March 2006

Quadrennial Experience Study of Actuarial Assumptions for the Five-Year Period July 1, 2000 - June 30, 2005

City of Philadelphia Municipal Retirement System

MERCER
Human Resource Consulting

Contents

1

Introduction

This Actuarial Experience Study for the City of Philadelphia Municipal Retirement System covers the five years from July 1, 2000 through June 30, 2005. The study contains information for setting actuarial assumptions to use in the July 1, 2005 and future actuarial valuations. Mercer analyzed the System's actuarial experience, compared experience with the expected outcomes using your current actuarial assumptions, recommended adjustments to assumptions where necessary, and summarized our findings. This study is the most recent in a series of experience studies we've performed. The previous study covered July 1, 1996 through June 30, 2001.

We prepared this report in accordance with the requirements of Act 205 of 1984 which requires the study to cover five years of experience and be performed every four years. Act 205 requires the actuarial valuation reports to be prepared using actuarial assumptions selected jointly by the actuary and the Board. As actuary to the Retirement Board, our recommendations for the actuarial assumptions to be used in the July 1, 2005 actuarial valuation are presented in this report.

Summary of Findings

Non-economic assumptions

Mercer reviewed the actuarial experience for this period and compared it with the results of prior studies. We combined the 1967 Plan and Plan 87 experience for analysis of deaths and disabilities; however, we separated those plans' experience for turnover (quits and discharges) and retirements. In most cases, experience for municipal members is

separated for males and females while police and fire members are shown combined because of a much smaller female population.

Our recommendations reflect two approaches.

Where experience is relatively consistent but shows some minor differences from expectations, we have adjusted the assumption to better fit experience. The other approach is to reflect a significant change in our assumption because of changes in behavior or incidence of occurrence.

Minor changes were therefore made to the rates for:

- Turnover, 1967 Municipal Division active female members

- Turnover, 1967 Police and Fire Division active members

- Retirement, 1967 Municipal Division active members

- Retirement, 1967 and 1987 Police and Fire Division active members

- Disability, Municipal and Police and Fire Divisions active members

- Mortality, Municipal and Police and Fire Divisions retiree members

- Mortality, Municipal and Police and Fire Divisions disabled members.

More significant changes were made to the following:

- Turnover, 1987 Municipal Division and Police and Fire Divisions active members;

  – The turnover assumption captures experience of all City employees who leave the plan as actives prior to retirement. Because Plan 87 is the open program covering all new entrants, changes in short-term employment due to labor markets is experienced in this plan. Turnover during the five-year period ending June 30, 2005 has been higher than expected. This trend of higher than expected turnover was also seen in the prior experience study, leading us to increase our assumptions as much 85% for some age ranges to reflect past actual experience.

  – The net financial impact of assuming higher rates of turnover is a decrease in projected benefits and a reduction of liabilities that will reduce future plan costs.

- Mortality, Municipal and Police and Fire Divisions active members;

– Mortality experience among all active member divisions was lower over the past five years than we expected. This may be the result of a number of influences. The biggest reason is probably the improvement of health care which continues to contribute to the ability of the general population to live longer. Another reason is that many older active participants have elected the DROP program. While in the DROP and prior to actual retirement, this group of participants' experience is tracked as retirees, not active members. The result is the older active employees with the higher mortality risk have been removed from the active experience for the years measured in this study.

– The 1994 Group Annuity Reserving Tables were adjusted to match the lower than expected experience with the expectation that the lower mortality will continue into the future.

– The financial impact of assuming lower mortality rates for active participants results in higher liabilities and an increase in cost.

Economic assumptions

During the period covered by this experience study we have seen market volatility exhibited by returns as high as 16.6% and as low as -6.0%. The dramatic decline in the equity market and its slow rebound were considered in lowering the investment return rate from 9% to 8.75%. Using a building block approach based on the City's investment policy further supports an 8.75% rate.

The payroll growth rate during this period was only 2.2% versus our assumption of 4.5%. This assumption is used to calculate the amortization payment of the initial unfunded liability. The funding policy calls for the liability to be funded over a level percent of aggregate pay. We recommend this assumption be reduced to 4% to reflect the slower growth of active member salary. The net impact is a higher contribution for the City because two significant past service liabilities are amortized as a level percent of pay. When the payroll growth assumption is reduced, the balance of this unfunded liability is spread over a lower present value of future pay and therefore increases the amount to be funded for the next few years.

The average annual salary increase for members active at both the beginning and the end of the fiscal year ranged from 2.7% to 8.4% during the past five years. The five year averages for the Municipal and Police/Fire Divisions were 4.7% and 5.6% per year, respectively. Because the increases don't diverge much and the City's schedule of increases are 3% to 4% in the next few years, without including seniority increases, we don't recommend a change in assumptions at this time.

2

Certification

In the preparation of this experience study we relied on data provided to us each year for preparation of the actuarial valuation of the Retirement System. We used generally accepted actuarial principals to value the actual versus expected non-economic and economic experience over the period studied. The assumptions tested were the major assumptions used during the experience study period and reported in the actuarial valuation as presented each year.

The undersigned actuaries meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions presented in this report.

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

Douglas Rowe, FSA, EA, MAAA
Mercer Human Resource Consulting
120 East Baltimore Street, 20th Floor
Baltimore, MD 21202
410 347 2806

Thomas Skiavo, EA, MAAA
Mercer Human Resource Consulting
1255 23rd Street, 5th Floor
Washington, DC 20037
202 331 2557

3

Discussion of Non-economic Experience Results

This section presents the results of the non-economic experience and includes separate analyses for mortality, disability, turnover, and retirement rates.

Data processing

The demographic data for this study was provided by the City. The data used was the same as that used for the July 1, 2001 – July 1, 2005 actuarial valuations.

Annual rates of mortality

Active members mortality experience

The mortality experience for active members is summarized in Tables 1 through 3 in Section 6 of this report.

The rate of actual deaths for active members is lower than expected. The published tables for the assumed rates of active member mortality were changed based on the 2001 experience study. A change to the adjustment applied to the pre-retirement mortality tables is recommended at this time.

The actual, expected and recommended rates are presented in graphs 1 through 3 in Section 6.

Service-Connected Death Experience

A comparison of the actual percentage of service-connected deaths with assumptions is as follows:

This assumption has a very small impact on overall costs, but is used in determining the difference in the benefit value. Based on the experience over the past five years, we recommend changing this assumption. For Municipal Division members, we recommend decreasing the assumption of service-connected deaths from 2.5% to 1.5%. For Police and Fire Division members, we recommend increasing the assumption from 5.0% to 8.0%.

	Number of Service-Connected Deaths	Percentage of Service-Connected Deaths		
		Expected	Actual	Recommended
Municipal members	90	2.5%	1.1%	1.5%
Police and fire members	324	5.0%	9.4%	8.0%

Retired members mortality experience

Mortality experience for retired members and surviving spouses is shown in tables 4 through 6 of Section 6.

The tables show that actual experience was close to (but still less than) what was expected. We recommend making minor adjustments to reflect the City's experience and future improvements in health care.

The actual, expected and recommended rates are presented in graphs 4 through 6 in Section 6.

Disabled Members Mortality Experience

Tables 7 through 9 of Section 6 reflect the postretirement mortality experience for disabled members.

For the Municipal Division, actual experience was higher than expected for most age ranges, while for the Police and Fire Division, the opposite was true. We suggest making minor adjustments to the rates for both divisions to better reflect actual experience.

The annual, expected and recommended rates are presented in graphs 7 through 9 in Section 6.

Annual rates of disability

For our analysis of disability experience, see Section 6, tables 10 through 12.

Actual incidences of disability were close to the expected incidences. At this time, we recommend making minor adjustments to the rates for a few age ranges with bigger differences.

In addition to looking at the number of disabilities during this period, we examined the proportion of disabilities that are service-connected. We recommend changing the service-connected disability assumption from 50% to 70% for the Police and Fire Division. No change is recommended for the Municipal Division at this time.

	Number of Service-Connected Disabilities	Percentage of Service-Connected Disabilities		
		Expected	Actual	Recommended
Municipal members	120	30%	28%	30%
Police and fire members	107	50%	80%	70%

The annual, expected and recommended rates are presented in graphs 10 through 12 in Section 6.

Annual rates of turnover

The member turnover analysis is summarized in tables 13 through 17 of Section 6. A summary follows:

As was done in the prior study, we show the '87 plans separately from the 1967 plans. The actual turnover for 1967 plan participants was very close to the expected experience.

Only minor adjustments to some age ranges are needed. The experience for employees in the '87 plans is higher than anticipated. To reflect this increase, we recommend increasing turnover rates to better reflect experience.

The actual, expected and recommended rates are presented in graphs 13 through 17 in Section 6.

Annual rates of retirement

The retirement experience is summarized in tables 18 through 21 of Section 6. The average ages of retirement for the 1967 plan are:

Actual Average Retirement Age
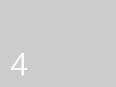
Year Ending June 30	Municipal Division[a]	Police and Fire Division[a]
2001	58.5	52.1
2002	57.8	51.7
2003	57.6	52.2
2004	57.4	52.4
2005	57.0	52.8

a) Only includes those retiring during the year. The average age of retirement for all retirees in the data as of July 1, 2005 is 59.5 for the Municipal Division and 51.0 for the Police and Fire Division.

The average retirement age has been dropping for the Municipal Division, but has increased slightly for the Police and Fire Division. In addition, the retirement incidence has increased compared to the expected. The DROP probably caused this inconsistency because it was first implemented on a "temporary" basis in 2000 and did not become permanent until four years later. We feel the DROP will eventually smooth out retirements over time and therefore we did not want to increase the retirement rates to the same levels as seen in the past five years.

Although Plan 87 does not yet have a large number of retirements, we do suggest making minor adjustments to the Police and Fire employees at age 50. We do not suggest making any changes to the 1987 Municipal Plan.

The actual, expected and recommended rates are presented in graphs 18 through 21 in Section 6.

4

Discussion of Economic Experience Results

This section presents economic experience for the five-year period July 1, 2001 through June 30, 2005. We analyzed the rate of investment return, the rate of individual salary growth, and the rate of total payroll growth. These economic actuarial assumptions are considered separately and together because of their close relationship.

Current assumptions reflect a 9% interest rate, a 5.0% salary growth rate, and a 4.5% covered payroll growth rate. Use of a building block approach as well as recent market trends, indicate that the interest rate should be lowered to 8.75%. The 2001 experience study lowered the rate of covered payroll growth from 5.0% to 4.5%. Recent experience suggests further revising the covered payroll growth assumption from 4.5% to 4.0%.

Investment return

The rate of investment return, after investment expenses, is the expected increase to the fund's assets. The investment gain (or loss) in excess (deficiency) of the assumption then determines the actuarial asset value for the purpose of calculating actuarial gains and losses. The actuarial asset valuation method uses a five-year average to smooth the effect of short-term market fluctuations.

To help determine the investment return rate, we looked at three different pieces of information: the plan's historical return, the market's historical return for the fund's asset classes to achieve a building block approach, and a forward-looking expectation of a fund's return using the plan's investment strategy.

The actual rates of return for the City of Philadelphia's pension fund on an adjusted market value basis as well as a market value basis over the five years studied are:

Pension Fund's Rate of Return

Year Ending June 30	Adjusted Market Value	Market Value
2001	8.3%	(6.0%)
2002	3.4%	(5.8%)
2003	(2.2%)	1.8%
2004	4.6%	16.6%
2005	1.9%	9.9%
Average	3.1%	2.9%

Note – The compound averages of the returns from 1985 are 9.2% on a market value basis and 9.0% on an adjusted value basis.

Even though the fund has returned the assumed the 9.0% investment return on average since 1985, the average rate of return during the most recent five-year period is well less than 9% assumption.

The following table divides the fund's assets into four major classes. We looked at the historical performance of those asset classes to achieve a weighted return of the fund via a building block approach. We then adjusted for the difference in the actual historical inflation rate of 3.3% to the assumption of 2.75% and subtracted investment expenses to derive an anticipated investment return based on the market's historical return rates.

Asset Class	Approximate Asset Allocation	Historic Performance [a]	Weighted Return
Cash	5.0%	3.00%	0.15%
Bonds	25.0%	4.80%	1.20%
Small cap equities	30.0%	13.30%	3.99%
Large cap equities	40.0%	10.50%	4.20%
	100.0%		
Total return			9.54%
Adjustment for past and future expected inflation			(0.57)%
Investment expenses			(0.20)%
Total return			**8.77%**

a) These returns are based on historical returns from 1930 – 1999, recognizing current yields. They were calculated by Mercer using information and data presented in Ibbotson Investment Analysis Software.

The last table shown below takes a forward-looking expectation of a hypothetical fund's return if it had the same investment policy as the pension plan. Based upon a 20-year projection horizon, the table shows the expected investment return for the hypothetical fund with its associated percentile for achieving that return.

Percentile	Expected investment return [a]
40%	7.00%
45%	7.37%
50%	7.74%
55%	8.11%
60%	8.48%
65%	8.87%
70%	9.27%

a) 20-year projection horizon. These returns are net of 20 bps for investment expenses. Any remaining investment expenses are assumed to be covered by active managers outperforming market indices. These returns assume no Alpha and are based on the investment policy as of July 1, 2005.

Based upon all of the previous information, we are seeing a trend of decreasing return rates both in the recent market experience as well as future expected investment return rate. As a result we recommend lowering the rate to 8.75%.

Rate of salary increase

The five-year average rate of salary increase is 4.7% for municipal members and 5.6% for police and fire members. The rates summarized by year are:

Average Salary Increase

Fiscal Year Ending June 30	Municipal and Elected	Police and Fire
2001	3.4%	5.4%
2002	5.1%	8.0%
2003	8.4%	5.5%
2004	2.7%	4.6%
2005	3.8%	4.3%
Average	4.7%	5.6%

The average rates for the period covered by the study are close to our 5.0% assumption. In addition, we arrive at a 5.0% assumption using a building block approach – 2.75% due to inflation, 0.75% due to general productivity and 1.5% based on seniority/merit. Therefore, we believe no change is needed in this assumption at this time.

Rate of covered payroll growth

In addition to projecting individual salary growth, assumptions are used to project the annual rate of growth for the total covered payroll. This assumption accounts for growth in covered participants, increases in overtime, and increases in merit and longevity pay. This assumption is necessary because the July 1, 1985 unfunded actuarial accrued liability is funded as a level percentage of covered payroll. During the past five years, the rate of growth in covered payroll averaged 2.1%, much less than the expected rate of 4.5%. We therefore recommend lowering the covered payroll growth assumption from 4.5% to 4.0%.

5

Recommended Actuarial Assumptions

Withdrawal Probabilities at 5-year Intervals

	1967 Plan			1987 Plan	
	Municipal		Uniformed	Municipal	Uniformed
Attained Age	Males	Females	Unisex	Unisex	Unisex
20	0.100000	0.105319	0.022050	0.260000	0.030000
25	0.086000	0.096000	0.021148	0.150000	0.037800
30	0.072000	0.071562	0.019148	0.105000	0.029900
35	0.045000	0.056170	0.016148	0.090000	0.025200
40	0.035000	0.039379	0.012148	0.090000	0.011000
45	0.030000	0.035597	0.000000	0.075000	0.010000
50	0.020000	0.022400	0.000000	0.065000	0.000000
55	0.000000	0.000000		0.050000	

In addition, we assumed that a vested employee terminating employment (with 10 years of service) will elect an employee contribution refund unless his or her age plus years of service at termination equal 55 or more (rule of 55) [rule of 45 for 1967 Police and Fire].

Otherwise, we assumed the person would elect a deferred pension beginning at service retirement age.

Annual rate of disability prior to retirement

Disability Probabilities at 5-year Intervals

| Attained Age | Municipal and Elected Officials | | Uniformed |
	Males	Females	Males and Females
20	.000025	.000043	.000795
25	.000070	.000061	.000870
30	.000557	.000263	.001418
35	.001514	.000620	.001918
40	.001800	.001314	.001934
45	.003840	.002359	.002334
50	.007600	.004285	.002654
55	.008680	.007088	.000000

In addition, we assumed that 70% of all disabilities among municipal and elected members are ordinary (30% are service-connected) and 30% of all disabilities among uniformed members are ordinary (70% are service connected).

Annual rate of mortality prior to retirement

We assumed that deaths of active municipal and elected male members would be at 100% of the GAR-94 Mortality Table for males and deaths of municipal and elected female members at 100% of the GAR-94 Mortality Table for females. In addition, we assumed that 98.5% of all deaths of active municipal and elected members are ordinary (1.5% are service-connected).

We assumed that deaths of active uniformed male and female members would be at 100% of the GAR-94 Mortality Table for males and females, respectively. In addition, we

assumed that 92% of all deaths of active uniformed members are ordinary (8% are service-connected).

Service retirement

We assumed that active members in the 1967 plan will retire according to the rates in the following table.

1967 Plan Service Retirement Rates

Attained Age	Municipal and Elected Officials Males and Females	Uniformed Males and Females
45	—	.08
46	—	.08
47	—	.08
48	—	.08
49	—	.08
50	—	.12
51	—	.12
52	—	.12
53	—	.12
54	—	.17
55	.35	.20
56	.20	.20
57	.12	.20
58	.12	.20
59	.12	.20
60	.12	.20

Attained Age	Municipal and Elected Officials Males and Females	Uniformed Males and Females
61	.12	.20
62	.40	.20
63	.20	.20
64	.20	.20
65	.20	.20
66	.20	.20
67	.20	.20
68	.20	.20
69	.20	.20
70+	1.00	1.00

The corresponding rates for members under Plan 87 are in the table below.

Plan 87 Service Retirement Rates

	Municipal and Elected Officials		Uniformed	
	Full Benefits		Full Benefits	
Age	First Year Eligible[a]	Subsequent Years	First Year Eligible[a]	Subsequent Years
40	—	—	.300	.125
41	—	—	.300	.125
42	—	—	.300	.125

	Full Benefits		Full Benefits	
43	—	—	.300	.125
44	—	—	.300	.125
45	—	—	.300	.125
46	—	—	.300	.125
47	—	—	.300	.125
48	—	—	.300	.125
49	—	—	.300	.125
50	—	—	.300	.125
51	—	—	.300	.125
52	.450	.060	.300	.140
53	.420	.060	.300	.150
54	.390	.060	.300	.170
55	.360	.060	.300	.190
56	.330	.060	.300	.215
57	.300	.060	.300	.225
58	.300	.060	.300	.225
59	.300	.080	.300	.230
60	.300	.100	.300	.230
61	.350	.150	.300	.245
62	.430	.300	.300	.295
63	.500	.187	.300	.265
64	.500	.199	.300	.260
65	.600	.309	.300	1.000

		Full Benefits		Full Benefits
66	.600	.232	—	—
67	.600	.214	—	—
68	.600	.214	—	—
69	.600	.238	—	—
70	.600	1.000	—	—

a. Earlier of age 60 and 10 years of service or 33 years of service for municipal; earlier of age 50 and 10 years of service or 25 years of service for police and fire; and 33 years of service for elected officials.

Annual rate of mortality after retirement

We assumed that postretirement mortality will be as follows:

▪ Municipal members (male) – 140% of the GAR-94 Mortality Table for males

▪ Municipal members (female) – 150% of the GAR-94 Mortality Table for females

▪ Uniformed members – 150% of the GAR-94 Mortality Table (for males and females as appropriate)

We assumed that post-disability mortality will follow the adjustment factors in the tables below applied to:

▪ Municipal members (male) – 140% of the GAR-94 Mortality Table for males

▪ Municipal members (female) – 150% of the GAR-94 Mortality Table for females

▪ Uniformed members – 150% of the GAR-94 Mortality Table (for males and females as appropriate)

Post-disablement Mortality Adjustment Factors (Municipal)

	Adjustment Factor			Adjustment Factor	
Age	Male	Female	Age	Male	Female
47 and earlier	7.30	11.70	66	2.30	3.10
48	7.10	11.30	67	2.20	2.80
49	7.00	10.90	68	2.20	2.50
50	6.80	10.50	69	2.10	2.20
51	6.70	10.00	70	2.10	1.90
52	6.60	9.60	71	2.10	1.60
53	6.20	8.90	72	2.00	1.30
54	5.90	8.10	73	1.90	1.30
55	5.60	7.40	74	1.80	1.30
56	5.20	6.60	75	1.70	1.30
57	4.90	5.90	76	1.50	1.30
58	4.50	5.60	77	1.40	1.30
59	4.10	5.20	78	1.20	1.30
60	3.60	4.90	79	1.20	1.30
61	3.20	4.60	80	1.20	1.20
62	2.80	4.30	81	1.20	1.20
63	2.70	4.00	82	1.20	1.20
64	2.50	3.70	83 and later	1.00	1.00
65	2.40	3.40			

Post-disablement Mortality Adjustment Factors (Uniformed)

Age	Adjustment Factor Unisex
42 and earlier	2.80
43	2.50
44	2.20
45	2.00
46	1.70
47	1.40
48	1.40
49	1.30
50	1.30
51	1.20
52	1.20
53	1.20
54	1.20
55	1.20
56	1.20
57	1.20
58	1.20
59	1.20
60 and later	1.00

Salary scale

We assumed that salaries, including longevity and overtime, will increase at a compound annual rate of 5.0% per year (2.75% due to inflation, 0.75% due to general productivity and 1.5% based on seniority/merit).

Rate of investment return

We assumed that assets of the fund will accumulate at a compound annual rate of 8.75% per year, after annual expenses incurred in the investment of the fund's assets by the equity and debt money managers under contract with the Board of Pensions and Retirement.

Expenses

The administrative expenses of operating the Retirement System are based on the previous year's actual expenses increased by the average salary increase for continuing actives. Administrative expenses exclude the fees of the money managers hired to invest the fund's assets.

Value of investments

Assets held by the fund are valued at market value as reported by the City. The actuarial value of assets is the difference between the market value of the assets reported and last year's assets projected forward at the rate of investment return. One-fifth of this difference is recognized immediately and four-fifths is deferred and recognized over the next four years, one-fifth at a time. Also, the actuarial value doesn't include assets held in the Pension Adjustment Fund (PAF).

Family composition

We assumed that 70% of all active members and 60% of all nonactive members will be survived by a spouse and that female (male) spouses are four years younger (older) than members.

Form of annuity

We assumed that all Plan '67 members will elect Option 4 and Plan '87 members will elect Option 1 unless otherwise indicated in the participant's data.

Rate of covered payroll growth

We assume that the annual rate of growth of total covered payroll is 4.0% per year.

6

Tabular and Graphical Summary of Experience Results

Table/ Graph	Divisions by Membership		Description
1	Municipal Active	Mortality:	Male
2	Municipal Active		Female
3	Police and Fire Active		Male/Female Combined
4	Municipal Retired	Mortality:	Male
5	Municipal Retired		Female
6	Police and Fire Retired		Male/Female Combined
7	Municipal Disabled	Mortality:	Male
8	Municipal Disabled		Female
9	Police and Fire Disabled		Male/Female Combined
10	Municipal Active	Disability:	Male
11	Municipal Active		Female

Table/ Graph	Divisions by Membership		Description
12	Police and Fire Active		Male/Female Combined
13	1967 Municipal Active	Turnover:	Male
14	1967 Municipal Active		Female
15	1967 Police and Fire Active		Male/Female Combined
16	1987 Municipal Active	Turnover:	Male/Female Combined
17	1987 Police and Fire Active		Male/Female Combined
18	1967 Municipal Active	Retirement:	Male/Female Combined
19	1967 Police and Fire Active		Male/Female Combined
20	1987 Municipal Active		Male/Female Combined
21	1987 Police and Fire Active		Male/Female Combined

Table 1

Municipal Division Active Members
Mortality for Males

	Expected Deaths							Actual Deaths					
Age	2001	2002	2003	2004	2005	Total		2001	2002	2003	2004	2005	Total
<20	0	0	0	0	0	**0**		0	0	0	0	0	**0**
20-24	0	0	0	0	0	**1**		0	0	0	0	0	**0**
25-29	0	1	1	1	0	**3**		0	0	0	0	0	**0**
30-34	1	1	1	1	1	**5**		0	0	0	0	0	**0**
35-39	2	2	2	2	1	**8**		0	0	0	0	0	**0**
40-44	3	3	3	3	3	**15**		4	0	0	1	0	**5**
45-49	6	6	6	6	5	**28**		4	0	3	7	0	**14**
50-54	11	11	10	10	9	**49**		5	0	6	5	0	**16**
55-59	9	10	10	10	9	**48**		9	0	3	2	1	**15**
60-64	5	5	5	5	4	**25**		2	0	2	0	0	**4**
65-69	5	6	5	5	4	**24**		2	0	1	1	0	**4**
70-74	0	0	0	0	0	**0**		1	0	0	0	0	**1**
75-80	0	0	0	0	0	**0**		0	0	0	0	0	**0**
80-84	0	0	0	0	0	**0**		0	0	1	1	0	**2**
84+	0	0	0	0	0	**0**		0	0	0	0	0	**0**
Total	**42**	**44**	**42**	**41**	**37**	**206**		**27**	**0**	**16**	**17**	**1**	**61**

Ratio of Actual to Expected Deaths

2001	65%
2002	0%
2003	38%
2004	42%
2005	3%

Graph 1

**Municipal Division Active Members
Mortality for Males**
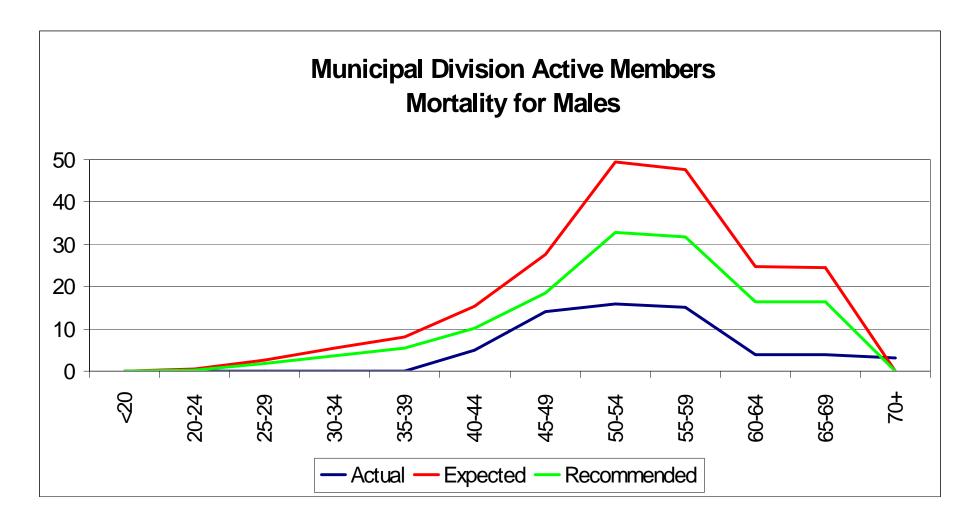
Table 2

Municipal Division Active Members
Mortality for Females

	Expected Deaths						Actual Deaths					
Age	2001	2002	2003	2004	2005	Total	2001	2002	2003	2004	2005	Total
<20	0	0	0	0	0	**0**	0	0	0	0	0	**0**
20-24	0	0	0	0	0	**0**	0	0	0	0	0	**0**
25-29	0	0	0	0	0	**1**	0	0	0	0	0	**0**
30-34	0	0	0	0	0	**2**	0	0	0	0	0	**0**
35-39	1	1	1	1	1	**4**	0	0	0	0	0	**0**
40-44	1	1	1	1	1	**7**	1	0	0	0	0	**1**
45-49	2	2	2	2	2	**11**	1	0	2	0	1	**4**
50-54	3	3	3	3	3	**17**	2	0	0	1	0	**3**
55-59	3	3	4	4	3	**17**	4	0	2	1	1	**8**
60-64	2	2	3	3	2	**12**	3	0	1	0	0	**4**
65-69	3	3	3	3	3	**15**	1	0	1	0	0	**2**
70-74	0	0	0	0	0	**0**	0	0	0	0	1	**1**
75-80	0	0	0	0	0	**0**	0	0	1	0	0	**1**
80-84	0	0	0	0	0	**0**	0	0	0	0	0	**0**
84+	0	0	0	0	0	**0**	0	0	0	0	1	**1**
Total	**16**	**16**	**18**	**18**	**17**	**86**	**12**	**0**	**7**	**2**	**4**	**25**

Ratio of Actual to Expected Deaths

2001	74%
2002	0%
2003	38%
2004	11%
2005	24%

Graph 2

Municipal Division Active Members
Mortality for Females
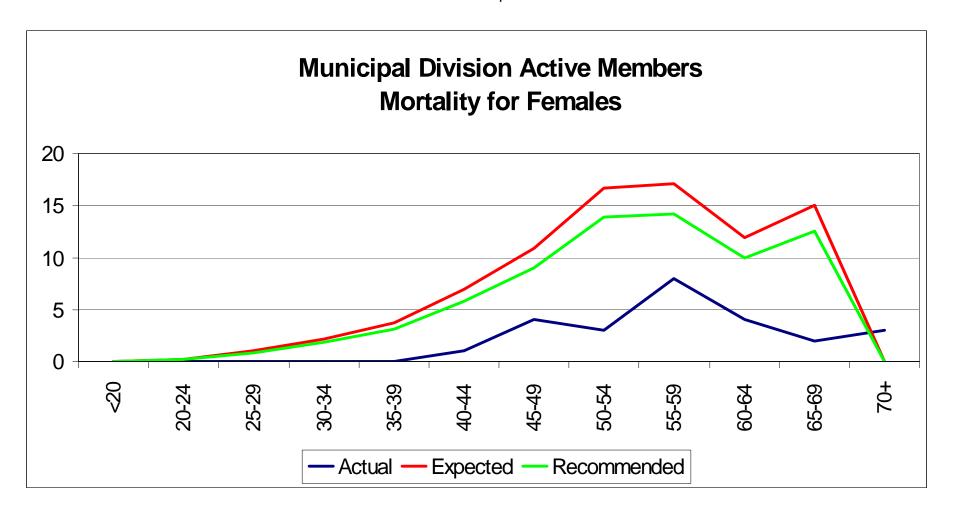
Table 3

Police and Fire Division Active Members
Mortality for Males and Females

Age	Expected Deaths						Actual Deaths					
	2001	2002	2003	2004	2005	Total	2001	2002	2003	2004	2005	Total
<20	0	0	0	0	0	**0**	0	0	0	0	0	**0**
20-24	0	0	0	0	0	**1**	0	0	0	0	0	**0**
25-29	1	1	1	1	1	**4**	0	0	0	0	0	**0**
30-34	2	2	2	2	1	**8**	2	0	0	0	0	**2**
35-39	2	2	2	2	2	**9**	1	0	0	1	0	**2**
40-44	2	2	2	2	2	**12**	0	0	0	2	0	**2**
45-49	3	3	3	3	3	**16**	3	0	0	4	0	**7**
50-54	4	4	4	4	4	**20**	0	0	0	0	0	**0**
55-59	2	2	2	3	2	**12**	1	0	0	0	0	**1**
60-64	0	1	1	0	0	**2**	0	0	0	0	0	**0**
65-69	0	0	0	0	0	**0**	0	0	0	0	0	**0**
70-74	0	0	0	0	0	**0**	0	0	0	0	0	**0**
75-80	0	0	0	0	0	**0**	0	0	0	0	0	**0**
80-84	0	0	0	0	0	**0**	0	0	0	0	0	**0**
84+	0	0	0	0	0	**0**	0	0	0	0	0	**0**
Total	**17**	**17**	**17**	**17**	**16**	**85**	**7**	**0**	**0**	**7**	**0**	**14**

Ratio of Actual to Expected Deaths

2001	40%
2002	0%
2003	0%
2004	41%
2005	0%

Graph 3

Police and Fire Division Active Members
Mortality for Males and Females
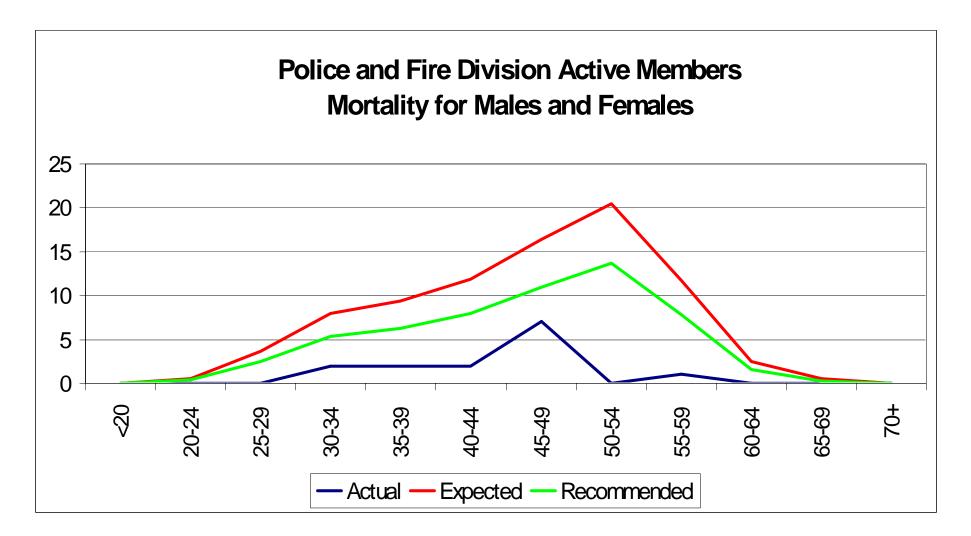
Table 4

**Municipal Division Nonactive Members
Mortality for Retired Males**

Age	Expected Deaths						Actual Deaths					
	2001	2002	2003	2004	2005	Total	2001	2002	2003	2004	2005	Total
<20	0	0	0	0	0	**0**	0	0	0	0	0	**0**
20-24	0	0	0	0	0	**0**	0	0	0	0	0	**0**
25-29	0	0	0	0	0	**0**	0	0	0	0	0	**0**
30-34	0	0	0	0	0	**0**	0	0	0	0	0	**0**
35-39	0	0	0	0	0	**0**	0	0	0	0	0	**0**
40-44	0	0	0	0	0	**0**	0	0	1	0	0	**1**
45-49	0	0	0	0	0	**0**	0	1	0	0	1	**2**
50-54	0	0	0	0	0	**1**	4	2	0	0	0	**6**
55-59	7	8	8	10	11	**44**	10	22	12	6	25	**75**
60-64	18	18	19	20	21	**96**	29	21	25	24	25	**124**
65-69	39	37	37	37	36	**185**	45	36	34	35	29	**179**
70-74	65	64	61	58	56	**304**	62	69	53	59	42	**285**
75-80	80	80	82	83	82	**406**	76	78	65	74	58	**351**
80-84	83	86	86	90	90	**436**	61	84	71	71	72	**359**
84+	96	101	102	109	118	**526**	82	87	78	82	94	**423**
Total	**388**	**393**	**395**	**407**	**415**	**1998**	**369**	**400**	**339**	**351**	**346**	**1805**

Ratio of Actual to Expected Deaths

2001	95%
2002	102%
2003	86%
2004	86%
2005	83%

Graph 4

Municipal Division Non-active Members
Mortality for Retired Males
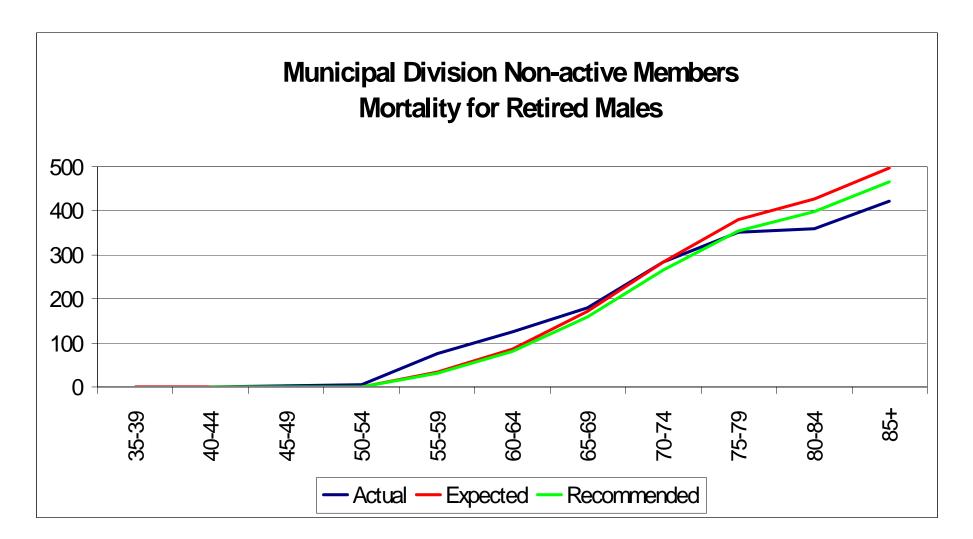
Table 5

Municipal Division Nonactive Members
Mortality for Retired Females

	Expected Deaths						Actual Deaths					
Age	2001	2002	2003	2004	2005	Total	2001	2002	2003	2004	2005	Total
<20	0	0	0	0	0	**0**	0	0	0	0	0	**0**
20-24	0	0	0	0	0	**0**	0	0	0	0	0	**0**
25-29	0	0	0	0	0	**0**	0	0	0	0	0	**0**
30-34	0	0	0	0	0	**0**	0	0	0	0	0	**0**
35-39	0	0	0	0	0	**0**	0	0	0	0	0	**0**
40-44	0	0	0	0	0	**0**	0	0	0	0	0	**0**
45-49	0	0	0	0	0	**0**	0	0	0	0	0	**0**
50-54	0	0	0	0	0	**0**	0	0	0	0	0	**0**
55-59	3	3	3	4	5	**18**	4	7	18	3	23	**55**
60-64	9	10	10	11	11	**52**	14	19	25	15	21	**94**
65-69	18	17	18	19	20	**92**	14	20	17	27	20	**98**
70-74	27	27	27	27	28	**136**	23	19	21	22	17	**102**
75-80	39	39	40	40	40	**198**	37	31	32	34	28	**162**
80-84	52	54	54	54	54	**267**	39	43	43	37	41	**203**
84+	106	106	107	111	118	**548**	76	95	84	78	85	**418**
Total	**253**	**256**	**260**	**267**	**276**	**1312**	**207**	**234**	**240**	**216**	**235**	**1132**

Ratio of Actual to Expected Deaths

2001	82%
2002	91%
2003	92%
2004	81%
2005	85%

Graph 5

Municipal Division Non-active Members
Mortality for Retired Females
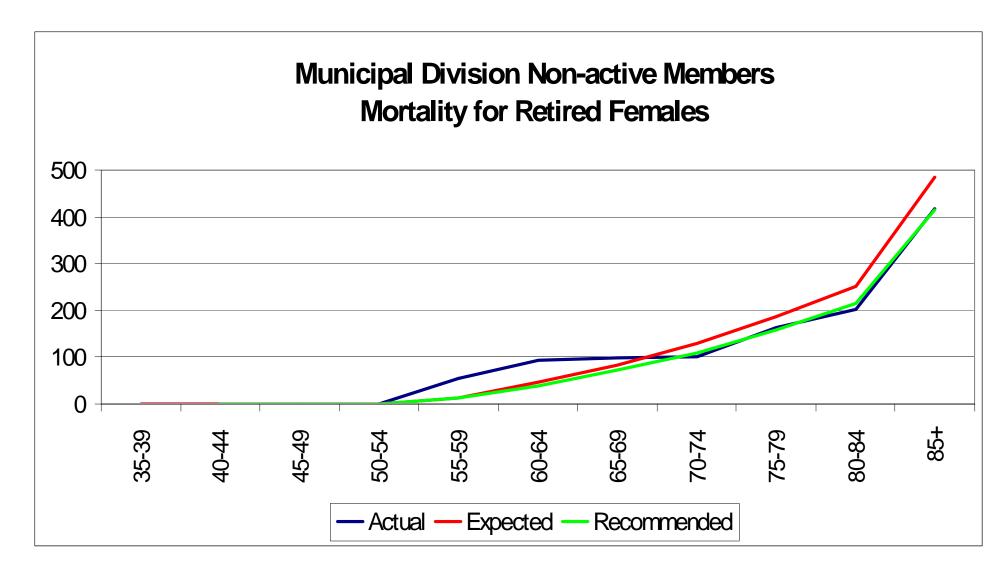
Table 6

Police and Fire Division Nonactive Members
Mortality for Retired Males and Females

Age	Expected Deaths						Actual Deaths					
	2001	2002	2003	2004	2005	Total	2001	2002	2003	2004	2005	Total
<20	0	0	0	0	0	**0**	0	0	0	0	0	**0**
20-24	0	0	0	0	0	**0**	0	0	0	0	0	**0**
25-29	0	0	0	0	0	**0**	0	0	0	0	0	**0**
30-34	0	0	0	0	0	**0**	0	0	0	0	0	**0**
35-39	0	0	0	0	0	**0**	0	0	0	0	0	**0**
40-44	0	0	0	0	0	**0**	0	0	0	0	0	**0**
45-49	1	1	1	1	1	**4**	0	6	1	2	3	**12**
50-54	6	6	5	5	5	**26**	9	11	14	8	1	**43**
55-59	15	16	15	16	16	**79**	17	15	19	21	17	**89**
60-64	22	23	26	28	28	**126**	18	23	21	16	18	**96**
65-69	27	28	30	31	34	**150**	23	25	20	19	30	**117**
70-74	32	33	34	36	36	**171**	19	21	32	34	34	**140**
75-80	29	33	35	37	39	**173**	24	33	33	35	34	**159**
80-84	34	29	28	30	30	**150**	37	15	18	29	23	**122**
84+	52	55	52	53	52	**265**	41	59	40	49	45	**234**
Total	**218**	**223**	**226**	**236**	**242**	**1144**	**188**	**208**	**198**	**213**	**205**	**1012**

Ratio of Actual to Expected Deaths

2001	86%
2002	93%
2003	88%
2004	90%
2005	85%

Graph 6

Police and Fire Division Non-active Members Mortality for Retired Males and Females
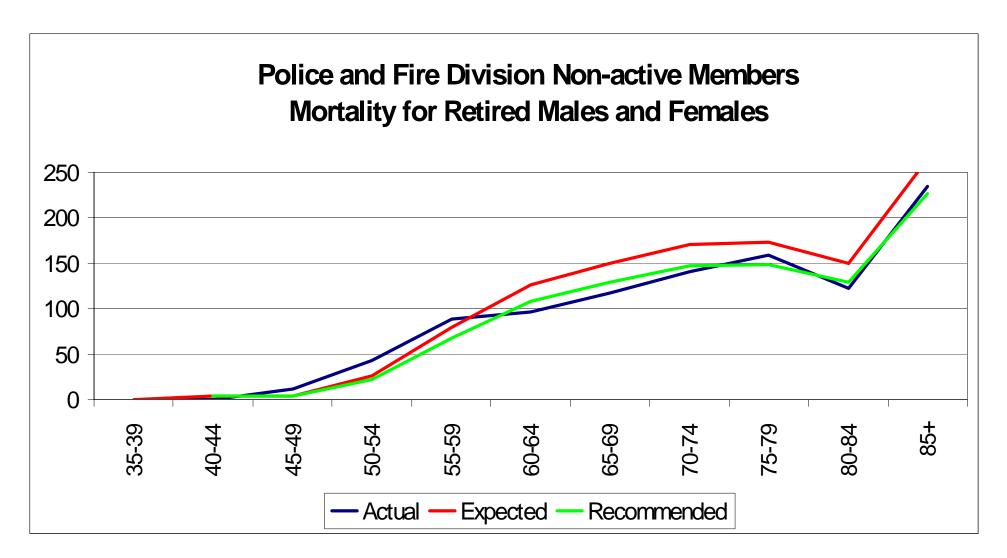
Table 7

Municipal Division Nonactive Members
Mortality for Disabled Males

Age	Expected Deaths						Actual Deaths					
	2001	2002	2003	2004	2005	Total	2001	2002	2003	2004	2005	Total
<20	0	0	0	0	0	**0**	0	0	0	0	0	**0**
20-24	0	0	0	0	0	**0**	0	0	0	0	0	**0**
25-29	0	0	0	0	0	**0**	0	0	0	0	0	**0**
30-34	0	0	0	0	0	**0**	0	0	0	0	0	**0**
35-39	0	0	0	0	0	**0**	0	0	0	0	1	**1**
40-44	1	1	1	0	0	**3**	0	0	0	0	1	**1**
45-49	2	2	2	2	2	**10**	4	1	1	1	0	**7**
50-54	5	4	4	4	4	**21**	10	8	2	8	5	**33**
55-59	6	6	6	6	6	**30**	11	12	9	11	10	**53**
60-64	7	7	7	7	7	**35**	8	5	14	11	8	**46**
65-69	9	9	8	7	8	**41**	9	9	19	8	8	**53**
70-74	11	11	10	11	9	**52**	17	17	7	22	13	**76**
75-80	14	13	13	13	12	**66**	14	12	11	14	16	**67**
80-84	12	14	14	13	14	**67**	9	14	12	9	13	**57**
84+	9	9	9	10	14	**51**	9	8	5	3	10	**35**
Total	**76**	**75**	**74**	**75**	**76**	**376**	**91**	**86**	**80**	**87**	**85**	**429**

Ratio of Actual to Expected Deaths

2001	120%
2002	114%
2003	108%
2004	116%
2005	112%

Graph 7

Municipal Division Non-active Members
Mortality for Disabled Males
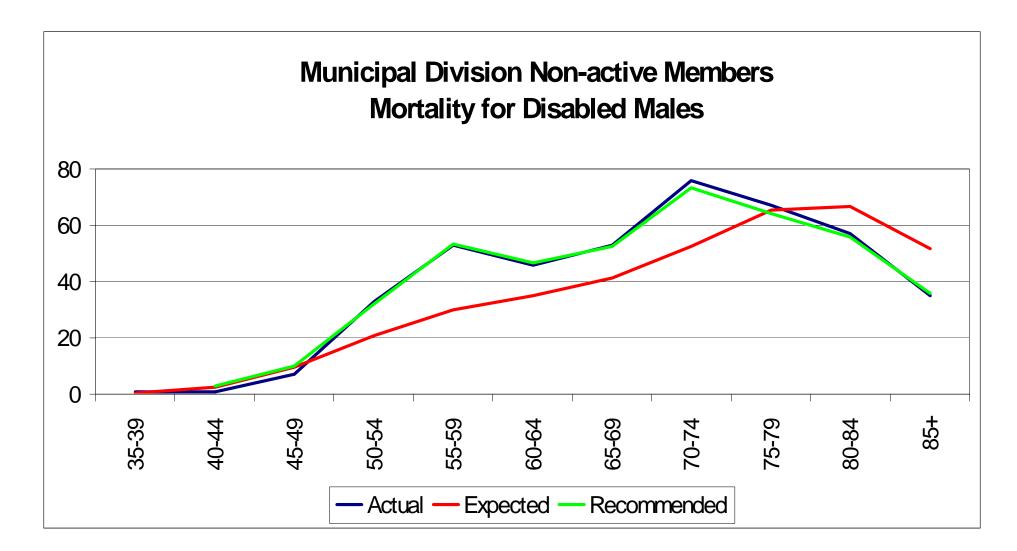
Table 8

Municipal Division Nonactive Members
Mortality for Disabled Females

Age	Expected Deaths						Actual Deaths					
	2001	2002	2003	2004	2005	Total	2001	2002	2003	2004	2005	Total
<20	0	0	0	0	0	**0**	0	0	0	0	0	**0**
20-24	0	0	0	0	0	**0**	0	0	0	0	0	**0**
25-29	0	0	0	0	0	**0**	0	0	0	0	0	**0**
30-34	0	0	0	0	0	**0**	0	0	0	0	0	**0**
35-39	0	0	0	0	0	**0**	1	0	0	0	0	**1**
40-44	0	0	0	0	0	**1**	3	2	0	0	0	**5**
45-49	0	0	0	1	1	**3**	3	0	1	1	0	**5**
50-54	1	1	1	1	1	**5**	0	1	2	3	3	**9**
55-59	1	1	1	1	1	**6**	4	2	2	0	3	**11**
60-64	2	2	2	2	2	**10**	3	6	4	3	2	**18**
65-69	2	2	2	3	2	**11**	1	2	1	5	3	**12**
70-74	2	2	2	3	3	**12**	2	2	1	3	0	**8**
75-80	4	4	4	3	3	**18**	4	4	4	2	3	**17**
80-84	3	4	4	4	4	**20**	3	4	3	1	6	**17**
84+	4	5	5	5	6	**25**	2	1	6	4	3	**16**
Total	**21**	**22**	**22**	**22**	**23**	**110**	**26**	**24**	**24**	**22**	**23**	**119**

Ratio of Actual to Expected Deaths

2001	125%
2002	111%
2003	107%
2004	100%
2005	101%

Graph 8

Municipal Division Non-active Members
Mortality for Disabled Females
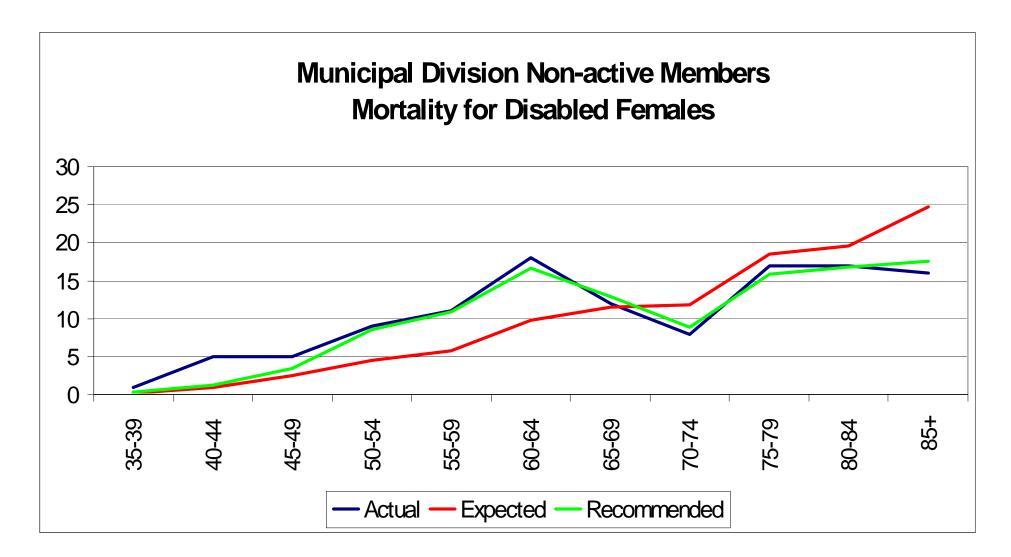
Table 9

Police and Fire Division Nonactive Members
Mortality for Disabled Males and Females

Age	Expected Deaths						Actual Deaths					
	2001	2002	2003	2004	2005	Total	2001	2002	2003	2004	2005	Total
<20	0	0	0	0	0	**0**	0	0	0	0	0	**0**
20-24	0	0	0	0	0	**0**	0	0	0	0	0	**0**
25-29	0	0	0	0	0	**0**	0	0	0	0	0	**0**
30-34	0	0	0	0	0	**0**	0	0	0	0	0	**0**
35-39	0	0	0	0	0	**1**	0	0	0	0	1	**1**
40-44	1	1	1	1	1	**4**	0	0	2	0	0	**2**
45-49	4	3	3	2	2	**13**	2	0	1	1	1	**5**
50-54	9	8	7	6	5	**34**	6	2	2	0	2	**12**
55-59	13	13	12	11	11	**60**	8	8	12	9	8	**45**
60-64	11	12	14	15	16	**67**	5	8	9	11	6	**39**
65-69	13	13	12	13	13	**64**	11	10	8	8	10	**47**
70-74	17	17	16	17	16	**84**	17	18	10	14	13	**72**
75-80	16	19	20	20	20	**96**	4	14	18	8	12	**56**
80-84	14	15	14	15	16	**74**	15	10	8	11	11	**55**
84+	14	14	16	16	19	**78**	11	9	11	8	11	**50**
Total	**113**	**113**	**115**	**116**	**119**	**576**	**79**	**79**	**81**	**70**	**75**	**384**

Ratio of Actual to Expected Deaths

2001	70%
2002	70%
2003	71%
2004	60%
2005	63%

Graph 9

Police and Fire Division Non-active Members Mortality for Disabled Males and Females
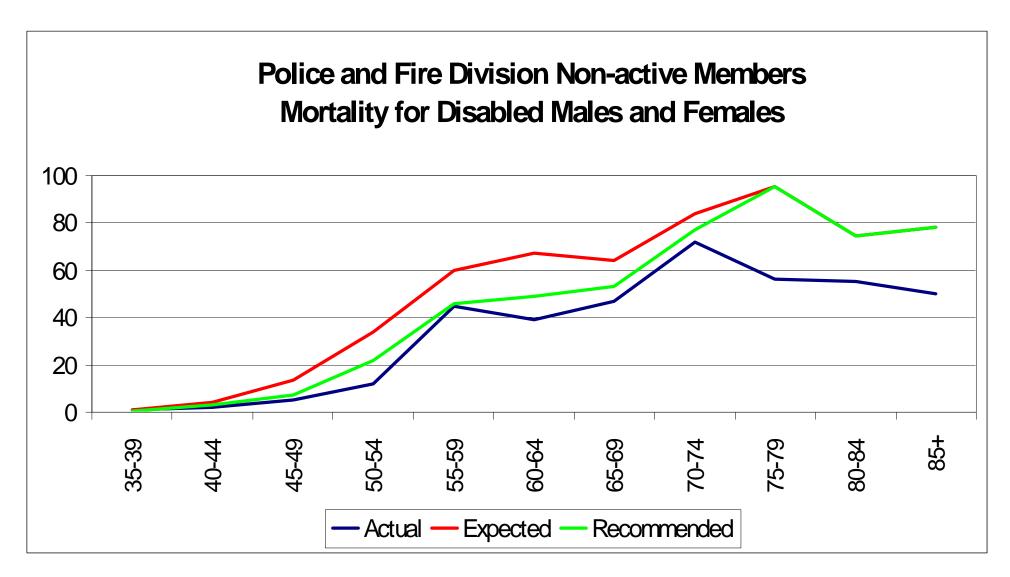
Table 10

Municipal Division Active Members
Disability for Males

Age	Expected Disabilities						Actual Disabilities					
	2001	**2002**	**2003**	**2004**	**2005**	**Total**	**2001**	**2002**	**2003**	**2004**	**2005**	**Total**
<20	0	0	0	0	0	**0**	0	0	0	0	0	**0**
20-24	0	0	0	0	0	**0**	0	0	0	0	0	**0**
25-29	0	0	0	0	0	**1**	0	0	1	0	0	**1**
30-34	1	1	1	1	1	**4**	0	0	0	1	0	**1**
35-39	2	3	2	2	2	**11**	1	2	1	2	1	**7**
40-44	6	7	6	6	5	**30**	2	6	5	1	0	**14**
45-49	12	12	12	12	11	**57**	7	8	11	10	7	**43**
50-54	18	18	17	16	15	**84**	16	19	19	19	14	**87**
55-59	0	0	0	0	0	**0**	12	0	5	1	7	**25**
Total	**39**	**40**	**38**	**36**	**33**	**186**	**38**	**35**	**42**	**34**	**29**	**178**

Ratio of Actual to Expected Disabilities

2001	97%
2002	88%
2003	112%
2004	93%
2005	87%

Graph 10

Municipal Division Active Members
Disability for Males
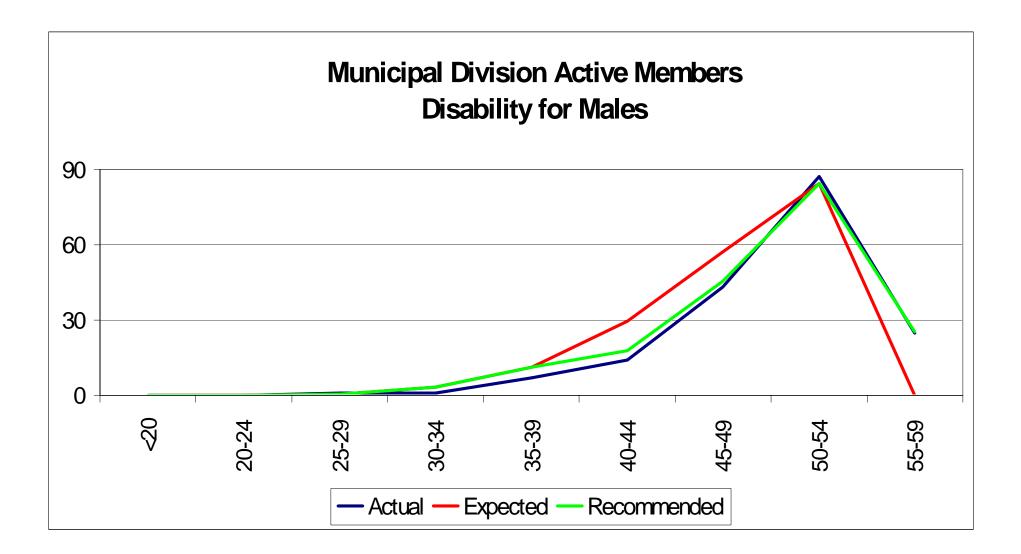
Table 11

Municipal Division Active Members
Disability for Females

	Expected Disabilities						Actual Disabilities					
Age	2001	2002	2003	2004	2005	Total	2001	2002	2003	2004	2005	Total
<20	0	0	0	0	0	**0**	0	0	0	0	0	**0**
20-24	0	0	0	0	0	**0**	0	0	0	0	0	**0**
25-29	0	0	0	0	0	**0**	0	0	0	0	0	**0**
30-34	0	0	0	0	0	**2**	0	1	0	0	0	**1**
35-39	1	1	1	1	1	**4**	0	1	1	0	1	**3**
40-44	2	2	2	2	2	**12**	1	1	4	2	1	**9**
45-49	4	4	5	5	4	**22**	4	2	3	8	4	**21**
50-54	7	7	7	7	7	**35**	9	7	12	11	7	**46**
55-59	0	0	0	0	0	**0**	6	0	3	3	0	**12**
Total	**15**	**15**	**16**	**16**	**15**	**75**	**20**	**12**	**23**	**24**	**13**	**92**

Ratio of Actual to Expected Disabilities

2001	137%
2002	82%
2003	147%
2004	154%
2005	90%

Graph 11

Municipal Division Active Members
Disability for Females

Legend: Actual — Expected — Recommended

X-axis: <20, 20-24, 25-29, 30-34, 35-39, 40-44, 45-49, 50-54, 55-59

Y-axis: 0, 10, 20, 30, 40, 50
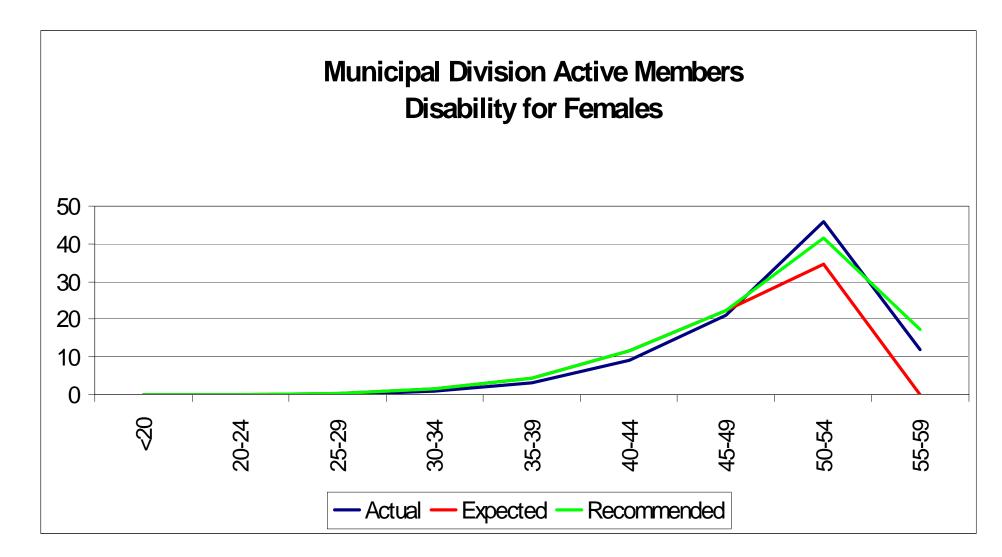
Table 12

Police and Fire Division Active Members
Disability for Males and Females

Age	Expected Disabilities						Actual Disabilities					
	2001	2002	2003	2004	2005	Total	2001	2002	2003	2004	2005	Total
<20	0	0	0	0	0	**0**	0	0	0	0	0	**0**
20-24	0	0	0	0	0	**1**	0	0	0	0	0	**0**
25-29	1	1	1	1	1	**4**	0	0	0	1	1	**2**
30-34	2	2	2	2	2	**11**	0	2	5	0	5	**12**
35-39	3	3	3	3	3	**16**	3	7	3	4	1	**18**
40-44	4	4	4	4	4	**18**	5	4	3	0	2	**14**
45-49	4	4	4	4	4	**20**	4	5	4	1	1	**15**
50-54	4	4	3	3	3	**17**	1	1	0	0	1	**3**
Total	**18**	**18**	**18**	**18**	**17**	**88**	**13**	**19**	**15**	**6**	**11**	**64**

Ratio of Actual to Expected Disabilities

2001	72%
2002	106%
2003	85%
2004	34%
2005	65%

Graph 12

Police and Fire Division Active Members
Disability for Males and Females
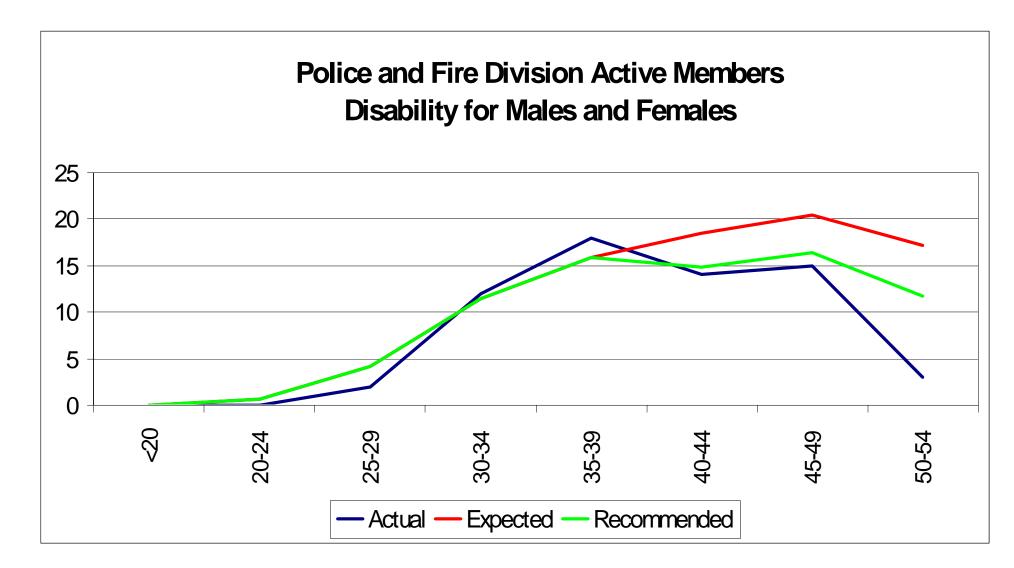
Table 13

**1967 Municipal Division Active Members
Turnover for Males**

	Expected Turnovers							Actual Turnovers					
Age	**2001**	**2002**	**2003**	**2004**	**2005**	**Total**		**2001**	**2002**	**2003**	**2004**	**2005**	**Total**
<20	0	0	0	0	0	**0**		0	0	0	0	0	**0**
20-24	0	0	0	0	0	**0**		0	0	0	0	0	**0**
25-29	1	1	0	0	0	**2**		1	0	0	1	0	**2**
30-34	9	5	3	2	1	**20**		6	3	9	0	1	**19**
35-39	24	19	14	11	7	**74**		20	21	18	12	14	**85**
40-44	40	36	29	24	18	**148**		23	47	34	19	24	**147**
45-49	42	40	38	35	30	**185**		44	57	37	26	19	**183**
50-54	41	38	33	30	27	**169**		32	49	34	24	21	**160**
Total	**156**	**138**	**118**	**101**	**83**	**597**		**126**	**177**	**132**	**82**	**79**	**596**

Ratio of Actual to Expected Turnovers

2001	81%
2002	128%
2003	112%
2004	81%
2005	95%

Graph 13

1967 Municipal Division Active Members Turnover for Males

Legend: Actual — Expected = Recommended
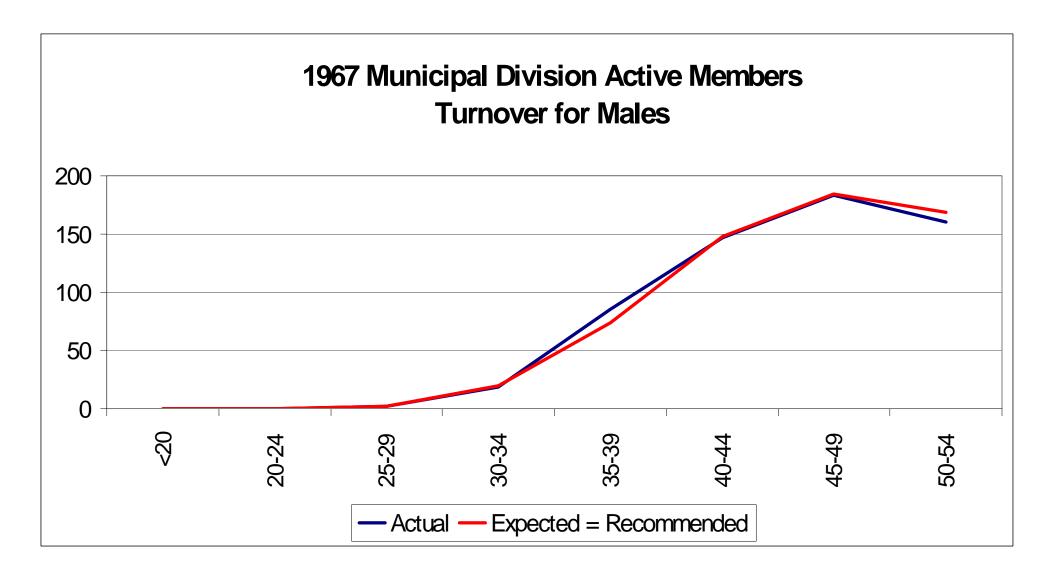
Table 14

1967 Municipal Division Active Members
Turnover for Females

	Expected Turnovers						Actual Turnovers					
Age	2001	2002	2003	2004	2005	Total	2001	2002	2003	2004	2005	Total
<20	0	0	0	0	0	**0**	0	0	0	0	0	**0**
20-24	0	0	0	0	0	**0**	0	0	0	0	0	**0**
25-29	0	0	0	0	0	**1**	1	2	1	0	0	**4**
30-34	9	6	4	2	1	**21**	10	6	3	3	1	**23**
35-39	25	20	16	13	9	**82**	23	21	11	12	13	**80**
40-44	35	31	28	24	19	**137**	26	42	20	19	13	**120**
45-49	37	36	36	34	29	**171**	35	40	29	28	32	**164**
50-54	41	38	37	35	32	**182**	26	33	17	12	21	**109**
Total	**147**	**130**	**120**	**107**	**90**	**594**	**121**	**144**	**81**	**74**	**80**	**500**

Ratio of Actual to Expected Turnovers

2001	82%
2002	110%
2003	67%
2004	69%
2005	89%

Graph 14

1967 Municipal Division Active Members Turnover for Females
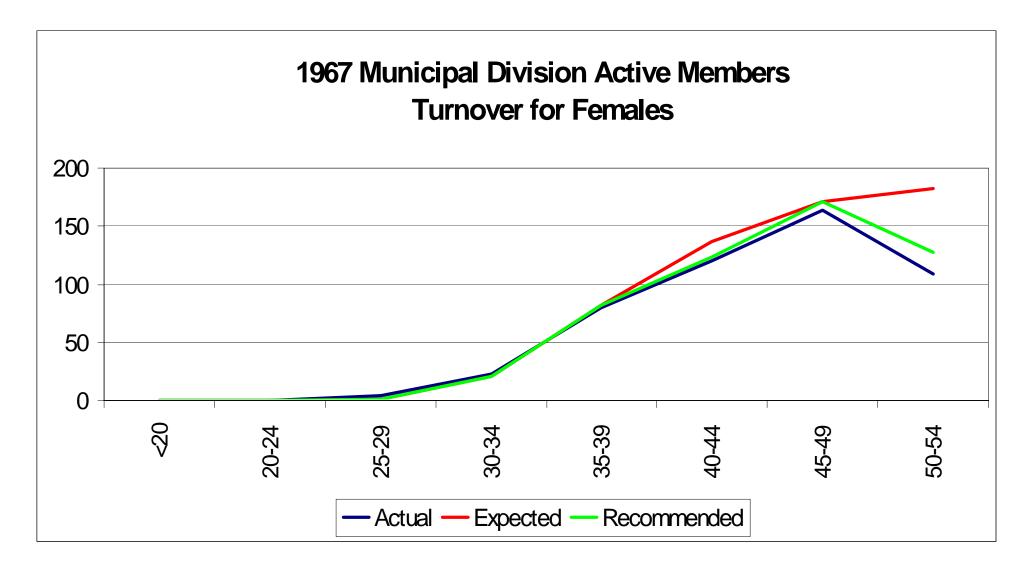
Table 15

1967 Police and Fire Division Active Members
Turnover for Males and Females

	Expected Turnovers							Actual Turnovers					
Age	**2001**	**2002**	**2003**	**2004**	**2005**	**Total**		**2001**	**2002**	**2003**	**2004**	**2005**	**Total**
<20	0	0	0	0	0	**0**		0	0	0	0	0	**0**
20-24	0	0	0	0	0	**0**		0	0	0	0	0	**0**
25-29	0	0	0	0	0	**0**		0	0	0	0	0	**0**
30-34	0	0	0	0	0	**0**		0	0	0	0	0	**0**
35-39	4	2	1	1	1	**8**		2	7	2	0	0	**11**
40-44	9	8	6	5	3	**31**		4	9	5	3	3	**24**
45-49	2	2	1	1	1	**7**		9	7	6	10	5	**37**
Total	**14**	**12**	**9**	**7**	**5**	**47**		**15**	**23**	**13**	**13**	**8**	**72**

Ratio of Actual to Expected Turnovers

2001	103%
2002	198%
2003	143%
2004	185%
2005	156%

Graph 15

1967 Police and Fire Division Active Members Turnover for Males and Females
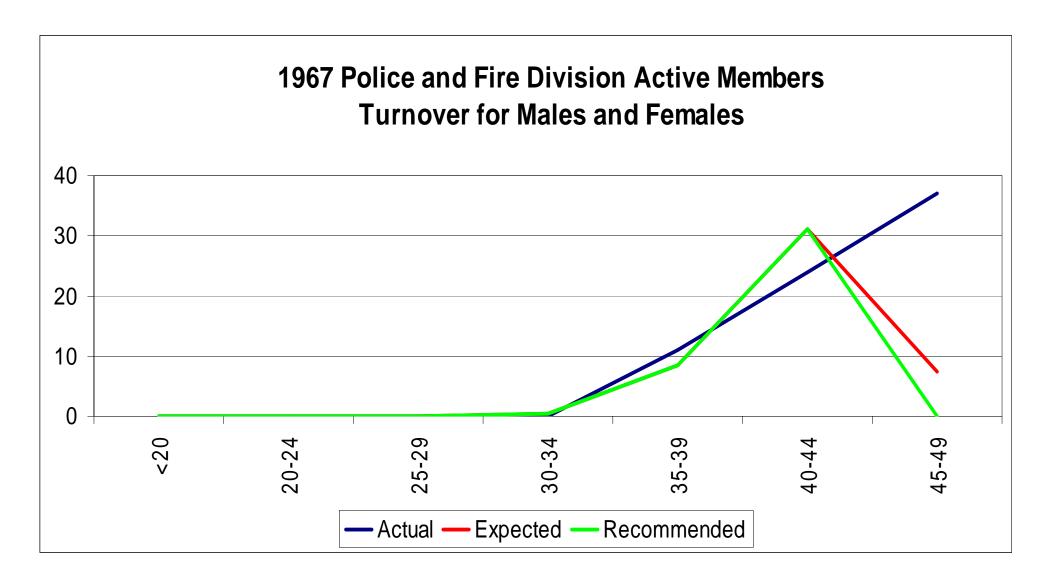
Table 16

**1987 Municipal Division Active Members
Turnover for Males and Females**

Age	Expected Turnovers						Actual Turnovers					
	2001	2002	2003	2004	2005	Total	2001	2002	2003	2004	2005	Total
<20	0	0	0	0	0	**0**	0	0	0	0	51	**51**
20-24	27	34	50	52	40	**204**	23	39	119	83	97	**361**
25-29	109	127	138	139	122	**635**	121	129	182	147	204	**783**
30-34	156	171	177	173	145	**822**	158	169	187	169	173	**856**
35-39	115	130	141	147	141	**674**	122	127	182	132	201	**764**
40-44	85	97	114	122	114	**532**	86	112	163	152	216	**729**
45-49	56	65	75	82	80	**358**	82	87	139	107	145	**560**
50-54	31	38	45	49	50	**213**	49	54	83	71	99	**356**
55-59	18	24	28	33	35	**137**	33	52	61	49	59	**254**
Total	**596**	**686**	**767**	**797**	**728**	**3574**	**674**	**769**	**1116**	**910**	**1245**	**4714**

Ratio of Actual to Expected Turnovers

2001	113%
2002	112%
2003	145%
2004	114%
2005	171%

Graph 16

1987 Municipal Division Active Members
Turnover for Males and Females
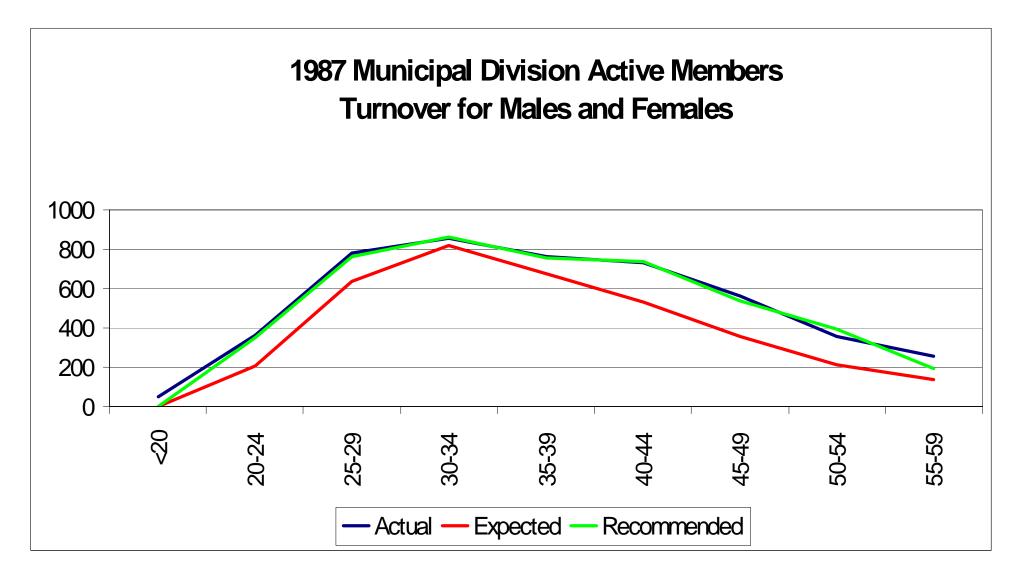
Table 17

**1987 Police and Fire Division Active Members
Turnover for Males and Females**

| | Expected Turnovers | | | | | | | Actual Turnovers | | | | | |
Age	2001	2002	2003	2004	2005	Total		2001	2002	2003	2004	2005	Total
<20	0	0	0	0	0	**0**		0	0	0	0	0	**0**
20-24	4	5	3	5	5	**22**		1	2	8	14	6	**31**
25-29	22	22	20	22	20	**106**		24	28	37	37	34	**160**
30-34	34	34	33	32	29	**162**		35	50	53	34	40	**212**
35-39	20	23	24	27	28	**122**		31	39	39	27	47	**183**
40-44	7	8	9	11	12	**48**		12	26	26	10	29	**103**
45-49	2	3	3	3	4	**14**		3	7	7	7	7	**31**
50-54	0	0	0	0	0	**1**		0	1	3	3	4	**11**
Total	**90**	**95**	**92**	**101**	**97**	**475**		**106**	**153**	**173**	**132**	**167**	**731**

Ratio of Actual to Expected Turnovers

2001	118%
2002	161%
2003	187%
2004	131%
2005	172%

Graph 17

1987 Police and Fire Division Active Members Turnover for Males and Females
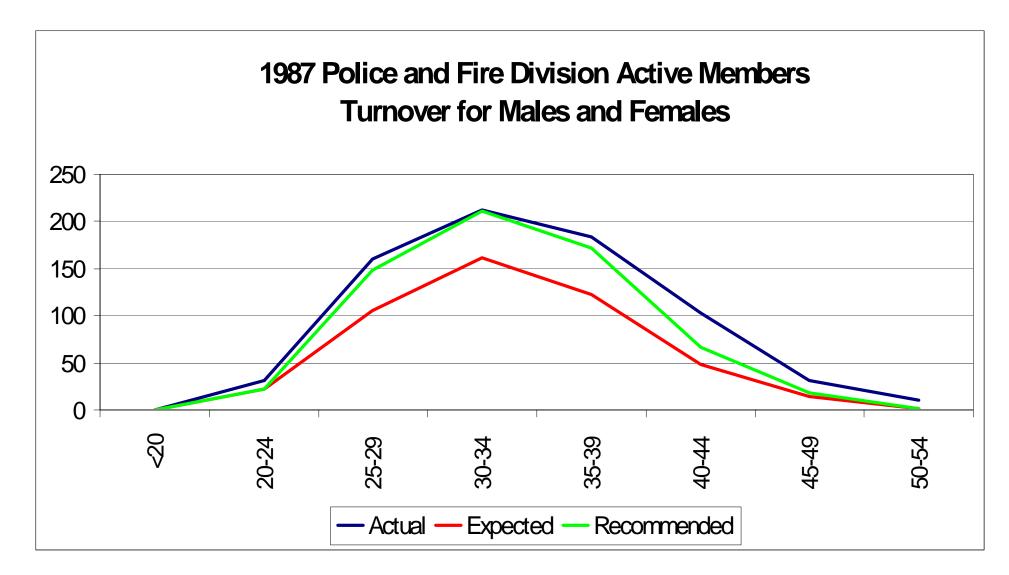
Table 18

1967 Municipal Division Active Members
Retirement for Males and Females

	Expected Retirements							Actual Retirements					
Age	**2001**	**2002**	**2003**	**2004**	**2005**	**Total**		**2001**	**2002**	**2003**	**2004**	**2005**	**Total**
55	114	135	142	136	109	**636**		158	253	302	271	227	**1211**
56	22	22	23	19	18	**104**		114	113	186	119	121	**653**
57	20	15	17	15	12	**79**		55	40	80	58	32	**265**
58	16	14	10	10	8	**59**		51	41	53	33	26	**204**
59	11	10	10	6	7	**45**		39	45	45	28	21	**178**
60	12	9	9	7	5	**42**		35	25	40	23	17	**140**
61	10	10	7	6	4	**37**		28	30	31	25	8	**122**
62	18	13	16	9	8	**64**		47	27	32	28	16	**150**
63	9	7	6	5	3	**30**		19	18	24	11	10	**82**
64	7	7	6	4	2	**27**		16	10	9	13	4	**52**
65+	113	98	89	70	34	**404**		60	48	59	44	30	**241**
Total	**353**	**341**	**334**	**287**	**210**	**1525**		**622**	**650**	**861**	**653**	**512**	**3298**

Ratio of Actual to Expected Retirements

2001	176%
2002	191%
2003	257%
2004	228%
2005	244%

Graph 18

1967 Municipal Division Active Members
Retirement for Males and Females
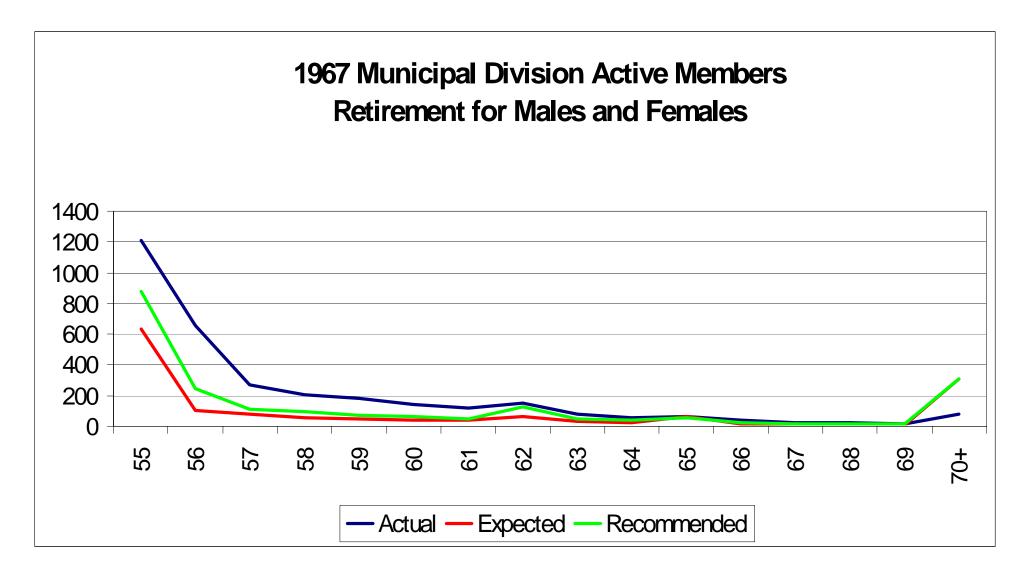
Table 19

1967 Police and Fire Division Active Members
Retirement for Males and Females

| | Expected Retirements | | | | | | | Actual Retirements | | | | | |
Age	2001	2002	2003	2004	2005	Total		2001	2002	2003	2004	2005	Total
45	20	18	17	15	15	**85**		17	17	15	11	6	**66**
46	20	15	13	13	11	**72**		17	15	16	21	10	**79**
47	16	18	13	12	11	**71**		16	21	12	9	5	**63**
48	19	16	18	13	11	**77**		18	16	9	11	2	**56**
49	18	18	14	16	12	**79**		18	15	16	19	5	**73**
50	21	17	16	12	14	**80**		37	33	44	34	21	**169**
51	20	19	16	15	11	**81**		32	17	32	15	7	**103**
52	18	19	19	16	14	**85**		30	23	37	34	12	**136**
53	20	18	18	16	14	**85**		29	18	36	24	13	**120**
54	14	15	15	15	11	**70**		28	34	24	35	14	**135**
55	7	12	13	12	11	**55**		22	20	34	32	13	**121**
56	6	6	11	10	9	**42**		16	15	38	29	14	**112**
57	6	3	4	6	5	**24**		16	11	24	27	4	**82**
58	4	4	2	3	3	**16**		12	6	2	6	7	**33**
59	2	3	3	2	2	**11**		13	5	5	4	4	**31**
60+	6	6	4	5	3	**24**		17	14	11	14	12	**68**
Total	**218**	**206**	**198**	**180**	**157**	**958**		**338**	**280**	**355**	**325**	**149**	**1447**

Ratio of Actual to Expected Retirements

2001	155%
2002	136%
2003	180%
2004	180%
2005	95%

Graph 19

1967 Police and Fire Division Active Members Retirement for Males and Females
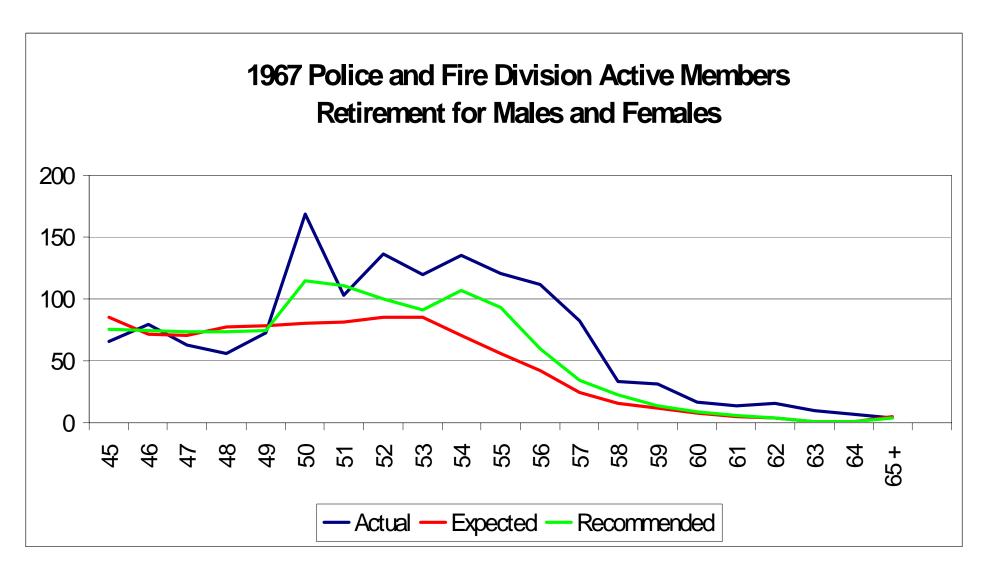
Table 20

1987 Municipal Division Active Members
Retirement for Males and Females

	Expected Retirements							Actual Retirements					
Age	2001	2002	2003	2004	2005	Total		2001	2002	2003	2004	2005	Total
55	0	0	1	0	0	**1**		0	1	0	0	0	**1**
56	0	0	0	0	0	**1**		0	0	1	1	1	**3**
57	0	0	0	0	1	**2**		0	1	3	0	0	**4**
58	0	0	0	0	0	**1**		0	2	1	1	2	**6**
59	0	0	0	1	0	**1**		0	0	0	6	0	**6**
60	5	5	8	12	9	**39**		3	1	3	5	12	**24**
61	3	2	5	5	4	**18**		4	1	11	13	9	**38**
62	5	4	6	5	7	**27**		3	0	9	1	7	**20**
63	3	2	3	5	3	**16**		5	1	2	3	10	**21**
64	4	1	3	4	5	**16**		2	4	1	3	6	**16**
65+	35	16	27	31	25	**135**		12	21	17	21	37	**108**
Total	**55**	**31**	**53**	**63**	**55**	**258**		**29**	**32**	**48**	**54**	**84**	**247**

Ratio of Actual to Expected Retirements

2001	52%
2002	104%
2003	91%
2004	85%
2005	152%

Graph 20

1987 Municipal Division Active Members
Retirement for Males and Females

Legend: Actual — Expected = Recommended
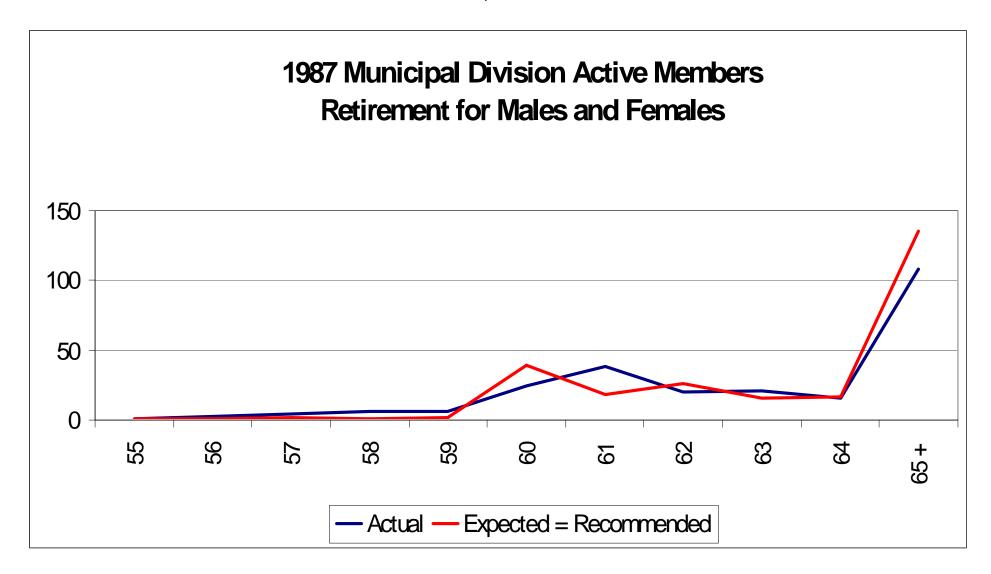
Table 21

1987 Police and Fire Division Active Members
Retirement for Males and Females
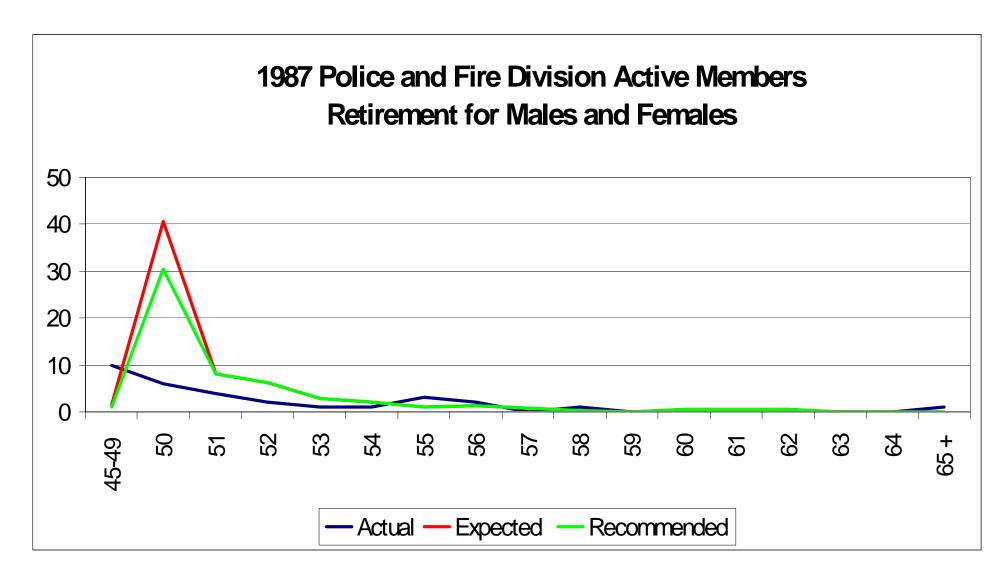
| | Expected Retirements | | | | | | | Actual Retirements | | | | | |
Age	2001	2002	2003	2004	2005	Total		2001	2002	2003	2004	2005	Total
45-49	0	0	0	0	0	**1**		2	0	1	3	4	**10**
50	2	3	11	9	16	**41**		0	1	1	0	4	**6**
51	0	1	1	3	3	**8**		0	1	2	1	0	**4**
52	0	0	1	1	5	**6**		0	0	1	1	0	**2**
53	0	0	0	1	2	**3**		0	0	0	0	1	**1**
54	0	0	0	1	1	**2**		0	0	0	0	1	**1**
55	0	0	0	0	0	**1**		1	1	0	1	0	**3**
56	0	0	0	0	1	**1**		0	1	0	0	1	**2**
57	0	0	0	0	0	**1**		0	0	0	0	0	**0**
58	0	0	0	0	0	**0**		0	0	0	1	0	**1**
59	0	0	0	0	0	**0**		0	0	0	0	0	**0**
60	0	0	0	0	0	**0**		0	0	0	0	0	**0**
61	0	0	0	0	0	**0**		0	0	0	0	0	**0**
62	0	0	0	0	0	**1**		0	0	0	0	0	**0**
63	0	0	0	0	0	**0**		0	0	0	0	0	**0**
64	0	0	0	0	0	**0**		0	0	0	0	0	**0**
65+	0	0	0	0	0	**0**		0	0	0	0	1	**1**
Total	**4**	**5**	**14**	**16**	**27**	**66**		**3**	**4**	**5**	**7**	**12**	**31**

Ratio of Actual to Expected Retirements

2001	85%
2002	74%
2003	35%
2004	45%
2005	44%

Graph 21

1987 Police and Fire Division Active Members Retirement for Males and Females

Legend: Actual — Expected — Recommended

MERCER
Human Resource Consulting

1255 23rd Street, NW, Suite 500
Washington, DC 20036
202 331 5200

MMC Marsh & McLennan Companies