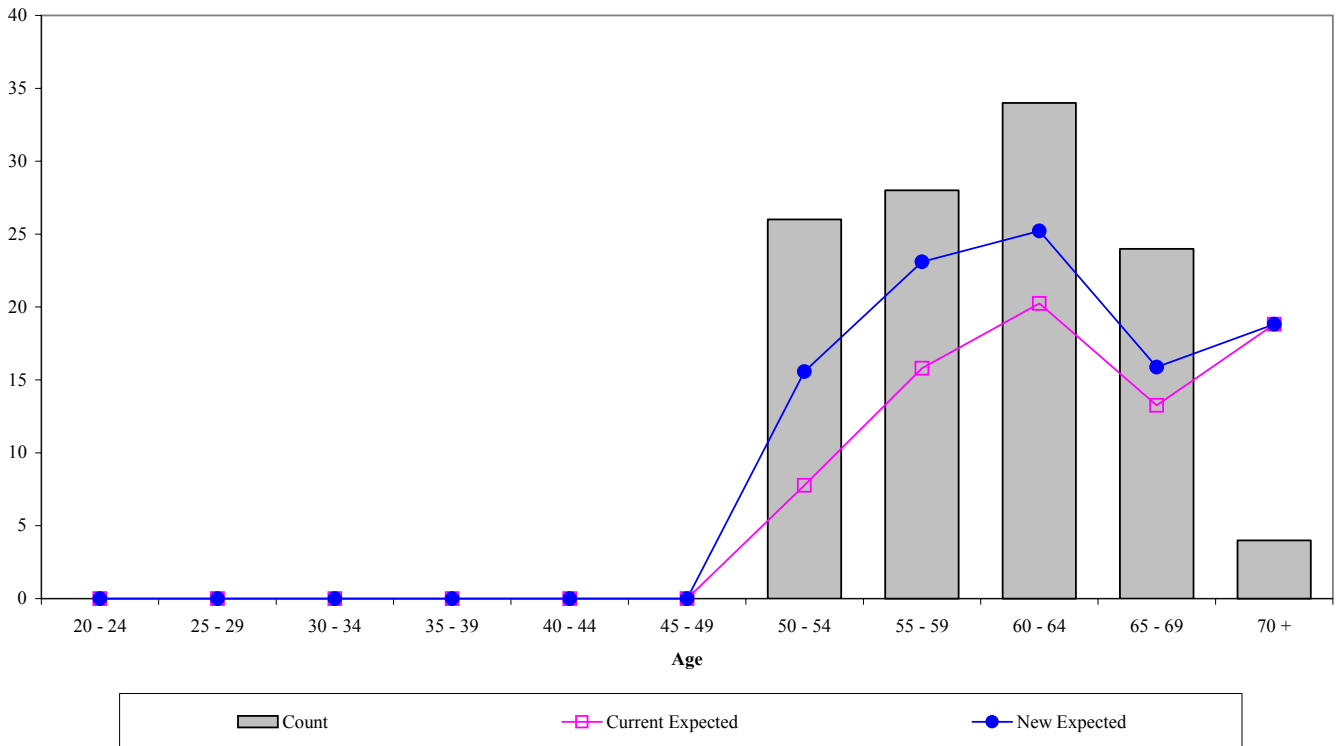


G. Service Retirement (continued)

**General — Female Plans 2 & 4**

Actual number = 116  
 Expected number = 76  
 New expected number = 99

Service Retirement

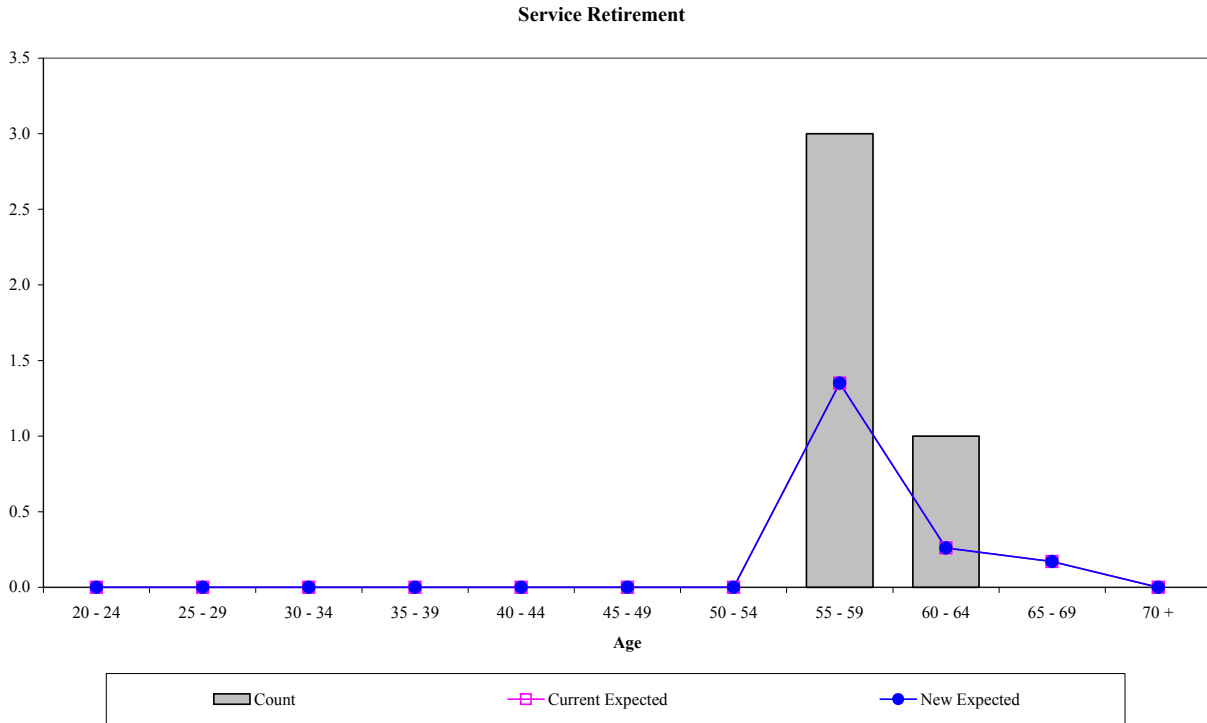




G. Service Retirement (continued)

**General — Male Plan 3**

Actual number = 4  
Expected number = 2  
New expected number = 2

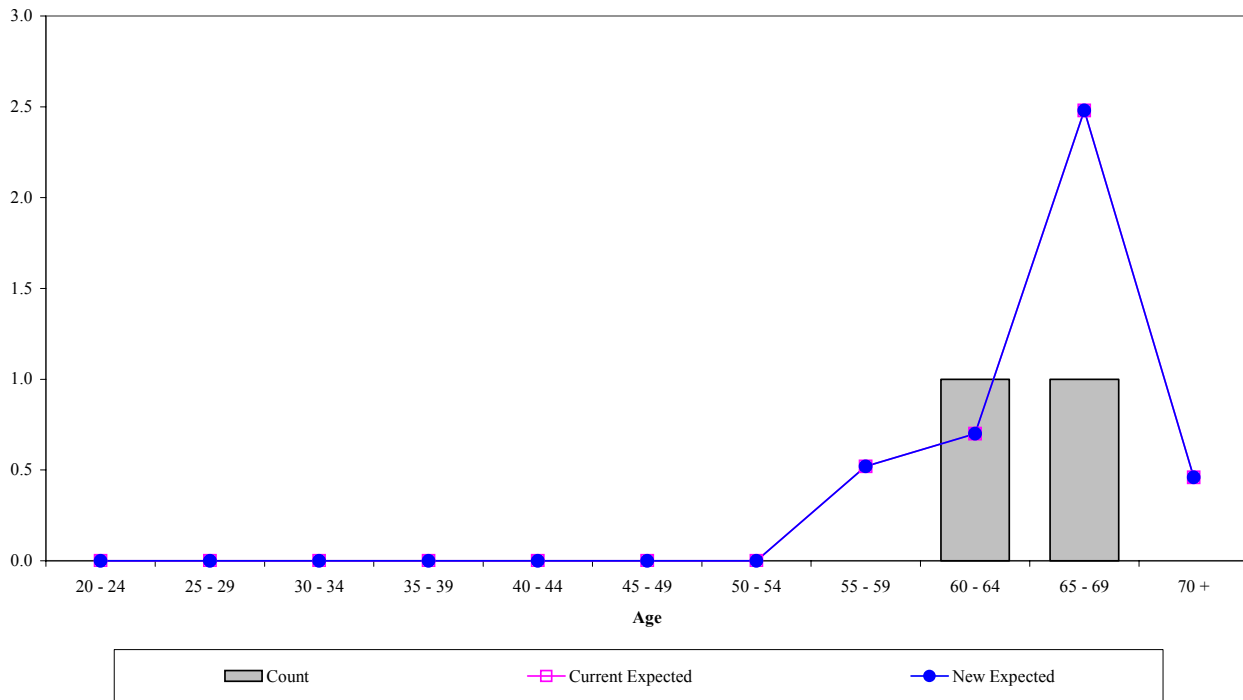


G. Service Retirement (continued)

**General — Female Plan 3**

Actual number = 2  
 Expected number = 4  
 New expected number = 4

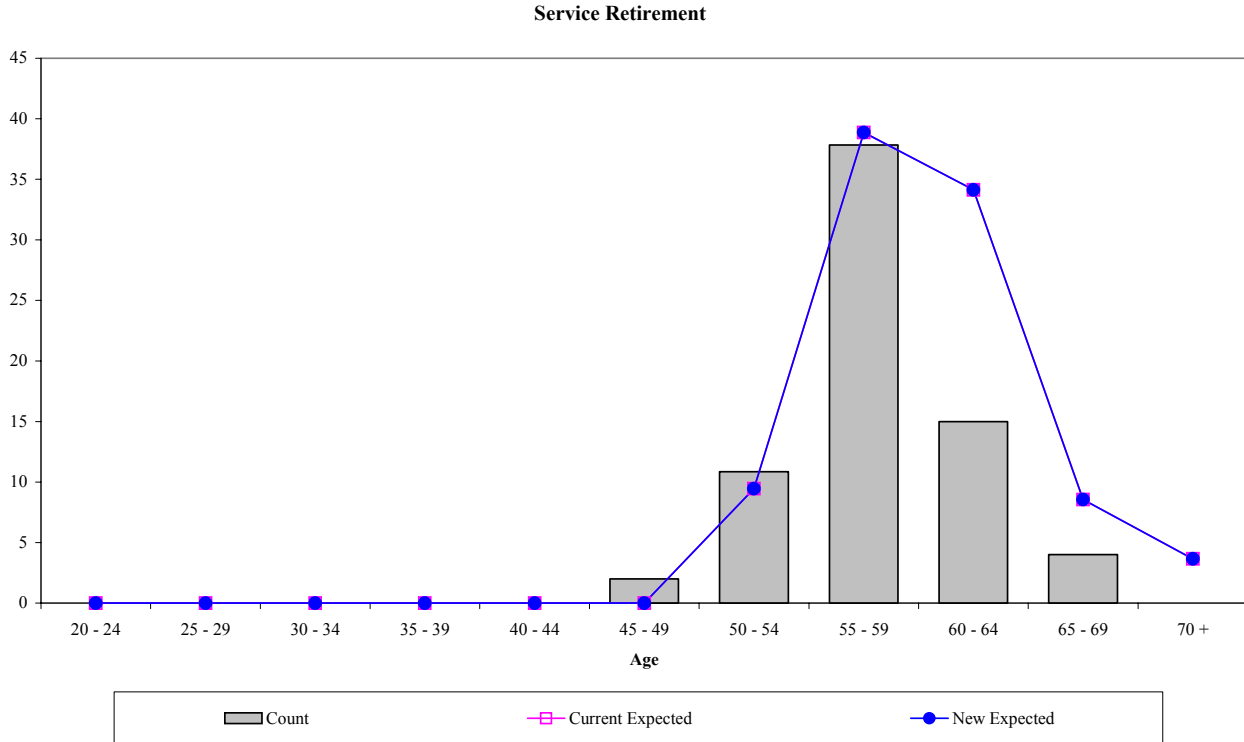
Service Retirement



G. Service Retirement (continued)

**Safety and Probation — Male & Female**

Actual number = 70  
 Expected number = 95  
 New expected number = 95



G. Service Retirement (continued)

Following is a comparison of the current experience results with the prior years.

Service Retirement	General								Safety & Probation	Total
	Female				Male					
	Plan 1	Plans 2 & 4	Plan 3	Total	Plan 1	Plans 2 & 4	Plan 3	Total		
1999-2002	84	116	2	202	54	42	4	100	70	372
1996-99	51	69	1	121	27	20	3	50	59	230
Prior Expected	66	76	4	146	45	30	2	77	95	318
Revised Expected	72	99	4	175	49	37	2	88	95	358

H. Percentage of Members Married

The current assumption is that 85% of male members will be married at the time of death before retirement, and 55% female members will be married at the time of death before retirement. Based on recent retirements, we recommend that the assumptions be maintained.

I. Reciprocity

An assumption is required as to the number of future terminated vested members who will become employed by another entity under reciprocity. The current assumption is 50%. Based on the termination experience for the last three years, we recommend this assumption be maintained.

J. Summary

In summary, we recommend that the experience during the study period and expectations for the future be used to revise assumptions for withdrawal, termination with vested benefit, duty disability, ordinary disability, and service retirement. We have developed new rate tables for each of these events. Following is a comparison of the current experience results and those expected from the recommended assumption.

**General Male Plan 1 Members**

	<b>7/99 – 7/02 Actual</b>	<b>Current Expected</b>	<b>Revised Expected</b>
Withdrawals (0<Service<5)	N/A	N/A	N/A
Withdrawals (Service>5)	1	1	1
Total Withdrawals	1	1	1
Terminated Vested	2	1	1
Duty Death	0	0.17	0.17
Ordinary Death	1	1.90	1.90
Duty Disability	3	1	1
Ordinary Disability	0	2	2
Service Retirement	54	45	49

**General Female Plan 1 Members**

	<u>7/99 – 7/02 Actual</u>	<u>Current Expected</u>	<u>Revised Expected</u>
Withdrawals (0<Service<5)	N/A	N/A	N/A
Withdrawals (Service>5)	0	1	1
Total Withdrawals	0	1	1
Terminated Vested	6	5	5
Duty Death	0	0	0
Ordinary Death	3	1.32	2.02
Duty Disability	4	1	3
Ordinary Disability	3	1	2
Service Retirement	84	66	72

**General Male Tiers 2 & 4 Members**

	<u>7/99 – 7/02 Actual</u>	<u>Current Expected</u>	<u>Revised Expected</u>
Withdrawals (0<Service<5)	169	146	157
Withdrawals (Service>5)	22	23	23
Total Withdrawals	191	169	180
Terminated Vested	84	54	68
Duty Death	0	0.54	0.54
Ordinary Death	6	3.31	3.31
Duty Disability	13	4	8
Ordinary Disability	6	3	5
Service Retirement	42	30	37

**General Female Tiers 2 & 4 Members**

	<u>7/99 – 7/02 Actual</u>	<u>Current Expected</u>	<u>Revised Expected</u>
Withdrawals (0<Service<5)	391	333	356
Withdrawals (Service>5)	59	62	59
Total Withdrawals	450	395	415
Terminated Vested	192	88	130
Duty Death	0	0	0
Ordinary Death	11	4.01	5.89
Duty Disability	16	13	15
Ordinary Disability	8	15	12
Service Retirement	116	76	99

**General Male Plan 3 Members**

	<u>7/99 – 7/02 Actual</u>	<u>Current Expected</u>	<u>Revised Expected</u>
Withdrawals (0<Service<5)	19	19	19
Withdrawals (Service>5)	N/A	N/A	N/A
Total Withdrawals	19	19	19
Terminated Vested	2	3	3
Duty Death	0	0	0
Ordinary Death	0	0.15	0.15
Duty Disability	0	0	0
Ordinary Disability	0	0	0
Service Retirement	4	2	2

**General Female Plan 3 Members**

	<b>7/99 – 7/02 Actual</b>	<b>Current Expected</b>	<b>Revised Expected</b>
Withdrawals (0<Service<5)	36	22	28
Withdrawals (Service>5)	N/A	N/A	N/A
Total Withdrawals	36	22	28
Terminated Vested	14	7	10
Duty Death	0	0	0
Ordinary Death	0	0.51	0.39
Duty Disability	0	0	0
Ordinary Disability	0	0	0
Service Retirement	2	4	4

**Safety and Probation Members**

	<b>7/99 – 7/02 Actual</b>	<b>Current Expected</b>	<b>Revised Expected</b>
Withdrawals (0<Service<5)	43	45	45
Withdrawals (Service>5)	2	9	6
Total Withdrawals	45	54	51
Terminated Vested	36	42	40
Duty Death	0	1.29	1.29
Ordinary Death	2	0.93	0.93
Duty Disability	13	14	14
Ordinary Disability	1	2	2
Service Retirement	70	95	95



## II. Retired Member Noneconomic Assumptions

In order to develop assumptions for post-retirement mortality, a combination of actual experience and standardized tables are used. Because mortality requires a very large population for reliable results, we rely heavily on the standardized tables and make adjustments for your particular population. Changes are recommended for General Male and Female Members and General and Safety and Probation Disabled Members to reflect that members are living longer than previously expected. The following table summarizes the recommendations:

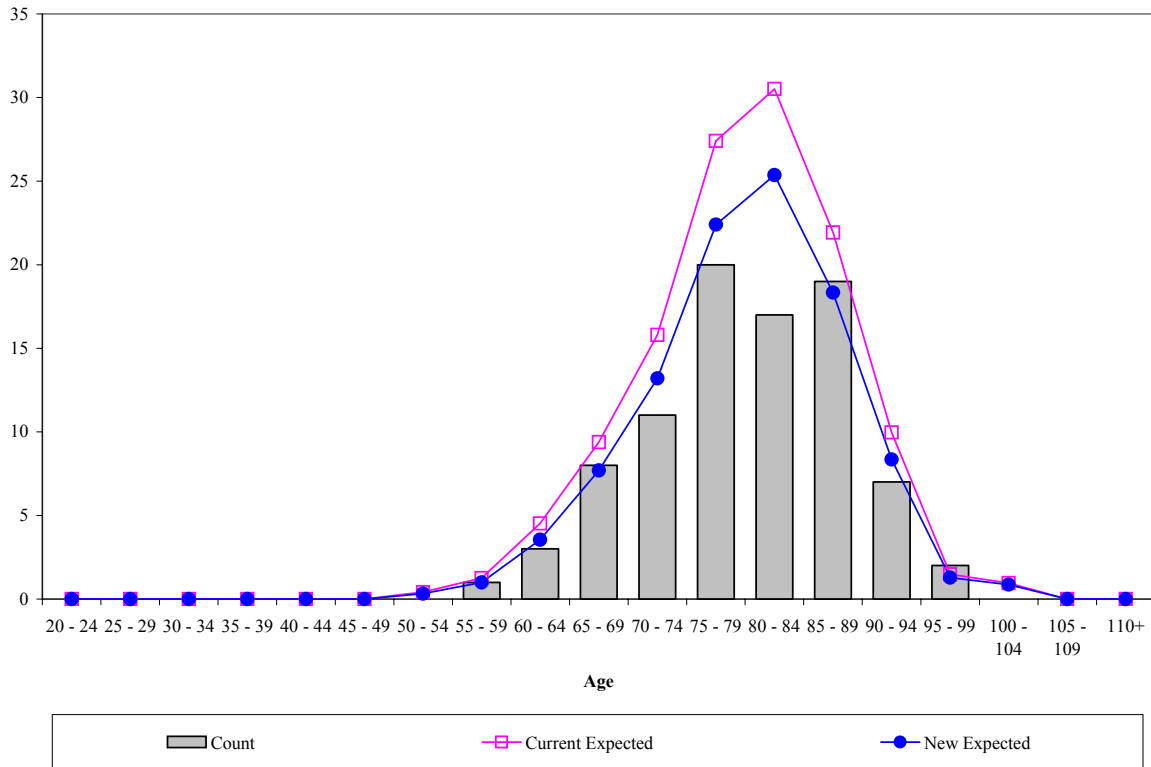
	<b>Old Assumption</b>	<b>New Assumption</b>
Male General Members	1994 Group Annuity Male set forward one year	1994 Group Annuity Male set back one year
Female General Members	1994 Group Annuity Female set back one year	1994 Group Annuity Female set back two years
Safety and Probation Members	1994 Group Annuity Male set forward one year	1994 Group Annuity Male set forward one year
Disabled General Members	1981 General Disability Mortality Table set back three years	1981 General Disability Mortality Table set back four years
Disabled Safety and Probation Members	1981 Safety Disability Mortality Table set back one year	1981 Safety Disability Mortality Table set back two years

A. Retiree Mortality

**Male General Members**

Actual deaths = 88  
 Expected deaths = 124  
 New expected deaths = 102

**Retiree Mortality**

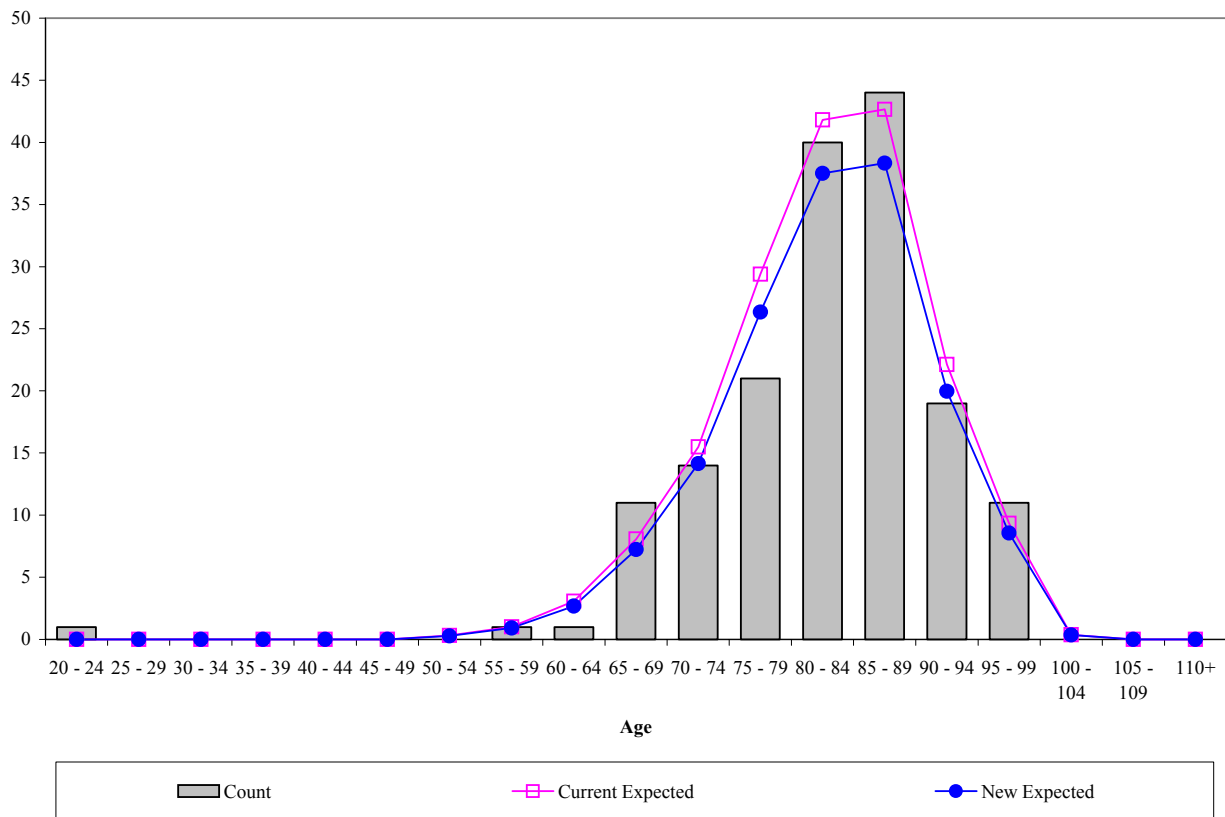


A. Retiree Mortality (continued)

**Female General Members**

Actual deaths = 163  
 Expected deaths = 174  
 New expected deaths = 156

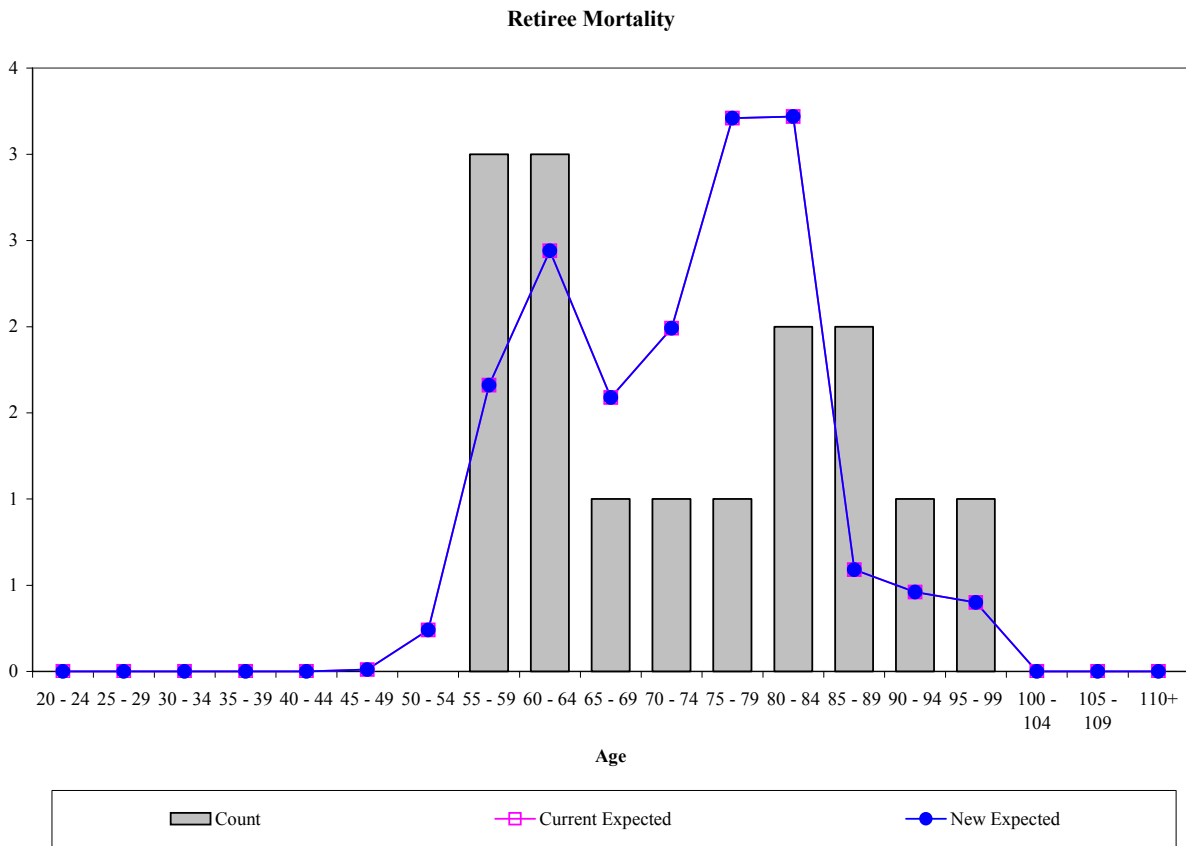
**Retiree Mortality**



A. Retiree Mortality (continued)

**Safety and Probation Members**

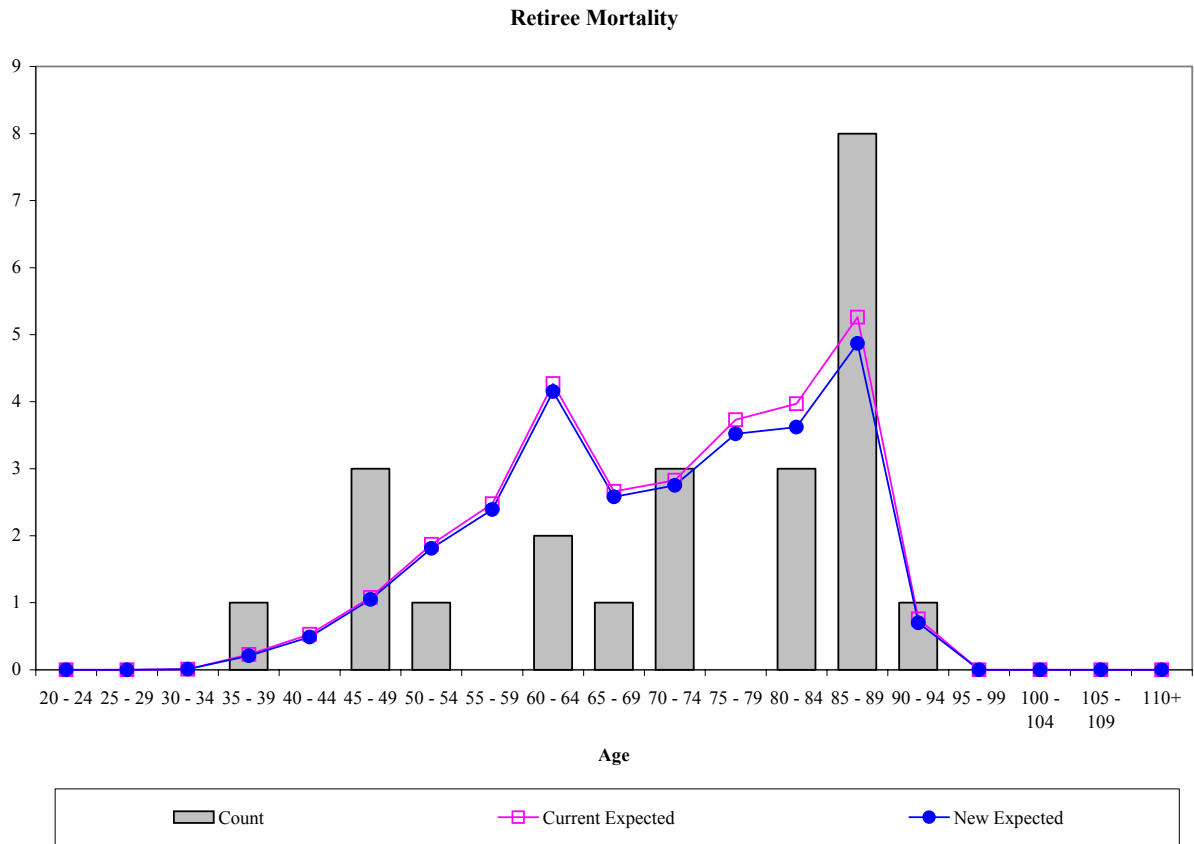
Actual deaths = 15  
 Expected deaths = 16  
 New expected deaths = 16



B. Mortality for Members After Disability Retirement

**General Members**

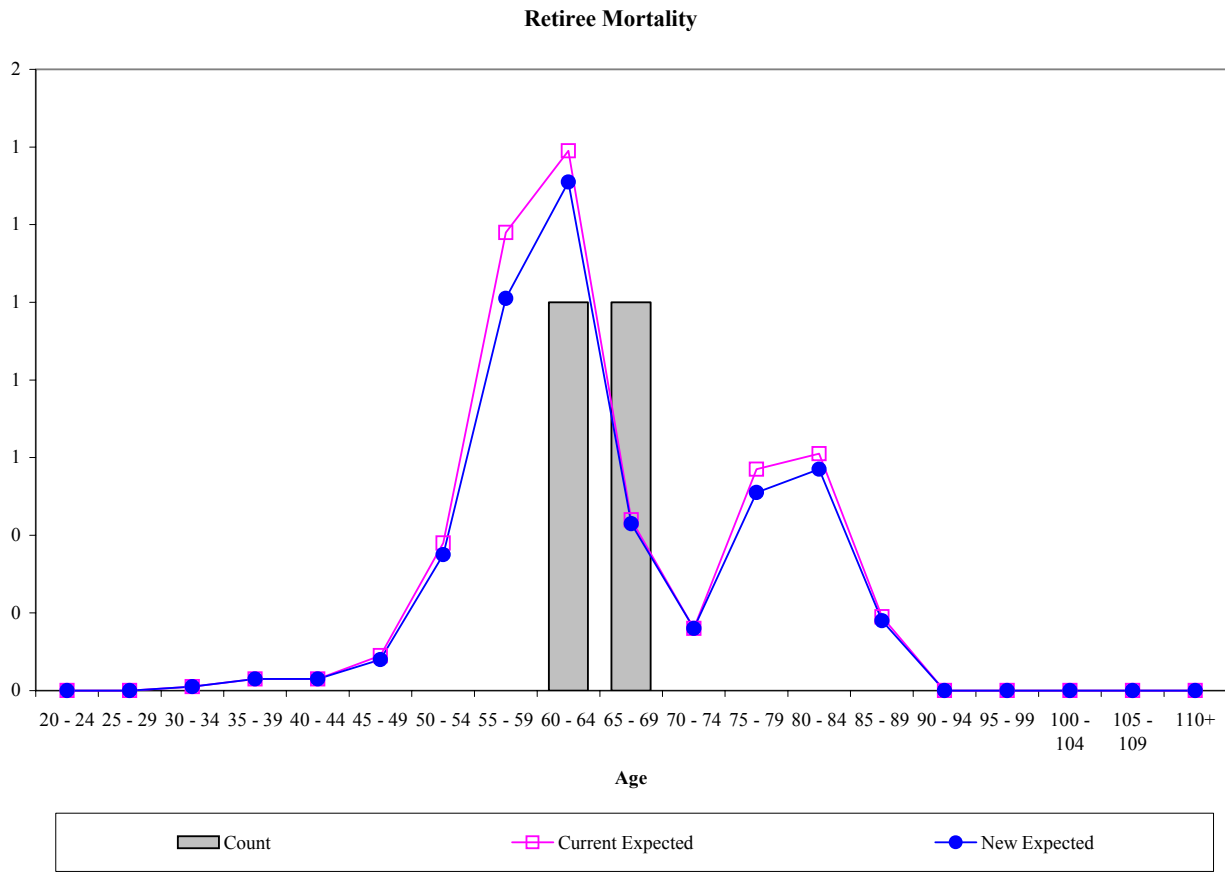
Actual deaths = 23  
 Expected deaths = 30  
 New expected deaths = 28

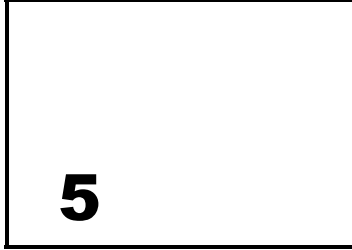


B. Mortality for Members After Disability Retirement (continued)

**Safety and Probation Members**

Actual deaths = 2  
 Expected deaths = 5  
 New expected deaths = 5





**Actuarial Value of Assets**

## Background

Under the Entry Age Normal Actuarial Funding Method, a determination is made of the target value of assets the Association would hold if current employer normal cost and member contribution rates had been paid from each member's entry age through the actuarial valuation date and credited with the current investment return assumption. This target value of assets is called the Actuarial Accrued Liability (AAL). The Unfunded Actuarial Accrued Liability (UAAL) is equal to the AAL less the Actuarial Value of Assets as of the actuarial valuation date.

## Actuarial Standards

In 1993 the Actuarial Standards Board issued Standard of Practice (SOP) No. 4 entitled Measuring Pension Obligations. Section 5.2.6 of SOP No. 4 states, in part, that the Actuarial Value of Assets should generally reflect some function of market value; however, it may be appropriate to use methods which smooth out the effects of short-term volatility in market value.

In Mercer's opinion, the use of smoothing methods is especially important for employers with limited budgetary flexibility, such as governmental entities.

## Determination of Actuarial Value of Assets

The Board adopted an asset valuation method which smoothes income only to the extent that the actual total return differs from the assumed earnings rate (currently 8.25%).

In our June 30, 2001 report, there was a total of about \$128 million of deferred investment losses. This represents the aggregate of all gains and losses not yet recognized for the actuarial value of assets. As of July 1, 2002, the amount of deferred losses has increased to \$273 million. As a result, the actuarial value of assets is 122.6% of the market value of assets.

## Recommendation for Market Value Corridor

With this valuation, we are also recommending to the Board that a market value corridor be adopted for both the actuarial (and interest crediting) process. The modification will prevent the actuarial value of assets (and reserves) from straying too far from market value during extended periods when investment markets perform above or below actuarial return expectations.

The justification for our recommendation follows.

## Background

The Association utilizes a "market smoothing" process to establish asset values for actuarial (and interest crediting) purposes. The process prevents short-term market fluctuations from impacting contribution rates (and reserve levels). The goal is to eliminate these short term fluctuations while retaining the implicit value of the Association's investments.



This smoothing process involves deferring recognition of market gains and losses (relative to actuarial return expectations) over a period of five years. By deferring gains and losses, the smoothed value of assets will differ from market by the amount of the cumulative deferred gains or losses. If investment markets continually outperform or underperform long term actuarial return expectations for a significant stretch of time, the smoothed market value will differ more and more from market value. At some point this may raise concerns whether the smoothed value still represents the implicit value of the Association's investments.

## **Recent History**

Over the last half of the 1990's, investment markets performed exceptionally well. This caused smoothed market values to trail market value by up to 18% at the peak of the market. Conditions have changed markedly over the last two years. As of the end of 2002, smoothed market values are typically above market values by about 20%. We expect the gap between smoothed market and market values to continue to widen, at least in the short term, while deferred losses continue to be recognized.

## **Recommendation**

For the above reasons, we recommend that the Board consider modifying its actuarial (and interest crediting) process so that the difference between smoothed market value and market value be limited to 20% of market value. In other words, the smoothed market value could not fall below 80% of market value, nor above 120% of market value.

Since the current actuarial value is above market value by more than 120%, the implementation of the corridor would leave the immediate impact of increasing the UAAL by \$32 million. This is because implementation of the corridor would require an immediate recognition of the loss over 20%.

Below, we have developed the actuarial value of assets assuming the market value corridor was not applied in the June 30, 2002 valuation. Since the actuarial asset was about 123% of market value as of June 30, 2002, the application of the corridor decreases the Actuarial Value of Assets by approximately \$32 million as of June 30, 2002.

**Calculation of Smoothed Market Value of Assets  
June 30, 2002**

<u>From</u>	<u>To</u>	<u>Total Actual Market Return (Net)</u>	<u>Expected Market Return (Net)</u>	<u>Investment Gain (Loss)</u>	<u>Deferred Factor</u>	<u>Deferred Return</u>
7/97	12/97	\$55,406,564	\$40,075,645	\$15,330,919	0	\$0
1/98	6/98	\$112,680,907	\$42,418,662	\$70,262,245	0.1	\$7,026,225
7/98	12/98	\$17,930,384	\$47,015,616	(\$29,085,232)	0.2	(\$5,817,046)
1/99	6/99	64,623,459	47,810,457	\$16,813,003	0.3	\$5,043,900
7/99	12/99	113,267,236	51,326,419	\$61,940,817	0.4	\$24,776,327
1/00	6/00	8,714,823	55,171,686	(46,456,862)	0.5	(\$23,228,431)
7/00	12/00	(36,739,096)	57,817,173	(94,556,269)	0.6	(\$56,733,761)
1/01	6/01	(30,502,489)	55,649,913	(86,152,402)	0.7	(\$60,306,681)
7/01	12/01	(24,556,062)	54,592,032	(79,148,094)	0.8	(\$63,318,475)
1/02	6/02	(59,362,561)	52,701,199	(112,063,760)	0.9	(\$100,857,384)
1. Total Deferred Return						(\$273,415,326)
2. Market Value						\$1,207,483,580
3. Actuarial Value of Assets for Funding Ratio (Item 2 - Item 1)						\$1,480,898,906
4. Non-Valuation Reserves and Designations:						
a. Reserve for Interest Fluctuations						\$13,553,077
b. Medicare Part B Reserve						\$26,356
c. Ventura Reserve						\$32,145,000
d. Total						\$45,724,433
5. Actuarial Value of Assets for Valuation (Item 3 - Item 4)						\$1,435,174,473



Exhibit I

PROBABILITIES OF SEPARATION PRIOR TO RETIREMENT  
General Male Members - Plan 1

Age	With(0<Svc<1)	With(1<Svc<2)	With(2<Svc<3)	With(3<Svc<4)	With(4<Svc<5)	With(Svc>5)	Vested Term	Ord. Disab	Duty Disab	Ord. Dth	Duty Dth	Svc Ret
<= 20	0.1460	0.1460	0.1460	0.1460	0.1460	0.1460	0.0000	0.0000	0.0000	0.0002	0.0001	0.0000
21	0.1440	0.1440	0.1440	0.1440	0.1440	0.1440	0.0000	0.0000	0.0000	0.0002	0.0001	0.0000
22	0.1420	0.1420	0.1420	0.1420	0.1420	0.1420	0.0000	0.0000	0.0000	0.0002	0.0001	0.0000
23	0.1400	0.1400	0.1400	0.1400	0.1400	0.1400	0.0000	0.0000	0.0000	0.0002	0.0001	0.0000
24	0.1370	0.1370	0.1370	0.1370	0.1370	0.1370	0.0000	0.0000	0.0000	0.0002	0.0001	0.0000
25	0.1340	0.1340	0.1340	0.1340	0.1340	0.1340	0.0085	0.0003	0.0000	0.0003	0.0001	0.0000
26	0.1310	0.1310	0.1310	0.1310	0.1310	0.1310	0.0085	0.0003	0.0000	0.0003	0.0001	0.0000
27	0.1280	0.1280	0.1280	0.1280	0.1280	0.1280	0.0090	0.0003	0.0001	0.0003	0.0001	0.0000
28	0.1250	0.1250	0.1250	0.1250	0.1250	0.1250	0.0090	0.0003	0.0001	0.0003	0.0001	0.0000
29	0.1210	0.1210	0.1210	0.1210	0.1210	0.1210	0.0095	0.0003	0.0001	0.0003	0.0001	0.0000
30	0.1170	0.1170	0.1170	0.1170	0.1170	0.1170	0.0098	0.0003	0.0002	0.0003	0.0001	0.0000
31	0.1120	0.1120	0.1120	0.1120	0.1120	0.1120	0.0103	0.0003	0.0002	0.0004	0.0001	0.0000
32	0.1050	0.1050	0.1050	0.1050	0.1050	0.1050	0.0108	0.0004	0.0002	0.0004	0.0001	0.0000
33	0.0960	0.0960	0.0960	0.0960	0.0960	0.0927	0.0113	0.0004	0.0003	0.0005	0.0001	0.0000
34	0.0860	0.0860	0.0860	0.0860	0.0860	0.0800	0.0123	0.0005	0.0003	0.0005	0.0001	0.0000
35	0.0760	0.0760	0.0760	0.0760	0.0760	0.0727	0.0130	0.0006	0.0003	0.0005	0.0001	0.0000
36	0.0650	0.0650	0.0650	0.0650	0.0650	0.0597	0.0137	0.0007	0.0004	0.0006	0.0001	0.0000
37	0.0550	0.0550	0.0550	0.0550	0.0550	0.0485	0.0144	0.0008	0.0005	0.0006	0.0001	0.0000
38	0.0460	0.0460	0.0460	0.0460	0.0460	0.0386	0.0152	0.0009	0.0006	0.0006	0.0001	0.0000
39	0.0380	0.0380	0.0380	0.0380	0.0380	0.0301	0.0159	0.0010	0.0007	0.0006	0.0001	0.0000
40	0.0300	0.0300	0.0300	0.0300	0.0300	0.0176	0.0166	0.0010	0.0008	0.0006	0.0001	0.0000
41	0.0240	0.0240	0.0240	0.0240	0.0240	0.0133	0.0170	0.0011	0.0009	0.0007	0.0001	0.0000
42	0.0200	0.0200	0.0200	0.0200	0.0200	0.0103	0.0170	0.0013	0.0010	0.0008	0.0001	0.0000
43	0.0180	0.0180	0.0180	0.0180	0.0180	0.0088	0.0168	0.0014	0.0010	0.0009	0.0001	0.0000
44	0.0160	0.0160	0.0160	0.0160	0.0160	0.0074	0.0165	0.0016	0.0011	0.0010	0.0002	0.0000
45	0.0140	0.0140	0.0140	0.0140	0.0140	0.0050	0.0157	0.0018	0.0012	0.0012	0.0002	0.0000
46	0.0120	0.0120	0.0120	0.0120	0.0120	0.0040	0.0150	0.0020	0.0012	0.0014	0.0002	0.0000
47	0.0100	0.0100	0.0100	0.0100	0.0100	0.0031	0.0142	0.0021	0.0013	0.0016	0.0002	0.0000
48	0.0090	0.0090	0.0090	0.0090	0.0090	0.0027	0.0134	0.0023	0.0013	0.0018	0.0002	0.0000
49	0.0080	0.0080	0.0080	0.0080	0.0080	0.0023	0.0126	0.0025	0.0013	0.0020	0.0002	0.0000
50	0.0070	0.0070	0.0070	0.0070	0.0070	0.0026	0.0000	0.0026	0.0013	0.0022	0.0002	0.0300
51	0.0060	0.0060	0.0060	0.0060	0.0060	0.0021	0.0000	0.0028	0.0013	0.0024	0.0002	0.0300
52	0.0050	0.0050	0.0050	0.0050	0.0050	0.0017	0.0000	0.0030	0.0013	0.0026	0.0003	0.0300
53	0.0040	0.0040	0.0040	0.0040	0.0040	0.0013	0.0000	0.0031	0.0013	0.0028	0.0003	0.0300
54	0.0040	0.0040	0.0040	0.0040	0.0040	0.0012	0.0000	0.0033	0.0013	0.0030	0.0003	0.0300
55	0.0030	0.0030	0.0030	0.0030	0.0030	0.0029	0.0000	0.0035	0.0014	0.0032	0.0003	0.0336
56	0.0020	0.0020	0.0020	0.0020	0.0020	0.0019	0.0000	0.0036	0.0015	0.0034	0.0003	0.0446
57	0.0020	0.0020	0.0020	0.0020	0.0020	0.0018	0.0000	0.0038	0.0016	0.0036	0.0004	0.0562
58	0.0010	0.0010	0.0010	0.0010	0.0010	0.0013	0.0000	0.0040	0.0019	0.0038	0.0004	0.0663
59	0.0010	0.0010	0.0010	0.0010	0.0010	0.0017	0.0000	0.0042	0.0022	0.0040	0.0004	0.0762
60	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0043	0.0025	0.0042	0.0004	0.0835
61	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0045	0.0028	0.0044	0.0004	0.0863
62	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0047	0.0032	0.0046	0.0005	0.2500
63	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0048	0.0038	0.0048	0.0005	0.1809
64	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0050	0.0044	0.0050	0.0005	0.2248
65	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0052	0.0005	0.5000
66	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0056	0.0005	0.5000
67	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0060	0.0006	0.7500
68	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0065	0.0006	0.8500
69	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0070	0.0006	0.9500
70	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0000

**PROBABILITIES OF SEPARATION PRIOR TO RETIREMENT  
General Female Members - Plan I**

Age	With(0<Svc<1)	With(1<Svc<2)	With(2<Svc<3)	With(3<Svc<4)	With(4<Svc<5)	With(Svc>5)	Vested Term	Ord. Disab	Duty Disab	Ord. Dth	Duty Dth	Svc Ret	
<= 20	0.1540	0.1540	0.1540	0.1540	0.1540	0.1540	0.0000	0.0000	0.0000	0.0000	0.0003	0.0000	0.0000
21	0.1471	0.1471	0.1471	0.1471	0.1471	0.1471	0.0000	0.0000	0.0000	0.0003	0.0000	0.0000	0.0000
22	0.1401	0.1401	0.1401	0.1401	0.1401	0.1401	0.0000	0.0000	0.0000	0.0003	0.0000	0.0000	0.0000
23	0.1332	0.1332	0.1332	0.1332	0.1332	0.1332	0.0000	0.0000	0.0000	0.0003	0.0000	0.0000	0.0000
24	0.1263	0.1263	0.1263	0.1263	0.1263	0.1263	0.0000	0.0000	0.0000	0.0003	0.0000	0.0000	0.0000
25	0.1194	0.1194	0.1194	0.1194	0.1194	0.1194	0.0035	0.0001	0.0000	0.0003	0.0000	0.0000	0.0000
26	0.1124	0.1124	0.1124	0.1124	0.1124	0.1124	0.0040	0.0001	0.0000	0.0003	0.0000	0.0000	0.0000
27	0.1055	0.1055	0.1055	0.1055	0.1055	0.1055	0.0045	0.0002	0.0001	0.0003	0.0000	0.0000	0.0000
28	0.0986	0.0986	0.0986	0.0986	0.0986	0.0986	0.0055	0.0002	0.0001	0.0003	0.0000	0.0000	0.0000
29	0.0916	0.0916	0.0916	0.0916	0.0916	0.0916	0.0070	0.0002	0.0001	0.0003	0.0000	0.0000	0.0000
30	0.0847	0.0847	0.0847	0.0847	0.0847	0.0847	0.0080	0.0002	0.0002	0.0003	0.0000	0.0000	0.0000
31	0.0762	0.0762	0.0762	0.0762	0.0762	0.0762	0.0094	0.0002	0.0002	0.0004	0.0000	0.0000	0.0000
32	0.0676	0.0676	0.0676	0.0676	0.0676	0.0676	0.0113	0.0002	0.0002	0.0004	0.0000	0.0000	0.0000
33	0.0591	0.0591	0.0591	0.0591	0.0591	0.0565	0.0132	0.0003	0.0003	0.0004	0.0000	0.0000	0.0000
34	0.0520	0.0520	0.0520	0.0520	0.0520	0.0474	0.0151	0.0003	0.0003	0.0004	0.0000	0.0000	0.0000
35	0.0461	0.0461	0.0461	0.0461	0.0461	0.0400	0.0180	0.0004	0.0003	0.0005	0.0000	0.0000	0.0000
36	0.0402	0.0402	0.0402	0.0402	0.0402	0.0331	0.0190	0.0004	0.0004	0.0005	0.0000	0.0000	0.0000
37	0.0344	0.0344	0.0344	0.0344	0.0344	0.0268	0.0200	0.0005	0.0005	0.0005	0.0000	0.0000	0.0000
38	0.0285	0.0285	0.0285	0.0285	0.0285	0.0202	0.0200	0.0006	0.0006	0.0006	0.0000	0.0000	0.0000
39	0.0227	0.0227	0.0227	0.0227	0.0227	0.0145	0.0190	0.0006	0.0007	0.0006	0.0000	0.0000	0.0000
40	0.0168	0.0168	0.0168	0.0168	0.0168	0.0096	0.0188	0.0006	0.0008	0.0006	0.0000	0.0000	0.0000
41	0.0157	0.0157	0.0157	0.0157	0.0157	0.0079	0.0172	0.0006	0.0009	0.0007	0.0000	0.0000	0.0000
42	0.0145	0.0145	0.0145	0.0145	0.0145	0.0063	0.0156	0.0007	0.0010	0.0008	0.0000	0.0000	0.0000
43	0.0138	0.0138	0.0138	0.0138	0.0138	0.0067	0.0144	0.0010	0.0010	0.0008	0.0000	0.0000	0.0000
44	0.0134	0.0134	0.0134	0.0134	0.0134	0.0071	0.0132	0.0014	0.0011	0.0009	0.0000	0.0000	0.0000
45	0.0126	0.0126	0.0126	0.0126	0.0126	0.0073	0.0119	0.0022	0.0012	0.0009	0.0000	0.0000	0.0000
46	0.0118	0.0118	0.0118	0.0118	0.0118	0.0075	0.0107	0.0030	0.0012	0.0010	0.0000	0.0000	0.0000
47	0.0107	0.0107	0.0107	0.0107	0.0107	0.0073	0.0094	0.0039	0.0013	0.0010	0.0000	0.0000	0.0000
48	0.0099	0.0099	0.0099	0.0099	0.0099	0.0075	0.0089	0.0037	0.0013	0.0011	0.0000	0.0000	0.0000
49	0.0092	0.0092	0.0092	0.0092	0.0092	0.0076	0.0080	0.0034	0.0013	0.0012	0.0000	0.0000	0.0000
50	0.0084	0.0084	0.0084	0.0084	0.0084	0.0080	0.0079	0.0030	0.0020	0.0013	0.0000	0.0400	0.0000
51	0.0076	0.0076	0.0076	0.0076	0.0076	0.0000	0.0076	0.0030	0.0020	0.0014	0.0000	0.0400	0.0000
52	0.0069	0.0069	0.0069	0.0069	0.0069	0.0000	0.0075	0.0030	0.0020	0.0015	0.0000	0.0400	0.0000
53	0.0061	0.0061	0.0061	0.0061	0.0061	0.0000	0.0074	0.0030	0.0020	0.0017	0.0000	0.0400	0.0000
54	0.0054	0.0054	0.0054	0.0054	0.0054	0.0000	0.0072	0.0030	0.0020	0.0019	0.0000	0.0400	0.0000
55	0.0046	0.0046	0.0046	0.0046	0.0046	0.0000	0.0071	0.0020	0.0042	0.0021	0.0000	0.0450	0.0000
56	0.0038	0.0038	0.0038	0.0038	0.0038	0.0000	0.0068	0.0025	0.0045	0.0022	0.0000	0.0500	0.0000
57	0.0031	0.0031	0.0031	0.0031	0.0031	0.0000	0.0061	0.0020	0.0048	0.0025	0.0000	0.0600	0.0000
58	0.0023	0.0023	0.0023	0.0023	0.0023	0.0000	0.0054	0.0020	0.0056	0.0028	0.0000	0.0700	0.0000
59	0.0019	0.0019	0.0019	0.0019	0.0019	0.0000	0.0047	0.0018	0.0065	0.0031	0.0000	0.0800	0.0000
60	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0032	0.0019	0.0065	0.0036	0.0000	0.0804	0.0000
61	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0026	0.0020	0.0065	0.0042	0.0000	0.0892	0.0000
62	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0021	0.0021	0.0065	0.0048	0.0000	0.2449	0.0000
63	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0016	0.0025	0.0065	0.0055	0.0000	0.2266	0.0000
64	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0011	0.0029	0.0065	0.0063	0.0000	0.2083	0.0000
65	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0072	0.0000	0.3505	0.0000
66	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0082	0.0000	0.2641	0.0000
67	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0093	0.0000	0.2832	0.0000
68	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0104	0.0000	0.4484	0.0000
69	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0116	0.0000	0.5765	0.0000
70	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0000	0.0000

**PROBABILITIES OF SEPARATION PRIOR TO RETIREMENT**  
**General Male Members - Plans 2 & 4**

Age	With(0<Svc<1)	With(1<Svc<2)	With(2<Svc<3)	With(3<Svc<4)	With(4<Svc<5)	With(Svc>5)	Vested Term	Ord. Disab	Duty Disab	Ord. Dth	Duty Dth	Svc Ret
<= 20	0.1360	0.1100	0.1000	0.0700	0.0400	0.0400	0.0000	0.0000	0.0000	0.0002	0.0001	0.0000
21	0.1360	0.1100	0.1000	0.0700	0.0400	0.0400	0.0000	0.0000	0.0000	0.0002	0.0001	0.0000
22	0.1360	0.1100	0.1000	0.0700	0.0400	0.0400	0.0000	0.0000	0.0000	0.0002	0.0001	0.0000
23	0.1360	0.1100	0.1000	0.0700	0.0400	0.0400	0.0000	0.0000	0.0000	0.0002	0.0001	0.0000
24	0.1360	0.1100	0.1000	0.0700	0.0400	0.0400	0.0000	0.0000	0.0000	0.0002	0.0001	0.0000
25	0.1360	0.1100	0.1000	0.0700	0.0400	0.0400	0.0090	0.0003	0.0000	0.0003	0.0001	0.0000
26	0.1360	0.1100	0.1000	0.0700	0.0400	0.0400	0.0100	0.0003	0.0000	0.0003	0.0001	0.0000
27	0.1360	0.1100	0.1000	0.0700	0.0400	0.0400	0.0110	0.0003	0.0002	0.0003	0.0001	0.0000
28	0.1360	0.1100	0.1000	0.0700	0.0400	0.0400	0.0120	0.0003	0.0002	0.0003	0.0001	0.0000
29	0.1360	0.1100	0.1000	0.0700	0.0400	0.0400	0.0130	0.0003	0.0002	0.0003	0.0001	0.0000
30	0.1360	0.1100	0.1000	0.0700	0.0400	0.0400	0.0160	0.0003	0.0004	0.0003	0.0001	0.0000
31	0.1360	0.1100	0.1000	0.0700	0.0400	0.0400	0.0144	0.0003	0.0004	0.0004	0.0001	0.0000
32	0.1360	0.1100	0.1000	0.0700	0.0400	0.0400	0.0190	0.0004	0.0004	0.0004	0.0001	0.0000
33	0.1360	0.1100	0.1000	0.0700	0.0400	0.0400	0.0174	0.0004	0.0006	0.0005	0.0001	0.0000
34	0.1360	0.1100	0.1000	0.0700	0.0400	0.0400	0.0220	0.0005	0.0006	0.0005	0.0001	0.0000
35	0.1360	0.1100	0.1000	0.0700	0.0400	0.0400	0.0260	0.0005	0.0006	0.0005	0.0001	0.0000
36	0.1360	0.1100	0.1000	0.0700	0.0400	0.0400	0.0220	0.0006	0.0008	0.0006	0.0001	0.0000
37	0.1360	0.1100	0.1000	0.0700	0.0400	0.0350	0.0300	0.0006	0.0010	0.0006	0.0001	0.0000
38	0.1360	0.1100	0.1000	0.0700	0.0400	0.0300	0.0260	0.0007	0.0012	0.0006	0.0001	0.0000
39	0.1360	0.1100	0.1000	0.0700	0.0400	0.0250	0.0340	0.0009	0.0014	0.0006	0.0001	0.0000
40	0.1360	0.1100	0.1000	0.0700	0.0400	0.0200	0.0380	0.0012	0.0016	0.0006	0.0001	0.0000
41	0.1360	0.1100	0.1000	0.0700	0.0400	0.0175	0.0380	0.0015	0.0018	0.0007	0.0001	0.0000
42	0.1360	0.1100	0.1000	0.0700	0.0400	0.0150	0.0380	0.0018	0.0020	0.0008	0.0001	0.0000
43	0.1360	0.1100	0.1000	0.0700	0.0400	0.0150	0.0300	0.0021	0.0022	0.0009	0.0001	0.0000
44	0.1360	0.1100	0.1000	0.0700	0.0400	0.0150	0.0280	0.0024	0.0024	0.0010	0.0002	0.0000
45	0.1360	0.1100	0.1000	0.0700	0.0400	0.0150	0.0260	0.0027	0.0026	0.0012	0.0002	0.0000
46	0.1360	0.1100	0.1000	0.0700	0.0400	0.0150	0.0260	0.0030	0.0030	0.0014	0.0002	0.0000
47	0.1360	0.1100	0.1000	0.0700	0.0400	0.0150	0.0240	0.0032	0.0030	0.0016	0.0002	0.0000
48	0.1360	0.1100	0.1000	0.0700	0.0400	0.0150	0.0240	0.0034	0.0032	0.0018	0.0002	0.0000
49	0.1360	0.1100	0.1000	0.0700	0.0400	0.0150	0.0240	0.0036	0.0034	0.0020	0.0002	0.0000
50	0.1360	0.1100	0.1000	0.0700	0.0400	0.0000	0.0220	0.0038	0.0036	0.0022	0.0002	0.0300
51	0.1360	0.1100	0.1000	0.0700	0.0400	0.0000	0.0220	0.0040	0.0038	0.0024	0.0002	0.0300
52	0.1360	0.1100	0.1000	0.0700	0.0400	0.0000	0.0220	0.0042	0.0040	0.0026	0.0003	0.0300
53	0.1360	0.1100	0.1000	0.0700	0.0400	0.0000	0.0200	0.0044	0.0042	0.0028	0.0003	0.0300
54	0.1360	0.1100	0.1000	0.0700	0.0400	0.0000	0.0180	0.0046	0.0044	0.0030	0.0003	0.0300
55	0.1360	0.1100	0.1000	0.0700	0.0400	0.0000	0.0120	0.0048	0.0048	0.0032	0.0003	0.0300
56	0.1360	0.1100	0.1000	0.0700	0.0400	0.0000	0.0110	0.0050	0.0054	0.0034	0.0003	0.0400
57	0.1360	0.1100	0.1000	0.0700	0.0400	0.0000	0.0100	0.0052	0.0060	0.0036	0.0004	0.0500
58	0.1360	0.1100	0.1000	0.0700	0.0400	0.0000	0.0090	0.0054	0.0066	0.0038	0.0004	0.0600
59	0.1360	0.1100	0.1000	0.0700	0.0400	0.0000	0.0080	0.0056	0.0072	0.0040	0.0004	0.0700
60	0.1360	0.1100	0.1000	0.0700	0.0400	0.0000	0.0070	0.0058	0.0078	0.0042	0.0004	0.0750
61	0.1360	0.1100	0.1000	0.0700	0.0400	0.0000	0.0060	0.0060	0.0084	0.0044	0.0004	0.1000
62	0.1360	0.1100	0.1000	0.0700	0.0400	0.0000	0.0050	0.0062	0.0092	0.0046	0.0005	0.1500
63	0.1360	0.1100	0.1000	0.0700	0.0400	0.0000	0.0040	0.0064	0.0100	0.0048	0.0005	0.1000
64	0.1360	0.1100	0.1000	0.0700	0.0400	0.0000	0.0030	0.0066	0.0108	0.0050	0.0005	0.2500
65	0.1360	0.1100	0.1000	0.0700	0.0400	0.0000	0.0000	0.0000	0.0000	0.0052	0.0005	0.3000
66	0.1360	0.1100	0.1000	0.0700	0.0400	0.0000	0.0000	0.0000	0.0000	0.0056	0.0005	0.1000
67	0.1360	0.1100	0.1000	0.0700	0.0400	0.0000	0.0000	0.0000	0.0000	0.0060	0.0006	0.1500
68	0.1360	0.1100	0.1000	0.0700	0.0400	0.0000	0.0000	0.0000	0.0000	0.0065	0.0006	0.2000
69	0.1360	0.1100	0.1000	0.0700	0.0400	0.0000	0.0000	0.0000	0.0000	0.0070	0.0006	0.2500
70	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0000

**PROBABILITIES OF SEPARATION PRIOR TO RETIREMENT**  
**General Female Members - Plans 2 & 4**

Age	With(0<Svc<1)	With(1<Svc<2)	With(2<Svc<3)	With(3<Svc<4)	With(4<Svc<5)	With(Svc>5)	Vested Term	Ord. Disab	Duty Disab	Ord. Dth	Duty Dth	Svc Ret
<= 20	0.1300	0.1097	0.0882	0.0700	0.0400	0.0400	0.0000	0.0000	0.0000	0.0003	0.0000	0.0000
21	0.1300	0.1097	0.0882	0.0700	0.0400	0.0400	0.0000	0.0000	0.0000	0.0003	0.0000	0.0000
22	0.1300	0.1097	0.0882	0.0700	0.0400	0.0400	0.0000	0.0000	0.0000	0.0003	0.0000	0.0000
23	0.1300	0.1097	0.0882	0.0700	0.0400	0.0400	0.0000	0.0000	0.0000	0.0003	0.0000	0.0000
24	0.1300	0.1097	0.0882	0.0700	0.0400	0.0400	0.0000	0.0000	0.0000	0.0003	0.0000	0.0000
25	0.1300	0.1097	0.0882	0.0700	0.0400	0.0400	0.0128	0.0001	0.0000	0.0003	0.0000	0.0000
26	0.1300	0.1097	0.0882	0.0700	0.0400	0.0400	0.0128	0.0001	0.0000	0.0003	0.0000	0.0000
27	0.1300	0.1097	0.0882	0.0700	0.0400	0.0400	0.0135	0.0002	0.0001	0.0003	0.0000	0.0000
28	0.1300	0.1097	0.0882	0.0700	0.0400	0.0400	0.0135	0.0002	0.0001	0.0003	0.0000	0.0000
29	0.1300	0.1097	0.0882	0.0700	0.0400	0.0400	0.0143	0.0002	0.0001	0.0003	0.0000	0.0000
30	0.1300	0.1097	0.0882	0.0700	0.0400	0.0349	0.0188	0.0003	0.0001	0.0003	0.0000	0.0000
31	0.1300	0.1097	0.0882	0.0700	0.0400	0.0349	0.0225	0.0003	0.0001	0.0004	0.0000	0.0000
32	0.1300	0.1097	0.0882	0.0700	0.0400	0.0349	0.0240	0.0003	0.0001	0.0004	0.0000	0.0000
33	0.1300	0.1097	0.0882	0.0700	0.0400	0.0349	0.0255	0.0007	0.0003	0.0004	0.0000	0.0000
34	0.1300	0.1097	0.0882	0.0700	0.0400	0.0349	0.0263	0.0010	0.0006	0.0004	0.0000	0.0000
35	0.1300	0.1097	0.0882	0.0700	0.0400	0.0240	0.0300	0.0016	0.0010	0.0005	0.0000	0.0000
36	0.1300	0.1097	0.0882	0.0700	0.0400	0.0240	0.0300	0.0020	0.0012	0.0005	0.0000	0.0000
37	0.1300	0.1097	0.0882	0.0700	0.0400	0.0240	0.0300	0.0028	0.0015	0.0005	0.0000	0.0000
38	0.1300	0.1097	0.0882	0.0700	0.0400	0.0240	0.0263	0.0029	0.0018	0.0006	0.0000	0.0000
39	0.1300	0.1097	0.0882	0.0700	0.0400	0.0240	0.0225	0.0030	0.0020	0.0006	0.0000	0.0000
40	0.1300	0.1097	0.0882	0.0700	0.0400	0.0240	0.0225	0.0030	0.0020	0.0006	0.0000	0.0000
41	0.1300	0.1097	0.0882	0.0700	0.0400	0.0240	0.0225	0.0030	0.0020	0.0007	0.0000	0.0000
42	0.1300	0.1097	0.0882	0.0700	0.0400	0.0240	0.0225	0.0030	0.0020	0.0008	0.0000	0.0000
43	0.1300	0.1097	0.0882	0.0700	0.0400	0.0240	0.0225	0.0030	0.0020	0.0008	0.0000	0.0000
44	0.1300	0.1097	0.0882	0.0700	0.0400	0.0240	0.0225	0.0030	0.0020	0.0009	0.0000	0.0000
45	0.1300	0.1097	0.0882	0.0700	0.0400	0.0227	0.0210	0.0030	0.0022	0.0009	0.0000	0.0000
46	0.1300	0.1097	0.0882	0.0700	0.0400	0.0211	0.0200	0.0036	0.0024	0.0010	0.0000	0.0000
47	0.1300	0.1097	0.0882	0.0700	0.0400	0.0195	0.0190	0.0036	0.0026	0.0010	0.0000	0.0000
48	0.1300	0.1097	0.0882	0.0700	0.0400	0.0180	0.0180	0.0036	0.0028	0.0011	0.0000	0.0000
49	0.1300	0.1097	0.0882	0.0700	0.0400	0.0166	0.0170	0.0036	0.0030	0.0012	0.0000	0.0000
50	0.1300	0.1097	0.0882	0.0700	0.0400	0.0000	0.0160	0.0036	0.0031	0.0013	0.0000	0.0400
51	0.1300	0.1097	0.0882	0.0700	0.0400	0.0000	0.0150	0.0036	0.0032	0.0014	0.0000	0.0350
52	0.1300	0.1097	0.0882	0.0700	0.0400	0.0000	0.0140	0.0036	0.0033	0.0015	0.0000	0.0300
53	0.1300	0.1097	0.0882	0.0700	0.0400	0.0000	0.0130	0.0036	0.0034	0.0017	0.0000	0.0300
54	0.1300	0.1097	0.0882	0.0700	0.0400	0.0000	0.0125	0.0036	0.0035	0.0019	0.0000	0.0300
55	0.1300	0.1097	0.0882	0.0700	0.0400	0.0000	0.0120	0.0036	0.0036	0.0021	0.0000	0.0400
56	0.1300	0.1097	0.0882	0.0700	0.0400	0.0000	0.0110	0.0036	0.0037	0.0022	0.0000	0.0500
57	0.1300	0.1097	0.0882	0.0700	0.0400	0.0000	0.0100	0.0036	0.0038	0.0025	0.0000	0.0600
58	0.1300	0.1097	0.0882	0.0700	0.0400	0.0000	0.0050	0.0036	0.0039	0.0028	0.0000	0.0700
59	0.1300	0.1097	0.0882	0.0700	0.0400	0.0000	0.0025	0.0036	0.0040	0.0031	0.0000	0.0800
60	0.1300	0.1097	0.0882	0.0700	0.0400	0.0000	0.0000	0.0036	0.0056	0.0036	0.0000	0.0800
61	0.1300	0.1097	0.0882	0.0700	0.0400	0.0000	0.0000	0.0036	0.0071	0.0042	0.0000	0.0800
62	0.1300	0.1097	0.0882	0.0700	0.0400	0.0000	0.0000	0.0036	0.0085	0.0048	0.0000	0.1600
63	0.1300	0.1097	0.0882	0.0700	0.0400	0.0000	0.0000	0.0036	0.0097	0.0055	0.0000	0.1400
64	0.1300	0.1097	0.0882	0.0700	0.0400	0.0000	0.0000	0.0036	0.0107	0.0063	0.0000	0.1400
65	0.1300	0.1097	0.0882	0.0700	0.0400	0.0000	0.0000	0.0000	0.0000	0.0072	0.0000	0.3000
66	0.1300	0.1097	0.0882	0.0700	0.0400	0.0000	0.0000	0.0000	0.0000	0.0082	0.0000	0.2000
67	0.1300	0.1097	0.0882	0.0700	0.0400	0.0000	0.0000	0.0000	0.0000	0.0093	0.0000	0.2500
68	0.1300	0.1097	0.0882	0.0700	0.0400	0.0000	0.0000	0.0000	0.0000	0.0104	0.0000	0.2200
69	0.1300	0.1097	0.0882	0.0700	0.0400	0.0000	0.0000	0.0000	0.0000	0.0116	0.0000	0.3000
70	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0000

**PROBABILITIES OF SEPARATION PRIOR TO RETIREMENT**  
**General Male Members – Plan 3**

Age	With(0<Svc<1)	With(1<Svc<2)	With(2<Svc<3)	With(3<Svc<4)	With(4<Svc<5)	With(Svc>5)	Vested Term	Ord. Disab	Duty Disab	Ord. Dth	Duty Dth	Svc Ret
<= 20	0.3000	0.1387	0.1387	0.1387	0.0600	0.0000	0.0000	0.0000	0.0000	0.0002	0.0001	0.0000
21	0.3000	0.1387	0.1387	0.1387	0.0600	0.0000	0.0000	0.0000	0.0000	0.0002	0.0001	0.0000
22	0.3000	0.1387	0.1387	0.1387	0.0600	0.0000	0.0000	0.0000	0.0000	0.0002	0.0001	0.0000
23	0.3000	0.1387	0.1387	0.1387	0.0600	0.0000	0.0000	0.0000	0.0000	0.0002	0.0001	0.0000
24	0.3000	0.1387	0.1387	0.1387	0.0600	0.0000	0.0000	0.0000	0.0000	0.0002	0.0001	0.0000
25	0.3000	0.1387	0.1387	0.1387	0.0600	0.0000	0.0085	0.0002	0.0000	0.0003	0.0001	0.0000
26	0.3000	0.1387	0.1387	0.1387	0.0600	0.0000	0.0085	0.0002	0.0000	0.0003	0.0001	0.0000
27	0.3000	0.1387	0.1387	0.1387	0.0600	0.0000	0.0090	0.0002	0.0000	0.0003	0.0001	0.0000
28	0.3000	0.1387	0.1387	0.1387	0.0600	0.0000	0.0090	0.0002	0.0000	0.0003	0.0001	0.0000
29	0.3000	0.1387	0.1387	0.1387	0.0600	0.0000	0.0095	0.0002	0.0000	0.0003	0.0001	0.0000
30	0.3000	0.1387	0.1387	0.1387	0.0600	0.0000	0.0100	0.0002	0.0000	0.0003	0.0001	0.0000
31	0.3000	0.1387	0.1387	0.1387	0.0600	0.0000	0.0105	0.0002	0.0000	0.0004	0.0001	0.0000
32	0.3000	0.1387	0.1387	0.1387	0.0600	0.0000	0.0110	0.0002	0.0000	0.0004	0.0001	0.0000
33	0.3000	0.1387	0.1387	0.1387	0.0600	0.0000	0.0115	0.0002	0.0000	0.0005	0.0001	0.0000
34	0.3000	0.1387	0.1387	0.1387	0.0600	0.0000	0.0125	0.0002	0.0000	0.0005	0.0001	0.0000
35	0.3000	0.1387	0.1387	0.1387	0.0600	0.0000	0.0135	0.0003	0.0001	0.0005	0.0001	0.0000
36	0.3000	0.1387	0.1387	0.1387	0.0600	0.0000	0.0160	0.0004	0.0001	0.0006	0.0001	0.0000
37	0.3000	0.1387	0.1387	0.1387	0.0600	0.0000	0.0180	0.0004	0.0001	0.0006	0.0001	0.0000
38	0.3000	0.1387	0.1387	0.1387	0.0600	0.0000	0.0195	0.0005	0.0001	0.0006	0.0001	0.0000
39	0.3000	0.1387	0.1387	0.1387	0.0600	0.0000	0.0205	0.0005	0.0001	0.0006	0.0001	0.0000
40	0.3000	0.1387	0.1387	0.1387	0.0600	0.0000	0.0210	0.0006	0.0001	0.0006	0.0001	0.0000
41	0.3000	0.1387	0.1387	0.1387	0.0600	0.0000	0.0215	0.0006	0.0001	0.0007	0.0001	0.0000
42	0.3000	0.1387	0.1387	0.1387	0.0600	0.0000	0.0215	0.0007	0.0001	0.0008	0.0001	0.0000
43	0.3000	0.1387	0.1387	0.1387	0.0600	0.0000	0.0220	0.0008	0.0001	0.0009	0.0001	0.0000
44	0.3000	0.1387	0.1387	0.1387	0.0600	0.0000	0.0230	0.0009	0.0001	0.0010	0.0002	0.0000
45	0.3000	0.1387	0.1387	0.1387	0.0600	0.0000	0.0240	0.0010	0.0002	0.0012	0.0002	0.0000
46	0.3000	0.1387	0.1387	0.1387	0.0600	0.0000	0.0250	0.0011	0.0002	0.0014	0.0002	0.0000
47	0.3000	0.1387	0.1387	0.1387	0.0600	0.0000	0.0260	0.0012	0.0002	0.0016	0.0002	0.0000
48	0.3000	0.1387	0.1387	0.1387	0.0600	0.0000	0.0250	0.0014	0.0002	0.0018	0.0002	0.0000
49	0.3000	0.1387	0.1387	0.1387	0.0600	0.0000	0.0245	0.0015	0.0002	0.0020	0.0002	0.0000
50	0.3000	0.1387	0.1387	0.1387	0.0600	0.0000	0.0245	0.0016	0.0002	0.0022	0.0002	0.0000
51	0.3000	0.1387	0.1387	0.1387	0.0600	0.0000	0.0225	0.0018	0.0003	0.0024	0.0002	0.0000
52	0.3000	0.1387	0.1387	0.1387	0.0600	0.0000	0.0200	0.0019	0.0004	0.0026	0.0003	0.0000
53	0.3000	0.1387	0.1387	0.1387	0.0600	0.0000	0.0175	0.0021	0.0004	0.0028	0.0003	0.0000
54	0.3000	0.1387	0.1387	0.1387	0.0600	0.0000	0.0140	0.0023	0.0005	0.0030	0.0003	0.0000
55	0.3000	0.1387	0.1387	0.1387	0.0600	0.0000	0.0120	0.0025	0.0005	0.0032	0.0003	0.0513
56	0.3000	0.1387	0.1387	0.1387	0.0600	0.0000	0.0110	0.0027	0.0006	0.0034	0.0003	0.0660
57	0.3000	0.1387	0.1387	0.1387	0.0600	0.0000	0.0100	0.0029	0.0006	0.0036	0.0004	0.0806
58	0.3000	0.1387	0.1387	0.1387	0.0600	0.0000	0.0090	0.0032	0.0007	0.0038	0.0004	0.0953
59	0.3000	0.1387	0.1387	0.1387	0.0600	0.0000	0.0080	0.0034	0.0008	0.0040	0.0004	0.1099
60	0.3000	0.1387	0.1387	0.1387	0.0600	0.0000	0.0070	0.0038	0.0009	0.0042	0.0004	0.1200
61	0.3000	0.1387	0.1387	0.1387	0.0600	0.0000	0.0060	0.0040	0.0010	0.0044	0.0004	0.1250
62	0.3000	0.1387	0.1387	0.1387	0.0600	0.0000	0.0050	0.0042	0.0011	0.0046	0.0005	0.2500
63	0.3000	0.1387	0.1387	0.1387	0.0600	0.0000	0.0040	0.0045	0.0012	0.0048	0.0005	0.2000
64	0.3000	0.1387	0.1387	0.1387	0.0600	0.0000	0.0030	0.0047	0.0013	0.0050	0.0005	0.2000
65	0.3000	0.1387	0.1387	0.1387	0.0600	0.0000	0.0000	0.0000	0.0000	0.0052	0.0005	0.2553
66	0.3000	0.1387	0.1387	0.1387	0.0600	0.0000	0.0000	0.0000	0.0000	0.0056	0.0005	0.2553
67	0.3000	0.1387	0.1387	0.1387	0.0600	0.0000	0.0000	0.0000	0.0000	0.0060	0.0006	0.2918
68	0.3000	0.1387	0.1387	0.1387	0.0600	0.0000	0.0000	0.0000	0.0000	0.0065	0.0006	0.3283
69	0.3000	0.1387	0.1387	0.1387	0.0600	0.0000	0.0000	0.0000	0.0000	0.0070	0.0006	0.3647
70	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0000



**PROBABILITIES OF SEPARATION PRIOR TO RETIREMENT  
General Female Members – Plan 3**

Age	With(0<Svc<1)	With(1<Svc<2)	With(2<Svc<3)	With(3<Svc<4)	With(4<Svc<5)	With(Svc>5)	Vested Term	Ord. Disab	Duty Disab	Ord. Dth	Duty Dth	Svc Ret
<= 20	0.2000	0.2000	0.1000	0.1000	0.0800	0.0000	0.0000	0.0000	0.0000	0.0003	0.0000	0.0000
21	0.2000	0.2000	0.1000	0.1000	0.0800	0.0000	0.0000	0.0000	0.0000	0.0003	0.0000	0.0000
22	0.2000	0.2000	0.1000	0.1000	0.0800	0.0000	0.0000	0.0000	0.0000	0.0003	0.0000	0.0000
23	0.2000	0.2000	0.1000	0.1000	0.0800	0.0000	0.0000	0.0000	0.0000	0.0003	0.0000	0.0000
24	0.2000	0.2000	0.1000	0.1000	0.0800	0.0000	0.0000	0.0000	0.0000	0.0003	0.0000	0.0000
25	0.2000	0.2000	0.1000	0.1000	0.0800	0.0000	0.0000	0.0000	0.0000	0.0003	0.0000	0.0000
26	0.2000	0.2000	0.1000	0.1000	0.0800	0.0000	0.0000	0.0000	0.0000	0.0003	0.0000	0.0000
27	0.2000	0.2000	0.1000	0.1000	0.0800	0.0000	0.0000	0.0000	0.0000	0.0003	0.0000	0.0000
28	0.2000	0.2000	0.1000	0.1000	0.0800	0.0000	0.0000	0.0000	0.0000	0.0003	0.0000	0.0000
29	0.2000	0.2000	0.1000	0.1000	0.0800	0.0000	0.0000	0.0000	0.0000	0.0003	0.0000	0.0000
30	0.2000	0.2000	0.1000	0.1000	0.0800	0.0000	0.0400	0.0001	0.0000	0.0003	0.0000	0.0000
31	0.2000	0.2000	0.1000	0.1000	0.0800	0.0000	0.0400	0.0001	0.0000	0.0004	0.0000	0.0000
32	0.2000	0.2000	0.1000	0.1000	0.0800	0.0000	0.0400	0.0001	0.0000	0.0004	0.0000	0.0000
33	0.2000	0.2000	0.1000	0.1000	0.0800	0.0000	0.0400	0.0001	0.0000	0.0004	0.0000	0.0000
34	0.2000	0.2000	0.1000	0.1000	0.0800	0.0000	0.0400	0.0001	0.0000	0.0004	0.0000	0.0000
35	0.2000	0.2000	0.1000	0.1000	0.0800	0.0000	0.0400	0.0002	0.0001	0.0005	0.0000	0.0000
36	0.2000	0.2000	0.1000	0.1000	0.0800	0.0000	0.0400	0.0002	0.0001	0.0005	0.0000	0.0000
37	0.2000	0.2000	0.1000	0.1000	0.0800	0.0000	0.0400	0.0002	0.0001	0.0005	0.0000	0.0000
38	0.2000	0.2000	0.1000	0.1000	0.0800	0.0000	0.0400	0.0002	0.0001	0.0006	0.0000	0.0000
39	0.2000	0.2000	0.1000	0.1000	0.0800	0.0000	0.0400	0.0002	0.0001	0.0006	0.0000	0.0000
40	0.2000	0.2000	0.1000	0.1000	0.0800	0.0000	0.0300	0.0002	0.0001	0.0006	0.0000	0.0000
41	0.2000	0.2000	0.1000	0.1000	0.0800	0.0000	0.0280	0.0002	0.0001	0.0007	0.0000	0.0000
42	0.2000	0.2000	0.1000	0.1000	0.0800	0.0000	0.0240	0.0003	0.0001	0.0008	0.0000	0.0000
43	0.2000	0.2000	0.1000	0.1000	0.0800	0.0000	0.0200	0.0004	0.0001	0.0008	0.0000	0.0000
44	0.2000	0.2000	0.1000	0.1000	0.0800	0.0000	0.0180	0.0005	0.0001	0.0009	0.0000	0.0000
45	0.2000	0.2000	0.1000	0.1000	0.0800	0.0000	0.0175	0.0006	0.0002	0.0009	0.0000	0.0000
46	0.2000	0.2000	0.1000	0.1000	0.0800	0.0000	0.0170	0.0006	0.0002	0.0010	0.0000	0.0000
47	0.2000	0.2000	0.1000	0.1000	0.0800	0.0000	0.0165	0.0008	0.0002	0.0010	0.0000	0.0000
48	0.2000	0.2000	0.1000	0.1000	0.0800	0.0000	0.0155	0.0008	0.0002	0.0011	0.0000	0.0000
49	0.2000	0.2000	0.1000	0.1000	0.0800	0.0000	0.0140	0.0009	0.0002	0.0012	0.0000	0.0000
50	0.2000	0.2000	0.1000	0.1000	0.0800	0.0000	0.0130	0.0010	0.0003	0.0013	0.0000	0.0000
51	0.2000	0.2000	0.1000	0.1000	0.0800	0.0000	0.0125	0.0011	0.0003	0.0014	0.0000	0.0000
52	0.2000	0.2000	0.1000	0.1000	0.0800	0.0000	0.0120	0.0012	0.0004	0.0015	0.0000	0.0000
53	0.2000	0.2000	0.1000	0.1000	0.0800	0.0000	0.0115	0.0014	0.0004	0.0017	0.0000	0.0000
54	0.2000	0.2000	0.1000	0.1000	0.0800	0.0000	0.0110	0.0017	0.0005	0.0019	0.0000	0.0000
55	0.2000	0.2000	0.1000	0.1000	0.0800	0.0000	0.0105	0.0018	0.0005	0.0021	0.0000	0.0229
56	0.2000	0.2000	0.1000	0.1000	0.0800	0.0000	0.0100	0.0021	0.0006	0.0022	0.0000	0.0204
57	0.2000	0.2000	0.1000	0.1000	0.0800	0.0000	0.0090	0.0022	0.0006	0.0025	0.0000	0.0137
58	0.2000	0.2000	0.1000	0.1000	0.0800	0.0000	0.0080	0.0023	0.0006	0.0028	0.0000	0.0166
59	0.2000	0.2000	0.1000	0.1000	0.0800	0.0000	0.0070	0.0025	0.0007	0.0031	0.0000	0.0225
60	0.2000	0.2000	0.1000	0.1000	0.0800	0.0000	0.0060	0.0027	0.0008	0.0036	0.0000	0.0317
61	0.2000	0.2000	0.1000	0.1000	0.0800	0.0000	0.0050	0.0028	0.0008	0.0042	0.0000	0.0350
62	0.2000	0.2000	0.1000	0.1000	0.0800	0.0000	0.0040	0.0029	0.0008	0.0048	0.0000	0.0957
63	0.2000	0.2000	0.1000	0.1000	0.0800	0.0000	0.0030	0.0031	0.0009	0.0055	0.0000	0.0886
64	0.2000	0.2000	0.1000	0.1000	0.0800	0.0000	0.0020	0.0033	0.0009	0.0063	0.0000	0.2000
65	0.2000	0.2000	0.1000	0.1000	0.0800	0.0000	0.0000	0.0000	0.0000	0.0072	0.0000	0.2500
66	0.2000	0.2000	0.1000	0.1000	0.0800	0.0000	0.0000	0.0000	0.0000	0.0082	0.0000	0.1158
67	0.2000	0.2000	0.1000	0.1000	0.0800	0.0000	0.0000	0.0000	0.0000	0.0093	0.0000	0.1244
68	0.2000	0.2000	0.1000	0.1000	0.0800	0.0000	0.0000	0.0000	0.0000	0.0104	0.0000	0.4540
69	0.2000	0.2000	0.1000	0.1000	0.0800	0.0000	0.0000	0.0000	0.0000	0.0116	0.0000	0.5837
70	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0000

**PROBABILITIES OF SEPARATION PRIOR TO RETIREMENT**  
**Safety and Probation Members**

Age	With(0<Svc<1)	With(1<Svc<2)	With(2<Svc<3)	With(3<Svc<4)	With(4<Svc<5)	With(Svc>5)	Vested Term	Ord. Disab	Duty Disab	Ord. Dth	Duty Dth	Svc Ret
<= 20	0.1000	0.0799	0.0799	0.0799	0.0799	0.0078	0.0500	0.0000	0.0008	0.0002	0.0005	0.0000
21	0.1000	0.0754	0.0754	0.0754	0.0754	0.0078	0.0500	0.0000	0.0009	0.0002	0.0005	0.0000
22	0.1000	0.0709	0.0709	0.0709	0.0709	0.0078	0.0500	0.0000	0.0010	0.0002	0.0005	0.0000
23	0.1000	0.0663	0.0663	0.0663	0.0663	0.0078	0.0500	0.0000	0.0011	0.0002	0.0005	0.0000
24	0.1000	0.0618	0.0618	0.0618	0.0618	0.0078	0.0500	0.0000	0.0012	0.0002	0.0005	0.0000
25	0.1000	0.0474	0.0474	0.0474	0.0474	0.0078	0.0400	0.0002	0.0010	0.0003	0.0005	0.0000
26	0.1000	0.0449	0.0449	0.0449	0.0449	0.0078	0.0400	0.0002	0.0011	0.0003	0.0005	0.0000
27	0.1000	0.0424	0.0424	0.0424	0.0424	0.0078	0.0400	0.0002	0.0011	0.0004	0.0005	0.0000
28	0.1000	0.0411	0.0411	0.0411	0.0411	0.0078	0.0400	0.0002	0.0012	0.0004	0.0004	0.0000
29	0.1000	0.0399	0.0399	0.0399	0.0399	0.0078	0.0400	0.0002	0.0013	0.0004	0.0004	0.0000
30	0.1000	0.0369	0.0369	0.0369	0.0369	0.0078	0.0400	0.0003	0.0011	0.0003	0.0005	0.0000
31	0.1000	0.0357	0.0357	0.0357	0.0357	0.0078	0.0300	0.0003	0.0011	0.0004	0.0005	0.0000
32	0.1000	0.0345	0.0345	0.0345	0.0345	0.0077	0.0250	0.0004	0.0012	0.0003	0.0005	0.0000
33	0.1000	0.0333	0.0333	0.0333	0.0333	0.0077	0.0250	0.0004	0.0012	0.0004	0.0005	0.0000
34	0.1000	0.0321	0.0321	0.0321	0.0321	0.0077	0.0250	0.0005	0.0012	0.0004	0.0005	0.0000
35	0.1000	0.0310	0.0310	0.0310	0.0310	0.0077	0.0225	0.0004	0.0012	0.0004	0.0005	0.0000
36	0.1000	0.0299	0.0299	0.0299	0.0299	0.0077	0.0200	0.0005	0.0016	0.0004	0.0005	0.0000
37	0.1000	0.0289	0.0289	0.0289	0.0289	0.0077	0.0200	0.0006	0.0020	0.0004	0.0005	0.0000
38	0.1000	0.0278	0.0278	0.0278	0.0278	0.0077	0.0200	0.0007	0.0023	0.0004	0.0005	0.0000
39	0.1000	0.0267	0.0267	0.0267	0.0267	0.0077	0.0175	0.0008	0.0026	0.0004	0.0006	0.0000
40	0.1000	0.0257	0.0257	0.0257	0.0257	0.0076	0.0150	0.0009	0.0047	0.0004	0.0006	0.0000
41	0.1000	0.0214	0.0214	0.0214	0.0214	0.0076	0.0125	0.0010	0.0057	0.0004	0.0006	0.0000
42	0.1000	0.0172	0.0172	0.0172	0.0172	0.0076	0.0100	0.0010	0.0070	0.0005	0.0007	0.0000
43	0.1000	0.0129	0.0129	0.0129	0.0129	0.0066	0.0100	0.0011	0.0081	0.0005	0.0007	0.0000
44	0.1000	0.0086	0.0086	0.0086	0.0086	0.0061	0.0100	0.0011	0.0092	0.0006	0.0007	0.0000
45	0.1000	0.0056	0.0056	0.0056	0.0056	0.0056	0.0100	0.0012	0.0100	0.0006	0.0007	0.0000
46	0.1000	0.0051	0.0051	0.0051	0.0051	0.0051	0.0100	0.0012	0.0105	0.0007	0.0007	0.0000
47	0.1000	0.0046	0.0046	0.0046	0.0046	0.0046	0.0100	0.0012	0.0110	0.0008	0.0007	0.0000
48	0.1000	0.0041	0.0041	0.0041	0.0041	0.0041	0.0100	0.0012	0.0115	0.0008	0.0007	0.0000
49	0.1000	0.0036	0.0036	0.0036	0.0036	0.0036	0.0100	0.0012	0.0120	0.0008	0.0007	0.0000
50	0.1000	0.0013	0.0013	0.0013	0.0013	0.0000	0.0075	0.0012	0.0125	0.0009	0.0007	0.0362
51	0.1000	0.0013	0.0013	0.0013	0.0013	0.0000	0.0065	0.0012	0.0130	0.0009	0.0007	0.0239
52	0.1000	0.0007	0.0007	0.0007	0.0007	0.0000	0.0055	0.0015	0.0135	0.0009	0.0007	0.0261
53	0.1000	0.0007	0.0007	0.0007	0.0007	0.0000	0.0050	0.0020	0.0150	0.0010	0.0007	0.0384
54	0.1000	0.0007	0.0007	0.0007	0.0007	0.0000	0.0050	0.0030	0.0167	0.0012	0.0010	0.0527
55	0.1000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0050	0.0035	0.0175	0.0013	0.0011	0.2500
56	0.1000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0050	0.0036	0.0200	0.0014	0.0011	0.2500
57	0.1000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0050	0.0038	0.0225	0.0015	0.0012	0.2500
58	0.1000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0050	0.0040	0.0250	0.0017	0.0015	0.1500
59	0.1000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0050	0.0041	0.0275	0.0019	0.0000	0.1000
60	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0000
61	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0000
62	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0000
63	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0000
64	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0000
65	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0000
66	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0000
67	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0000
68	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0000
69	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0000
70	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0000

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*Exhibit II*  
*Post-Retirement Mortality Assumptions*

<b>Membership Category</b>	<b>Table</b>
General Male Members (Service Retirements)	1994 GAM Male set back one year
General Male Beneficiaries	1994 GAM Male set back one year
General Male Members (Disability Retirements)	1981 General Disab. set back four years
General Female Members (Service Retirements)	1994 GAM Female set back two years
General Female Beneficiaries	1994 GAM Female set back two years
General Female Members (Disability Retirements)	1981 General Disab. set back four years
Safety Members (Service Retirements)	1994 GAM Male set forward one year
Safety Beneficiaries	1994 GAM Female set back two years
Safety Members (Disability Retirements)	1981 Safety Disab. set back two years

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