City of Philadelphia
Municipal Retirement System

Actuarial Experience Study
For July 1, 1988 Through
June 30, 1993

Foster Higgins

CONTENTS

Introduction

This Actuarial Experience Study for the City of Philadelphia Municipal Retirement System covers the five years from July 1, 1988 through June 30, 1993. The study contains information for setting actuarial assumptions to use in your July 1, 1993 and future actuarial valuations. We've analyzed your System's actuarial experience, compared experience with the expected experience using your current actuarial assumptions, and summarized our findings.

This study is the most recent in a series of studies we've done. The previous study covered July 1, 1984 through July 1, 1989. 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, 1993 actuarial valuation are in this report.

Summary of findings

■ **Non-economic assumptions** We reviewed your actuarial experience for this period and compared it with the results of prior studies. We combined the 1967 Plan and Plan 87 and analyzed deaths, disabilities, terminations (quits and discharges), and retirements separately, with breakdowns for municipal members and police and fire members.

We recommend a 5% decrease in the assumed mortality rates for retired members, a 10% decrease for disabled municipal workers, and an even greater decrease for disabled police and fire members.

We reviewed the proportion of service-connected deaths versus those which are ordinary deaths and found no service-connected deaths for the plan years ending 1989 through 1993. This experience is thought to be at least partially due to the fact that it may be more beneficial for survivors to apply for ordinary death benefits plus workers' compensation rather than service-connected death benefits. No change is recommended.

The number of disabilities for municipal members during the period of the study was less than anticipated under the assumption. For police and fire members, actual experience during the period was more than the expected experience. The City has recently adopted an outside earnings offset provision and strengthened the definition of disability. Because we will not know the impact of these plan changes on experience until the 1997 study, we recommend no change in disability rates at this time.

Turnover for active members was considerably less than anticipated and may be temporary because of the poor economy. We recommend a 20% decrease in the assumed turnover rates for municipal members and a 30% decrease for police and fire members.

Our analysis of retirement experience shows a higher rate of retirement at earlier ages and lower retirement rates at more advanced ages. Accordingly, we recommend smoothing the existing retirement rates to reflect actual retirement patterns.

- **Economic assumptions** We do not see a need for changing your 9% investment return assumption at this time, but recommend it be reviewed again in two years rather than waiting for the next full study in 1997.

We believe lowering the rate of salary increase from 6% to 5.5% is justified by both previous experience and existing employee contract provisions.

The current assumption for the annual rate of growth in total covered payroll is 6%. We believe your experience justifies lowering the payroll growth rate from 6% to 5.5%.

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. This procedure represents a divergence from the 1984 - 1989 study, which used data from the prior five years' actuarial valuations.

Annual rates of mortality

■ **Active members mortality experience** The mortality experience for active members is summarized in Tables 1 through 3 in part 4 of this report. A summary follows:

Mortality experience for active members

Year Ending June 30	Ratio of Actual to Expected Deaths		
	Municipal		Police and Fire
	Male	Female	
1989	119%	71%	95%
1990	83	100	90
1991	81	100	86
1992	100	52	62
1993	76	36	64
Average	92%	71%	79%

The rate of actual deaths for active members is lower than expected. After the 1989 experience study, the assumed rates of active member mortality were increased. Either the trend in mortality is decreasing or the experience in the prior study was unusually high for the years studied. It is also likely that the data supplied by the City did not include all deaths. No change in preretirement mortality rates is recommended at this time. If the 1997 study substantiates recent experience, it will be appropriate to reduce rates at that time.

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

Service-connected death experience

	Number of Service-Connected Deaths	Percentage of Service-Connected Deaths	
		Expected	Actual
Municipal members	0	2.5%	0.0%
Police and fire members	0	5.0%	0.0%

Although no service-connected deaths were reported, the expected rates are already quite low, having been cut 50% in 1989. We recommend no change at this time. This assumption has a very small impact on overall costs, but is used in determining the difference in the benefit value. The lack of service-connected deaths reported may not be because there were no service-connected deaths, but because survivors choose to apply for ordinary death benefits instead. Service-connected deaths are offset by workers' compensation and therefore may be lower than ordinary death benefits.

- **Retired member mortality experience** Mortality experience for retired members and surviving spouses is shown in Tables 4 through 7 of Part 4. The experience for retired members is summarized as follows:

Retired municipal members and surviving spouses

Year Ending June 30	Ratio of Actual to Expected Deaths	
	Male	Female
1989	112%	92%
1990	103	92
1991	102	101
1992	89	92
1993	78	79
Average	96%	91%

Corresponding results for retired police and fire members and surviving spouses are in Tables 6 and 7. A summary follows:

Retired police and fire members and surviving spouses

Year Ending June 30	Ratio of Actual to Expected Deaths	
	Male	Female
1989	95%	102%
1990	101	96
1991	95	102
1992	88	87
1993	90	84
Average	94%	94%

The above tables show that actual experience was lower than expected. A consistent overall trend of reduced mortality has occurred among the municipal retirees and police and fire retirees as well as by gender in each group. We recommend an overall rate decrease for all retirees to 105% of the UP-84 Mortality Table (gender-adjusted). Currently, the City is using 110% for males and females. If future low rates of mortality continue, further adjustments may be necessary.

Disabled member mortality experience

Tables 8 through 11 of Part 4 reflect the postretirement mortality experience for disabled members. This experience for municipal and police and fire members is as follows:

Disabled members, ratio of actual to expected deaths

Year Ending June 30	Municipal		Police and Fire	
	Male	Female	Male	Female
1989	103%	76%	44%	0%
1990	82	58	48	0
1991	89	96	36	0
1992	81	93	35	0
1993	82	78	47	100
Average	83%	80%	42%	50%

Considering the above, we find that the rate of actual mortality among disabled members is lower than anticipated especially for disabled police and fire members. We recommend a decrease in this assumption for the municipal group by 10%. For the police and fire group, we recommend a more significant reduction as shown here:

Disabled mortality rates — Police and fire members

Age	Reduction[a]
45	50%
50	50%
55	50%
60	34%
65	28%
70	11%

a. Slightly different reductions are applied to disabled female police and fire members.

Annual rates of disability

For our analysis of disability experience, see Part 4, Tables 12, 13, and 14.

The table below summarizes actual disability retirement experience by year in comparison with the assumptions. While actual disability retirement for municipal members is lower than anticipated, the experience for police and fire members is significantly greater. The results of the disability experience are:

Ratio of actual to expected disabilities

Year Ending June 30	Municipal Male	Municipal Female	Police and Fire
1989	91%	54%	231%
1990	108	41	238
1991	97	61	196
1992	82	43	159
1993	86	24	47
Average	93%	44%	174%

The City has recently adopted an outside earnings offset provision and strengthened the definition of disability. Because we will not know the impact of these plan changes on disability experience until the 1997 study, we recommend no change in disability rates at this time.

In addition to looking at the number of disabilities during this period, we examined the proportion of disabilities that are service-connected. A comparison of actual and assumed rates for service-connected disabilities is as follows:

Service-connected disability experience

	Proportion of Disabilities that are Service-Connected	
	Expected	**Actual**
Municipal and elected members	15%	31%
Police and fire members	35%	64%

The significant increase in service-connected disabilities should be reflected in new assumptions for both municipal members and police and fire members as illustrated below:

Service-connected disability assumptions

	Previous Assumption Used in the July 1, 1992 Actuarial Valuation	Proposed Assumption Used in the July 1, 1993 Actuarial Valuation
Municipal and elected members	15%	30%
Police and fire members	35%	50%

Annual rates of turnover

The member turnover analysis is summarized in Tables 15, 16, and 17 of Part 4. A summary follows:

Ratio of actual to expected turnover

Year Ending June 30	Municipal and Elected Male	Municipal and Elected Female	Police and Fire
1989	100%	69%	48%
1990	90	76	42
1991	87	84	39
1992	75	61	29
1993	65	46	27
Average	84%	68%	37%

The experience for municipal employees is lower than anticipated. At least part of lower turnover may be temporary and related to the relatively poor economy. To reflect this decrease, we recommend turnover rates be reduced by 20% for municipal male and female employees.

For police and fire members, the experience is substantially lower than the assumption. While the current trend indicates almost a two-thirds decrease in the expected rates of employee turnover, we recommend that turnover rates for police and fire members be reduced by 30% and that experience continue to be tracked next year to determine if a still lower rate is needed.

A comparison of current and proposed turnover rates for active members follows:

Turnover rates — Municipal and elected members

Attained Age	Previous Assumption Used in the July 1, 1992 Actuarial Valuation		Proposed Assumption Used in the July 1, 1993 Actuarial Valuation	
	Male	Female	Male	Female
22	.162945	.157286	.130356	.125829
32	.065601	.094385	.052481	.075508
42	.031296	.048825	.025037	.039060
52	.020033	.031689	.016026	.025351

Turnover rates — Police and fire members

Attained Age	Previous Assumption Used in the July 1, 1992 Actuarial Valuation	Proposed Assumption Used in the July 1, 1993 Actuarial Valuation
22	.041320	.028924
32	.027544	.019281
42	.009464	.006625

Annual rates of retirement

The retirement experience is summarized in Tables 18, 19, and 20 of Part 4. Recognizing the impact of the early retirement window on 1989 experience, we show an aggregate four-year average age at retirement which excludes 1989 experience. The average ages of retirement are:

Actual average retirement age

Year Ending June 30	Municipal and Elected		Police and Fire
	Male	Female	
1990	58.50	58.83	48.39
1991	59.52	60.33	48.96
1992	59.39	60.17	50.06
1993	59.06	59.90	49.01
Average	59.22	59.98	49.24

The rates of retirement have been fairly stable over the period of the study.

Another way of analyzing actual experience is to summarize the ratio of actual versus expected experience by retirement age. This experience is summarized as follows:

Ratio of actual to expected retirement

Age	Municipal and Elected Male	Municipal and Elected Female	Police and Fire
45	— —	— —	127%
46	— —	— —	95
47	— —	— —	83
48	— —	— —	95
49	— —	— —	98
50	— —	— —	94
51	— —	— —	90
52	— —	— —	86
53	— —	— —	98
54	— —	— —	131
55	171%	171%	69
56	100	115	75
57	90	79	89
58	109	73	122
59	70	81	91
60	76	81	69
61	92	116	125
62	82	68	75
63	67	84	110
64	65	90	133
65	83	66	— —
66	110	88	— —
67	79	56	— —
68	83	104	— —
69	53	58	— —
70	18	14	— —
Average	84%	74%	101%

While the average retirement age is consistent from year to year, the actual incidence of retirement shows that a number of members are retiring earlier than expected. To compensate for the trend of earlier retirement, we recommend adjusting the rates for the 1967 Plan for both municipal and police and fire members at selected ages. Plan 87 has not been in place for 10 years — the minimum service required for retirement eligibility; therefore, we did not analyze retirement rates in Plan 87.

Here is a comparison of the current and proposed retirement rates for the 1967 Plan members:

Retirement rates

	Previous Assumption for July 1, 1992 Actuarial Valuation			Proposed Assumption for July 1, 1993 Actuarial Valuation		
	Municipal and Elected		Police	Municipal and Elected		Police
Age	Male	Female	and Fire	Male	Female	and Fire
45	--	--	.160	--	--	.200
46	--	--	.110	--	--	.077
47	--	--	.110	--	--	.077
48	--	--	.120	--	--	.084
49	--	--	.120	--	--	.084
50	--	--	.120	--	--	.084
51	--	--	.125	--	--	.088
52	--	--	.145	--	--	.102
53	--	--	.160	--	--	.112
54	--	--	.160	--	--	.112
55	.190	.150	.170	.238	.188	.119
56	.120	.090	.200	.084	.063	.140
57	.120	.110	.200	.084	.077	.140
58	.100	.110	.200	.070	.077	.140
59	.110	.100	.240	.077	.070	.168
60	.110	.115	.240	.077	.081	.168
61	.130	.115	.240	.091	.081	.168
62	.300	.250	.280	.210	.175	.196
63	.180	.180	.280	.126	.126	.196
64	.210	.180	.320	.147	.126	.224
65	.320	.280	.350	.224	.196	.224
66	.200	.230	.350	.140	.161	.224
67	.250	.230	.350	.175	.161	.224
68	.200	.230	.350	.140	.161	.224
69	.200	.250	.350	.140	.175	.224
70+	1.000	1.000	1.000	1.000	1.000	1.000

This section presents economic experience for the five-year period July 1, 1988 through June 30, 1993. 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 together rather than separately because of their close relationship.

Assumptions used since Act 205 took effect in 1985 reflect a 9% interest rate, a 6% salary growth rate, and a 6% covered payroll growth rate. Continued use of the 9% investment return assumption is justified; however, experience suggests lowering both the rate of individual salary growth and the rate of covered payroll growth from 6% to 5.5%. Although lowering the rate of individual salary growth to 5.5% will increase the spread between the rate of investment return and the rate of salary increase to more than 3%, these proposed assumptions are justified as discussed below.

Investment return

Rates of investment return, after investment expenses, were determined on an actuarial asset valuation basis from year to year. The actuarial asset valuation method uses a five-year average of the investment gain or loss. The five-year average method smoothes the effect of short-term market fluctuations over five years. The actual rates of return on an adjusted market value basis as well as the pure market value basis are:

Year Ending	Rate of Return	
June 30	Adjusted Market Value	Market Value
1989	9.0%	13.6%
1990	10.7	9.1
1991	7.7	4.3
1992	7.5	10.0
1993	9.7	12.8
Average	8.9%	10.0%

The average rate of return during the five-year period is almost exactly 9% on an adjusted market value basis. The average rates of return for the previous five-year period (1984–1989) were well above the 9% assumption. They were 12.7% on an adjusted market value and 12.9% on a market value basis. We understand that the

Board's investment advisors believe 9% is a reasonable expectation for the future. Because the two experience studies support the 9% rate, we recommend continuing the current 9% assumption.

Rate of salary increase

Comparisons of total average wage increases for continuing members during the five-year period appear in Tables 21 and 22 of Part 4. The five-year average rate of salary increase is 5.4% for municipal members and 4.5% 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
1989	4.1%	10.6%
1990	6.4	0.7
1991	7.4	5.5
1992	9.7	5.8
1993	1.0	0.3
Average	5.4%	4.5%

Scheduled increases for the next three years are well below the assumed 6% rate, even after adjusting for merit and longevity increases. This reflects the City's current economic condition.

Accordingly, we recommend a decrease in the individual salary increase assumption to 5.5% for all groups. This widens the spread between the assumed interest rate and anticipated salary increase rate from 3% to 3½%; however, past experience and reasonable expectations for the future justify this change.

Rate of covered payroll growth

In addition to projecting individual salary growth, the 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 3.4%. This decrease from the expected rate of 6% is due to the early retirement window and other decrements causing the number of total active members to decrease from 31,383 on July 1, 1989 to 29,824 on July 1, 1993. This is a four-year decrease in active employees of 5%, or an average annual decrease of 1.3%. Adjusting the actual rate of covered payroll growth for the decrease in active members, we arrive at an adjusted rate of 4.7% (3.4% + 1.3%). During the prior five years (1984 - 1989), the corresponding adjusted rate was 5.8%.

We therefore recommend lowering the covered payroll growth assumption from 6% to 5.5%.

Table	Divisions by Membership	Description	
1	Municipal and Elected Active	Mortality:	Male
2	Municipal and Elected Active		Female
3	Police and Fire Active		Male/Female Combined
4	Municipal and Elected Retired	Mortality:	Male
5	Municipal and Elected Retired		Female
6	Police and Fire Retired		Male
7	Police and Fire Retired		Female
8	Municipal and Elected Disabled	Mortality:	Male
9	Municipal and Elected Disabled		Female
10	Police and Fire Disabled		Male
11	Police and Fire Disabled		Female
12	Municipal and Elected Active	Disability:	Male
13	Municipal and Elected Active		Female
14	Police and Fire Active		Male/Female Combined
15	Municipal and Elected Active	Turnover:	Male
16	Municipal and Elected Active		Female
17	Police and Fire Active		Male/Female Combined
18	Municipal and Elected Active	Retirement:	Male
19	Municipal and Elected Active		Female
20	Police and Fire Active		Male/Female Combined
21	Municipal and Elected Active	Annual Salary Increase:	Male/Female Combined
22	Police and Fire Active	Annual Salary Increase:	Male/Female Combined

Description of summary tables

- **Expected rate per 1,000** The expected number of decrements (that is, deaths, disabilities, turnovers, or retirements) for every 1,000 members.

- **Data** We used data from you for members who were continuously active, active members who terminated employment, or inactive members or spouses who left during the five-year period.

Results of Experience Study for Fiscal Years 1989 - 1993

Table 1

MUNICIPAL DIVISION ACTIVE MEMBERS
Mortality for Males

Age	Expected Rate Per 1,000	Actual Deaths 1989	1990	1991	1992	1993	Total	Expected Deaths 1989	1990	1991	1992	1993	Total
20 - 24	.949	0	0	0	1	0	1	0	0	0	0	0	0
25 - 29	.871	0	1	1	0	0	2	1	1	1	1	1	5
30 - 34	.995	5	0	3	6	4	18	2	2	2	2	2	10
35 - 39	1.443	9	1	5	3	5	23	3	3	3	3	3	15
40 - 44	2.273	11	6	6	7	6	36	5	6	6	6	6	29
45 - 49	3.728	7	10	3	13	6	39	6	7	7	7	8	35
50 - 54	6.064	6	8	8	10	10	42	9	9	9	9	9	45
55 - 59	9.547	11	9	3	2	3	28	10	9	10	10	9	48
60 - 64	15.085	6	6	8	6	3	29	9	9	9	9	8	44
65 - 69	23.765	2	0	5	2	2	11	4	4	4	3	3	18
70+	30.134	5	2	2	3	0	12	3	2	3	3	2	13
Total		62	43	44	53	39	241	52	52	54	53	51	262

Ratio of Actual to Expected Deaths

1989	119%
1990	83
1991	81
1992	100
1993	76
1989-1993	92%
1990-1993	85%

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Results of Experience Study for Fiscal Years 1989 - 1993

Table 2

MUNICIPAL DIVISION ACTIVE MEMBERS
Mortality for Females

Age	Expected Rate Per 1,000	Actual Deaths 1989	Actual Deaths 1990	Actual Deaths 1991	Actual Deaths 1992	Actual Deaths 1993	Actual Deaths Total	Expected Deaths 1989	Expected Deaths 1990	Expected Deaths 1991	Expected Deaths 1992	Expected Deaths 1993	Expected Deaths Total
20 - 24	1.049	0	0	1	0	0	1	0	0	0	0	0	0
25 - 29	.949	0	0	1	0	0	1	1	1	1	1	1	5
30 - 34	.871	1	1	0	0	0	2	1	1	1	1	1	5
35 - 39	.995	3	2	1	0	1	7	2	2	1	1	1	7
40 - 44	1.443	1	2	5	2	2	12	2	2	2	2	2	10
45 - 49	2.273	3	4	3	2	1	13	3	3	3	3	3	15
50 - 54	3.728	4	8	4	3	0	19	4	4	4	4	4	20
55 - 59	6.064	2	2	2	4	2	12	4	4	4	5	5	22
60 - 64	9.547	2	1	1	2	1	7	4	4	3	4	4	19
65 - 69	15.085	0	3	3	0	1	7	2	2	2	2	2	10
70+	19.878	1	1	1	0	1	4	1	1	1	2	2	7
Total		17	24	22	13	9	85	24	24	22	25	25	120

Ratio of Actual to Expected Deaths

1989	71%
1990	100
1991	100
1992	52
1993	36
1989-1993	71%
1990-1993	71%

Results of Experience Study for Fiscal Years 1989 - 1993

Table 3

POLICE AND FIRE DIVISION ACTIVE MEMBERS
Mortality for Males and Females Combined

Age	Expected Rate Per 1,000	Actual Deaths 1989	Actual Deaths 1990	Actual Deaths 1991	Actual Deaths 1992	Actual Deaths 1993	Actual Deaths Total	Expected Deaths 1989	Expected Deaths 1990	Expected Deaths 1991	Expected Deaths 1992	Expected Deaths 1993	Expected Deaths Total
20 - 24	.949	0	0	1	1	0	2	0	0	0	0	0	0
25 - 29	.871	0	1	2	1	1	5	1	1	1	1	1	5
30 - 34	.995	1	1	0	2	4	8	1	1	1	1	1	5
35 - 39	1.443	3	5	2	2	1	13	3	3	3	2	2	13
40 - 44	2.273	5	4	3	5	4	21	5	5	5	5	5	25
45 - 49	3.728	6	3	6	1	3	19	5	5	5	6	6	27
50 - 54	6.064	2	1	2	0	0	5	3	3	3	3	4	16
55 - 59	9.547	2	2	1	1	1	7	1	1	2	2	2	8
60 - 64	15.085	0	1	1	0	0	2	1	1	1	1	1	5
65 - 69	23.765	0	0	0	0	0	0	0	0	0	0	0	0
70+	30.134	0	0	0	0	0	0	0	0	0	0	0	0
Total		19	18	18	13	14	82	20	20	21	21	22	104

Ratio of Actual to Expected Deaths

1989	95%
1990	90
1991	86
1992	62
1993	64
1989-1993	79%
1990-1993	75%

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Results of Experience Study for Fiscal Years 1989 - 1993

Table 4

MUNICIPAL DIVISION NONACTIVE MEMBERS
Mortality for Retired Males

Age	Expected Rate Per 1,000	Actual Deaths 1989	1990	1991	1992	1993	Total	Expected Deaths 1989	1990	1991	1992	1993	Total
35 - 39	1.985	0	0	0	0	0	0	0	0	0	0	0	0
40 - 44	3.126	1	0	0	0	0	1	0	0	0	0	0	0
45 - 49	5.127	0	0	0	0	0	0	0	0	0	0	0	0
50 - 54	8.339	2	2	3	1	1	9	1	1	1	1	0	4
55 - 59	13.126	11	19	13	16	9	68	12	12	11	10	10	55
60 - 64	20.742	46	32	35	36	22	171	31	31	30	31	31	154
65 - 69	32.676	52	54	57	47	53	263	51	53	52	53	55	264
70 - 74	49.381	62	60	65	61	62	310	58	60	64	66	68	316
75 - 79	75.999	62	43	65	56	57	283	59	58	62	64	69	312
80 - 84	115.267	58	70	57	41	37	263	56	58	57	56	59	286
85 - 89	171.857	39	39	34	28	25	165	32	37	38	40	44	191
90 - 94	257.944	19	14	6	17	10	66	15	14	14	18	18	79
95+	404.198	4	2	3	3	5	17	3	2	4	5	7	21
Total		356	335	338	306	281	1,616	318	326	333	344	361	1,682

Ratio of Actual to Expected Deaths

1989	112%
1990	103
1991	102
1992	89
1993	78
1989-1993	96%
1990-1993	92%

Results of Experience Study for Fiscal Years 1989 - 1993

Table 5

MUNICIPAL DIVISION NONACTIVE MEMBERS
Mortality for Retired Females

Age	Expected Rate Per 1,000	Actual Deaths 1989	1990	1991	1992	1993	Total	Expected Deaths 1989	1990	1991	1992	1993	Total
35 - 39	1.368	0	0	0	0	0	0	0	0	0	0	0	0
40 - 44	1.985	0	0	0	1	0	1	0	0	0	0	0	0
45 - 49	3.126	2	1	1	0	1	5	0	0	0	0	0	0
50 - 54	5.127	2	1	3	1	2	9	1	1	1	1	1	5
55 - 59	8.339	9	5	5	7	15	41	6	6	6	6	6	30
60 - 64	13.126	21	14	18	27	12	92	15	15	15	15	16	76
65 - 69	20.742	23	41	40	30	34	168	30	31	31	31	31	154
70 - 74	32.676	33	33	52	48	39	205	47	48	49	49	51	244
75 - 79	49.381	55	62	56	55	36	264	57	61	62	64	65	309
80 - 84	75.999	57	45	69	57	54	282	63	66	70	72	75	346
85 - 89	115.267	40	50	51	49	48	238	46	51	56	60	66	279
90 - 94	171.857	20	25	30	22	30	127	23	25	29	28	33	138
95+	269.431	14	13	7	12	10	56	11	11	11	11	10	54
Total		276	290	332	309	281	1,488	299	315	330	337	354	1,635

Ratio of Actual to Expected Deaths

1989	92%
1990	92
1991	101
1992	92
1993	79
1989-1993	91%
1990-1993	91%

Results of Experience Study for Fiscal Years 1989 - 1993

Table 6

POLICE AND FIRE DIVISION NONACTIVE MEMBERS
Mortality for Retired Males

Age	Expected Rate Per 1,000	Actual Deaths 1989	1990	1991	1992	1993	Total	Expected Deaths 1989	1990	1991	1992	1993	Total
35 - 39	1.985	0	0	0	0	0	0	0	0	0	0	0	0
40 - 44	3.126	1	1	0	1	0	3	0	0	0	0	0	0
45 - 49	5.127	4	6	6	6	5	27	4	4	4	4	4	20
50 - 54	8.339	12	8	10	7	12	49	8	8	8	9	10	43
55 - 59	13.126	9	8	9	8	7	41	12	13	13	13	14	65
60 - 64	20.742	19	21	22	12	10	84	17	17	18	19	19	90
65 - 69	32.676	24	12	14	22	23	95	17	18	19	21	23	98
70 - 74	49.381	31	28	21	22	23	125	30	27	25	23	21	126
75 - 79	75.999	32	39	36	38	30	175	36	38	38	37	37	186
80 - 84	115.267	23	35	26	29	33	146	29	29	28	31	36	153
85 - 89	171.857	11	17	27	16	23	94	19	21	24	22	23	109
90 - 94	257.944	7	12	8	7	13	47	9	10	10	10	12	51
95+	404.198	0	1	1	1	2	5	1	1	2	2	3	9
Total		173	188	180	169	181	891	182	186	189	191	202	950

Ratio of Actual to Expected Deaths

1989	95%
1990	101
1991	95
1992	88
1993	90
1989-1993	94%
1990-1993	93%

Results of Experience Study for Fiscal Years 1989 - 1993

Table 7

POLICE AND FIRE DIVISION NONACTIVE MEMBERS
Mortality for Retired Females

Age	Expected Rate Per 1,000	Actual Deaths 1989	Actual Deaths 1990	Actual Deaths 1991	Actual Deaths 1992	Actual Deaths 1993	Actual Deaths Total	Expected Deaths 1989	Expected Deaths 1990	Expected Deaths 1991	Expected Deaths 1992	Expected Deaths 1993	Expected Deaths Total
35 - 39	1.368	1	0	0	0	0	1	0	0	0	0	0	0
40 - 44	1.985	1	1	0	0	0	2	0	0	0	0	0	0
45 - 49	3.126	1	0	1	0	0	2	0	0	0	0	0	0
50 - 54	5.127	1	0	1	1	1	4	1	1	1	1	1	5
55 - 59	8.339	1	3	1	1	3	9	2	2	2	2	2	10
60 - 64	13.126	5	4	5	2	1	17	3	4	4	4	4	19
65 - 69	20.742	10	12	9	6	10	47	7	7	7	7	7	35
70 - 74	32.676	11	12	18	10	15	66	15	15	15	14	13	72
75 - 79	49.381	22	15	23	24	18	102	21	22	24	25	26	118
80 - 84	75.999	23	30	25	29	23	130	28	29	30	30	30	147
85 - 89	115.267	29	30	25	23	26	133	25	26	27	30	32	140
90 - 94	171.857	12	10	20	17	13	72	13	14	16	16	17	76
95+	269.431	4	3	7	4	6	24	4	5	6	5	6	26
Total		121	120	135	117	116	609	119	125	132	134	138	648

Ratio of Actual to Expected Deaths

1989	102%
1990	96
1991	102
1992	87
1993	84
1989-1993	94%
1990-1993	92%

Results of Experience Study for Fiscal Years 1989 - 1993

Table 8

MUNICIPAL DIVISION NONACTIVE MEMBERS
Mortality for Disabled Males

	Expected			Actual Deaths						Expected Deaths			
Age	Rate Per 1,000	1989	1990	1991	1992	1993	Total	1989	1990	1991	1992	1993	Total
35 - 39	16.076	1	0	1	1	0	3	0	0	1	1	1	3
40 - 44	25.315	5	3	2	2	1	13	2	2	2	2	2	10
45 - 49	37.760	4	4	3	7	4	22	4	5	5	6	6	26
50 - 54	39.020	8	5	5	7	7	32	7	7	7	8	9	38
55 - 59	38.985	11	13	8	6	10	48	12	12	11	10	10	55
60 - 64	48.410	20	8	11	19	13	71	16	15	15	15	14	75
65 - 69	65.105	21	20	25	11	11	88	19	19	19	18	18	93
70 - 74	86.295	9	10	14	18	13	64	13	14	15	16	17	75
75 - 79	123.118	7	7	11	2	1	28	10	11	12	11	12	56
80 - 84	186.732	4	3	2	4	2	15	3	3	4	6	8	24
85 - 89	278.409	0	0	1	0	0	1	1	1	1	1	1	5
90 - 94	417.868	0	1	0	0	0	1	0	1	1	1	2	5
95+	654.800	0	0	0	0	0	0	0	0	0	0	0	0
Total		90	74	83	77	62	386	87	90	93	95	100	465

Ratio of Actual to Expected Deaths

1989	103%
1990	82
1991	89
1992	81
1993	62
1989-1993	83%
1990-1993	78%

Results of Experience Study for Fiscal Years 1989 - 1993

Table 9

MUNICIPAL DIVISION NONACTIVE MEMBERS
Mortality for Disabled Females

Age	Expected Rate Per 1,000	Actual Deaths 1989	1990	1991	1992	1993	Total	Expected Deaths 1989	1990	1991	1992	1993	Total
35 - 39	14.156	0	1	1	1	0	3	0	0	0	0	0	0
40 - 44	20.541	0	0	1	0	0	1	0	0	0	0	0	0
45 - 49	29.426	1	1	1	1	0	4	1	1	1	1	1	5
50 - 54	30.622	2	1	2	3	4	12	2	2	2	3	3	12
55 - 59	31.623	1	1	2	1	3	8	2	3	3	3	3	14
60 - 64	39.155	2	1	2	6	2	13	4	3	3	3	3	16
65 - 69	52.788	5	1	4	4	6	20	5	5	5	5	5	25
70 - 74	72.974	7	3	5	5	3	23	4	4	4	5	4	21
75 - 79	102.219	1	4	3	3	0	11	3	3	2	3	3	14
80 - 84	157.317	0	0	1	0	1	2	1	1	1	1	2	6
85 - 89	238.603	0	2	0	1	1	4	2	3	3	2	2	12
90 - 94	355.745	0	0	2	0	1	3	1	1	1	1	1	5
95+	557.722	0	0	0	0	0	0	0	0	0	0	0	0
Total		19	15	24	25	21	104	25	26	25	27	27	130

Ratio of Actual to Expected Deaths

1989	76%
1990	58
1991	96
1992	93
1993	78
1989-1993	80%
1990-1993	81%

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Results of Experience Study for Fiscal Years 1989 - 1993

Table 10

POLICE AND FIRE DIVISION NONACTIVE MEMBERS
Mortality for Disabled Males

Age	Expected Rate Per 1,000	Actual Deaths 1989	1990	1991	1992	1993	Total	Expected Deaths 1989	1990	1991	1992	1993	Total
35 - 39	10.717	0	0	0	0	0	0	1	1	1	1	1	5
40 - 44	16.877	3	4	1	0	3	11	5	5	6	6	5	27
45 - 49	25.173	3	3	3	1	5	15	11	13	14	14	14	66
50 - 54	26.013	4	5	2	5	4	20	9	9	10	11	13	52
55 - 59	25.990	2	6	3	8	8	27	10	11	10	9	9	49
60 - 64	32.273	12	9	8	7	5	41	13	13	13	13	12	64
65 - 69	43.403	3	4	5	3	9	24	10	11	12	14	15	62
70 - 74	57.530	6	3	6	3	5	23	9	9	10	10	11	49
75 - 79	82.079	1	3	3	4	4	15	5	6	7	8	9	35
80 - 84	124.488	1	2	0	1	1	5	4	4	5	5	5	23
85 - 89	185.606	0	1	2	1	1	5	2	2	3	2	2	11
90 - 94	278.579	0	0	0	0	0	0	0	0	0	0	0	0
95+	436.534	0	0	0	0	0	0	0	0	0	0	0	0
Total		35	40	33	33	45	186	79	84	91	93	96	443

Ratio of Actual to Expected Deaths

1989	44%
1990	48
1991	36
1992	35
1993	47
1989-1993	42%
1990-1993	41%

Results of Experience Study for Fiscal Years 1989 - 1993

Table 11

POLICE AND FIRE DIVISION NONACTIVE MEMBERS
Mortality for Disabled Females

Age	Expected Rate Per 1,000	Actual Deaths 1989	1990	1991	1992	1993	Total	Expected Deaths 1989	1990	1991	1992	1993	Total
35 - 39	9.437	0	0	0	0	0	0	0	0	0	0	0	0
40 - 44	13.694	0	0	0	0	0	0	0	0	0	1	1	2
45 - 49	19.618	0	0	0	0	0	0	0	0	0	0	0	0
50 - 54	20.415	0	0	0	0	0	0	0	0	0	0	0	0
55 - 59	21.082	0	0	0	0	0	0	0	0	0	0	0	0
60 - 64	26.104	0	0	0	0	1	1	0	0	0	0	0	0
65 - 69	35.192	0	0	0	0	0	0	0	0	0	0	0	0
70 - 74	48.649	0	0	0	0	0	0	0	0	0	0	0	0
75 - 79	68.146	0	0	0	0	0	0	0	0	0	0	0	0
80 - 84	104.878	0	0	0	0	0	0	0	0	0	0	0	0
85 - 89	159.069	0	0	0	0	0	0	0	0	0	0	0	0
90 - 94	237.163	0	0	0	0	0	0	0	0	0	0	0	0
95+	371.814	0	0	0	0	0	0	0	0	0	0	0	0
Total		0	0	0	0	1	1	0	0	0	1	1	2

Ratio of Actual to Expected Deaths

1989	0%
1990	0
1991	0
1992	0
1993	100
1989-1993	50%
1990-1993	50%

Results of Experience Study for Fiscal Years 1989 - 1993

Table 12

MUNICIPAL DIVISION ACTIVE MEMBERS
Disability for Males

Age	Expected Rate Per 1,000	Actual Disabilities 1989	1990	1991	1992	1993	Total	Expected Disabilities 1989	1990	1991	1992	1993	Total
20 - 24	.012	0	0	0	0	0	0	0	0	0	0	0	0
25 - 29	.086	0	1	0	1	3	5	0	0	0	0	0	0
30 - 34	.539	7	4	5	3	6	25	1	1	1	1	1	5
35 - 39	1.477	4	13	8	9	10	44	4	3	3	3	3	16
40 - 44	3.287	14	16	15	17	9	71	8	9	9	9	8	43
45 - 49	6.758	9	13	9	10	7	48	12	12	12	13	14	63
50 - 54	11.287	9	10	13	7	14	53	18	18	18	17	17	88
55 - 59	13.282	8	9	10	6	4	37	14	13	13	14	13	67
60 - 64	13.500	8	2	2	0	1	13	8	8	8	8	7	39
65 - 69	.000	0	1	0	0	0	1	0	0	0	0	0	0
70+	.000	0	0	0	0	0	0	0	0	0	0	0	0
Total		59	69	62	53	54	297	65	64	64	65	63	321

Ratio of Actual to Expected Disabilities

1989	91%
1990	108
1991	97
1992	82
1993	86
1989-1993	93%
1990-1993	93%

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Results of Experience Study for Fiscal Years 1989 - 1993

Table 13

MUNICIPAL DIVISION ACTIVE MEMBERS
Disability for Females

Age	Expected Rate Per 1,000	Actual Disabilities 1989	1990	1991	1992	1993	Total	Expected Disabilities 1989	1990	1991	1992	1993	Total
20 - 24	.017	0	0	0	0	0	0	0	0	0	0	0	0
25 - 29	.082	0	0	0	1	0	1	0	0	0	0	0	0
30 - 34	.283	1	0	0	1	1	3	0	0	0	0	0	0
35 - 39	.686	1	2	0	1	1	5	1	1	1	1	1	5
40 - 44	1.607	1	2	3	1	1	8	2	3	2	3	3	13
45 - 49	3.648	3	0	6	3	3	15	5	5	4	5	5	24
50 - 54	7.112	2	6	4	3	1	16	7	8	7	8	9	39
55 - 59	8.808	3	1	0	2	0	6	7	6	6	7	7	33
60 - 64	9.000	3	0	0	0	0	3	4	4	3	4	4	19
65 - 69	.000	0	0	0	0	0	0	0	0	0	0	0	0
70+	.000	0	0	1	0	0	1	0	0	0	0	0	0
Total		14	11	14	12	7	58	26	27	23	28	29	133

Ratio of Actual to Expected Disabilities

1989	54%
1990	41
1991	61
1992	43
1993	24
1989-1993	44%
1990-1993	41%

Results of Experience Study for Fiscal Years 1989 - 1993

Table 14

POLICE AND FIRE DIVISION ACTIVE MEMBERS
Disability for Males and Females Combined

Age	Expected Rate Per 1,000	Actual Disabilities 1989	1990	1991	1992	1993	Total	Expected Disabilities 1989	1990	1991	1992	1993	Total
20 - 24	.831	0	0	0	0	0	0	0	0	0	0	0	0
25 - 29	1.203	5	6	8	0	0	19	1	1	1	1	1	5
30 - 34	2.425	18	19	14	4	2	57	3	3	3	3	3	15
35 - 39	4.802	38	46	24	30	7	145	10	10	9	8	8	45
40 - 44	8.918	55	49	46	42	15	207	22	22	21	20	18	103
45 - 49	15.097	30	31	32	29	8	130	21	21	21	23	24	110
50 - 54	16.000	7	9	6	3	0	25	7	8	8	9	10	42
55 - 59	16.000	2	2	1	0	0	5	2	2	3	3	3	13
60 - 64	16.000	0	0	0	0	0	0	1	1	1	1	1	5
65 - 69	.000	0	0	0	0	0	0	0	0	0	0	0	0
70+	.000	0	0	0	0	0	0	0	0	0	0	0	0
Total		155	162	131	108	32	588	67	68	67	68	68	338

Ratio of Actual to Expected Disabilities

1989	231%
1990	238
1991	196
1992	159
1993	47
1989-1993	174%
1990-1993	160%

Results of Experience Study for Fiscal Years 1989 - 1993

Table 15

MUNICIPAL DIVISION ACTIVE MEMBERS
Turnover for Males

Age	Expected Rate Per 1,000	Actual Turnovers 1989	1990	1991	1992	1993	Total	Expected Turnovers 1989	1990	1991	1992	1993	Total
20 - 24	162.726	38	35	33	14	13	133	61	63	57	46	36	263
25 - 29	114.778	135	107	100	63	63	468	152	136	129	111	97	625
30 - 34	66.854	141	132	99	109	61	542	138	134	127	120	105	624
35 - 39	41.971	145	100	106	86	72	509	105	96	93	89	86	469
40 - 44	31.424	94	95	81	78	57	405	78	84	84	83	78	407
45 - 49	25.075	39	38	52	24	29	182	44	45	45	48	53	235
50 - 54	20.032	18	24	22	19	20	103	31	31	31	30	30	153
Total		610	531	493	393	315	2,342	609	589	566	527	485	2,776

Ratio of Actual to Expected Turnovers

1989	100%
1990	90
1991	87
1992	75
1993	65
1989-1993	84%
1990-1993	80%

Results of Experience Study for Fiscal Years 1989 - 1993

Table 16

MUNICIPAL DIVISION ACTIVE MEMBERS
Turnover for Females

Age	Expected Rate Per 1,000	Actual Turnovers 1989	1990	1991	1992	1993	Total	Expected Turnovers 1989	1990	1991	1992	1993	Total
20 - 24	157.012	33	39	30	19	13	134	64	64	55	45	37	265
25 - 29	132.614	112	118	102	67	39	438	133	134	124	119	106	616
30 - 34	94.738	88	86	105	85	55	419	126	134	126	127	117	630
35 - 39	64.668	75	86	87	69	67	384	101	106	94	100	101	502
40 - 44	48.987	49	77	73	56	32	287	75	83	78	85	82	403
45 - 49	39.440	27	40	47	32	26	172	51	55	49	57	60	272
50 - 54	31.674	18	20	24	22	16	100	32	35	31	37	39	174
Total		402	466	468	350	248	1,934	582	611	557	570	542	2,862

Ratio of Actual to Expected Turnovers

1989	69%
1990	76
1991	84
1992	61
1993	46
1989-1993	68%
1990-1993	67%

Results of Experience Study for Fiscal Years 1989 - 1993

Table 17

POLICE AND FIRE DIVISION ACTIVE MEMBERS
Turnover for Males and Females Combined

Age	Expected Rate Per 1,000	Actual Turnovers 1989	1990	1991	1992	1993	Total	Expected Turnovers 1989	1990	1991	1992	1993	Total
20 - 24	41.360	2	6	10	7	6	31	4	14	21	19	14	72
25 - 29	38.906	13	19	15	10	10	67	28	33	35	34	35	165
30 - 34	27.589	18	18	13	12	13	74	37	37	37	36	35	182
35 - 39	15.733	26	12	15	9	6	68	33	31	29	26	25	144
40 - 44	9.605	6	7	8	5	3	29	23	23	23	21	19	109
45 - 49	7.048	0	0	0	0	0	0	10	10	10	11	11	52
50 - 54	.000	0	0	0	0	0	0	0	0	0	0	0	0
Total		65	62	61	43	38	269	135	148	155	147	139	724

Ratio of Actual to Expected Turnovers

1989	48%
1990	42
1991	39
1992	29
1993	27
1989-1993	37%
1990-1993	35%

Results of Experience Study for Fiscal Years 1990 - 1993

Table 18

MUNICIPAL DIVISION ACTIVE MEMBERS
Retirement for Males

Age	Rate Per 1,000	Actual Retirements	Expected Retirements	Ratio of Actual to Expected Retirement
55	190	454	266	171%
56	120	110	110	100%
57	120	84	93	90%
58	100	75	69	109%
59	110	49	70	70%
60	110	52	68	76%
61	130	70	76	92%
62	300	133	162	82%
63	180	44	66	67%
64	210	42	65	65%
65	320	63	76	83%
66	200	34	31	110%
67	250	22	28	79%
68	200	15	18	83%
69	200	8	15	53%
70	1000	63	352	18%
Total		1,318	1,565	84%

Average Age at Retirement

Period	Actual	Expected
1990	58.50	61.53
1991	59.52	62.19
1992	59.39	62.15
1993	59.06	62.15
1990-1993	59.22	62.02
1990-1992	59.26	61.98

Results of Experience Study for Fiscal Years 1990 - 1993

Table 19

MUNICIPAL DIVISION ACTIVE MEMBERS
Retirement for Females

Age	Rate Per 1,000	Actual Retirements	Expected Retirements	Ratio of Actual to Expected Retirement
55	150	224	131	171%
56	90	63	55	115%
57	110	50	63	79%
58	110	40	55	73%
59	100	38	47	81%
60	115	42	52	81%
61	115	52	45	116%
62	250	59	87	68%
63	180	42	50	84%
64	180	37	41	90%
65	280	38	58	66%
66	230	29	33	88%
67	230	14	25	56%
68	230	24	23	104%
69	250	11	19	58%
70	1000	43	299	14%
Total		806	1,083	74%

Average Age at Retirement

Period	Actual	Expected
1990	58.83	62.43
1991	60.33	62.42
1992	60.17	63.53
1993	59.90	63.52
1990-1993	59.98	63.07
1990-1992	60.01	62.90

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Results of Experience Study for Fiscal Years 1990 - 1993

Table 20

POLICE AND FIRE DIVISION ACTIVE MEMBERS
Retirement for Males and Females Combined

Age	Rate Per 1,000	Actual Retirements	Expected Retirements	Ratio of Actual to Expected Retirement
45	160	386	304	127%
46	110	147	155	95%
47	110	109	132	83%
48	120	116	122	95%
49	120	102	104	98%
50	120	79	84	94%
51	125	63	70	90%
52	145	57	66	86%
53	160	59	60	98%
54	160	59	45	131%
55	170	25	36	69%
56	200	27	36	75%
57	200	25	28	89%
58	200	28	23	122%
59	240	20	22	91%
60	240	11	16	69%
61	240	15	12	125%
62	280	9	12	75%
63	280	11	10	110%
64	320	12	9	133%
Total		1,360	1,346	101%

Average Age at Retirement

Period	Actual	Expected
1990	48.39	49.50
1991	48.96	49.63
1992	50.06	49.68
1993	49.01	49.24
1990-1993	49.24	49.51
1990-1992	49.30	49.61

Results of Experience Study for Fiscal Years 1989 - 1993

Table 21

MUNICIPAL DIVISION ACTIVE MEMBERS
Annual Salary Increases for Males and Females

Age Beginning Age	7/01/88 to 7/01/89	7/01/89 to 7/01/90	7/01/90 to 7/01/91	7/01/91 to 7/01/92	7/01/92 to 7/01/93	7/01/88 to 7/01/93
20 - 24	8.046%	6.924%	7.014%	10.765%	1.569%	6.611%
25 - 29	6.877%	6.619%	7.452%	10.767%	1.637%	6.523%
30 - 34	5.615%	8.615%	7.052%	10.058%	1.366%	5.942%
35 - 39	3.996%	6.082%	6.928%	9.685%	1.012%	5.416%
40 - 44	3.634%	6.051%	9.458%	9.436%	1.000%	5.244%
45 - 49	2.463%	5.739%	7.136%	9.187%	0.764%	4.828%
50 - 54	2.654%	5.867%	6.799%	9.064%	0.811%	4.787%
55 - 59	3.460%	5.695%	5.565%	9.561%	0.680%	4.804%
60 - 44	2.847%	5.794%	5.665%	9.067%	0.834%	4.745%
65 - 49	7.631%	3.952%	3.816%	10.388%	0.416%	4.759%
70+	0.936%	4.797%	5.172%	12.313%	0.331%	4.452%
Average Annual Rate of Increase For Ages 20 - 70+:	4.088%	6.411%	7.444%	9.657%	1.046%	5.378%

Results of Experience Study for Fiscal Years 1989 - 1993

Table 22

POLICE AND FIRE DIVISION ACTIVE MEMBERS
Annual Salary Increases for Males and Females

Age Beginning Age	7/01/88 to 7/01/89	7/01/89 to 7/01/90	7/01/90 to 7/01/91	7/01/91 to 7/01/92	7/01/92 to 7/01/93	7/01/88 to 7/01/93
20 - 24	25.701%	5.458%	8.971%	7.520%	0.806%	8.735%
25 - 29	12.891%	1.180%	6.011%	6.369%	0.499%	5.244%
30 - 34	10.846%	1.163%	5.663%	6.103%	0.445%	4.734%
35 - 39	10.535%	0.556%	5.429%	5.694%	0.293%	4.402%
40 - 44	9.848%	0.295%	5.259%	5.544%	0.215%	4.157%
45 - 49	9.607%	0.251%	5.196%	5.558%	0.187%	4.086%
50 - 54	9.295%	0.062%	5.076%	5.984%	0.154%	4.039%
55 - 59	8.843%	0.301%	5.150%	5.594%	0.092%	3.933%
60 - 44	8.400%	0.000%	5.000%	5.000%	0.000%	3.628%
65 - 49	7.889%	0.000%	5.000%	5.001%	0.000%	3.531%
70+	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%
Average Annual Rate of Increase For Ages 20 - 70+:	10.625%	.655%	5.478%	5.806%	.308%	4.471%

The recommended actuarial assumptions used in determining cost estimates are described below.

Annual rate of withdrawal prior to retirement

The assumed annual rates of withdrawal are as follows:

Withdrawal probabilities at 5-year intervals

Attained Age	Municipal and Elected Officials		Uniformed
	Males	Females	Males and Females
20	.144026	.131649	.029400
25	.108391	.120606	.028420
30	.066612	.087748	.023162
35	.038656	.059405	.013787
40	.027700	.042868	.007829
45	.021811	.034272	.000000
50	.017562	.027690	.000000
55	.000000	.000000	.000000

In addition, we assumed that a vested employee terminating employment (with 10 years service) will elect an employee contributions refund unless his or her age plus years of service at termination equal 55 or more (rule of 55). Otherwise, we assumed the person would elect a deferred pension beginning at service retirement age.

Annual rate of disability prior to retirement

The assumed annual disability rates are as follows:

Disability probabilities at 5-year intervals

Attained Age	Municipal and Elected Officials Males	Municipal and Elected Officials Females	Uniformed Males and Females
20	.000009	.000010	.000795
25	.000025	.000043	.000976
30	.000305	.000184	.001812
35	.001023	.000482	.003686
40	.002395	.001138	.006934
45	.005166	.002630	.012991
50	.009635	.005799	.016000
55	.012774	.008360	.016000
60	.013500	.009000	.016000
65	.000000	.000000	.000000

In addition, we assumed that 70% of all disabilities among municipal and elected members are ordinary (30% are service-connected) and 50% of all disabilities among uniformed members are ordinary (50% are service-connected).

Annual rate of mortality prior to retirement

We assumed that deaths of active municipal and elected male members would be at 80% of the UP-84 Mortality Table with ages set forward one year and deaths of municipal and elected female members at 80% of the UP-84 Mortality Table with ages set back four years. In addition, we assumed that 97.5% of all deaths of active municipal and elected members are ordinary (2.5% are service-connected).

We assumed that deaths of active uniformed male members would be at 80% of the UP-84 Mortality Table with ages set forward one year and deaths of uniformed female members would be at 80% of the UP-84 Mortality Table with ages set back four years. In addition, we assumed that 95% of all deaths of active uniformed members are ordinary (5% are service-connected).

Service retirement

We assumed that active members in the 1967 Plan will retire according to the rates as shown here:

1967 plan service retirement rates

	Municipal and Elected Officials		Uniformed
Age	Males	Females	Males and Females
45	—	—	.200
46	—	—	.077
47	—	—	.077
48	—	—	.084
49	—	—	.084
50	—	—	.084
51	—	—	.088
52	—	—	.102
53	—	—	.112
54	—	—	.112
55	.238	.188	.119
56	.084	.063	.140
57	.084	.077	.140
58	.070	.077	.140
59	.077	.070	.168
60	.077	.081	.168
61	.091	.081	.168
62	.210	.175	.196
63	.126	.126	.196
64	.147	.126	.224
65	.224	.196	.245
66	.140	.161	.245
67	.175	.161	.245
68	.140	.161	.245
69	.140	.175	.245
70+	1.000	1.000	1.000

The corresponding rates for members under Plan 87 are as follows:

Plan 87 service retirement rates

	Municipal and Elected Officials			Uniformed		
		Full Benefits			Full Benefits	
Age	Reduced Benefits	First Year Eligible[a]	Subsequent Years	Reduced Benefits	First Year Eligible[a]	Subsequent Years
40	--	--	--	.040	.500	.125
41	--	--	--	.040	.500	.125
42	--	--	--	.040	.500	.125
43	--	--	--	.040	.500	.125
44	--	--	--	.040	.500	.125
45	--	--	--	.040	.500	.125
46	--	--	--	.040	.480	.125
47	--	--	--	.040	.460	.125
48	--	--	--	.040	.440	.125
49	--	--	--	.040	.420	.125
50	--	--	--	.040	.400	.125
51	--	--	--	.040	.400	.125
52	.033	.450	.060	.040	.400	.140
53	.033	.420	.060	.040	.400	.150
54	.033	.390	.060	.040	.400	.170
55	.033	.360	.060	.040	.400	.190
56	.033	.330	.060	.040	.400	.215
57	.033	.300	.060	.040	.400	.225
58	.033	.300	.060	.040	.400	.225
59	.033	.300	.080	.040	.400	.230
60	.033	.300	.100	.040	.400	.230
61	.033	.350	.150	.040	.400	.245
62	.033	.430	.300	.040	.400	.295
63	.033	.500	.187	.040	.400	.265
64	.033	.500	.199	.040	.400	.260
65	.033	.600	.309	1.000	.400	1.000
66	.033	.600	.232	--	--	--
67	.033	.600	.214	--	--	--
68	.033	.600	.214	--	--	--
69	.033	.600	.238	--	--	--
70	1.000	.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 105% of the UP-84 Mortality Table with ages set forward one year for males and 105% of the UP-84 Mortality Table with ages set back four years for females. We assumed that post-disablement mortality will follow the above-mentioned tables with the adjustment factors in the table below applied at each age for municipal and the adjustment factors in the table on the following page for police and fire.

Post-disablement mortality adjustment factors (municipal)

	Adjustment Factor			Adjustment Factor	
Age	Male	Female	Age	Male	Female
47 and earlier	4.86	6.21	62	1.41	1.80
48	4.13	5.28	63	1.36	1.74
49	3.69	4.72	64	1.31	1.67
50	3.40	4.35	65	1.26	1.61
51	3.11	3.98	66	1.22	1.56
52	2.87	3.66	67	1.19	1.51
53	2.57	3.29	68	1.17	1.49
54	2.33	2.98	69	1.17	1.49
55	2.14	2.74	70	1.12	1.43
56	1.94	2.48	71	1.07	1.37
57	1.75	2.23	72	1.07	1.37
58	1.66	2.12	73	1.02	1.31
59	1.56	1.99	74	0.99	1.27
60	1.50	1.93	75 and later	0.97	1.24
61	1.46	1.86			

Post-disablement mortality adjustment factors (uniformed)

	Adjustment Factor			Adjustment Factor	
Age	Male	Female	Age	Male	Female
47 and earlier	2.70	3.45	62	1.10	1.10
48	2.30	2.94	63	1.10	1.10
49	2.05	2.62	64	1.10	1.10
50	1.89	2.42	65	1.10	1.10
51	1.73	2.21	66	1.10	1.10
52	1.60	2.04	67	1.10	1.10
53	1.43	1.83	68	1.10	1.10
54	1.30	1.66	69	1.10	1.10
55	1.19	1.52	70	1.10	1.10
56	1.10	1.38	71	1.10	1.10
57	1.10	1.24	72	1.10	1.10
58	1.10	1.18	73	1.10	1.10
59	1.10	1.11	74	1.10	1.10
60	1.10	1.10	75 and later	1.10	1.10
61	1.10	1.10			

Salary scale

We assumed that salaries, including longevity and overtime, will increase at a compound rate of 5.5% per year.

Rate of investment return

We assumed that assets of the fund will accumulate at a compound rate of 9% 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 estimated operating budget of the Board of Pensions and Retirement for fiscal year 1993, excluding 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 difference between the market value of the assets reported and last year's assets projected forward at the rate of investment return is determined and 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.

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 members will elect Option 4 unless otherwise indicated in the participant's data.

Rate of covered payroll growth

We assumed the annual rate of growth of total covered payroll to be 5.5% per year. This is supported by the actuarial experience study for the five-year period ending June 30, 1993, which showed that the adjusted growth rate of covered payroll averaged 4.7% for the period.

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Foster Higgins

February 13, 1996

Board of Pensions and Retirement
City of Philadelphia
Two Penn Center, 20th Floor
Philadelphia, PA 19102

Ladies and Gentlemen:

Enclosed are the results of our July 1, 1995 actuarial valuation of the City of Philadelphia Municipal Retirement System.

The employee data and the financial information used in this report were provided by the City and the Board of Pensions and Retirement. The actuarial valuation report may be used to support contributions to the Retirement System for the fiscal year ending June 30, 1997.

A summary of the results from the actuarial valuation is as shown in the table below.

Summary of actuarial valuation results as of July 1, 1995 (dollars in thousands)

Actuarial accrued liability as of July 1, 1995	$4,850,820
Assets as of July 1, 1995 for valuation purposes	$2,312,103
Unfunded actuarial accrued liability as of July 1, 1995	$2,538,718
City normal cost as a percent of payroll for the year, assuming payment is made at the beginning of year:	
1967 Plan	
Municipal division	**5.699%**
Police division	**8.527%**
Fire division	**8.496%**
Plan 87	
Municipal division (Plan M)	5.138%
Municipal division (Plan Y)	5.503%
Elected officials	5.382%
Police division	6.983%
Fire division	7.748%
Combined plans	6.423%

The actuarial assumptions underlying the results are our best estimate of anticipated future experience of the Retirement System.

The City's funding policy provides for payment of the normal cost in accordance with the calculations made by the actuary **plus** level dollar payments toward amortization of the Dombrowski unfunded actuarial accrued liabilities **plus** payments increasing 5.5% per year toward amortization of the unfunded actuarial accrued liability established on July 1, 1985 **plus** level dollar payments toward amortization of any plan changes or actuarial gains and losses which occur after July 1, 1985.

For the year beginning July 1, 1996 and ending June 30, 1997, policy requirements call for an amortization payment of $170,942, assuming payment is made at the beginning of the year.

The amortization schedule for determining the City's Minimum Municipal Obligation for the fiscal year ending June 30, 1997 is in Table 85 of this report.

Supporting data and background material pertinent to determining the normal cost and accrued liabilities of the Retirement System is also in this report.

Sincerely,

Albert Pike, 3rd

Albert Pike, 3rd, FCA
Principal

AP:sdk
PCYL6201.ST4

Enclosure

City of Philadelphia
Municipal Retirement System

July 1, 1995

Actuarial Valuation Report

Foster Higgins

CONTENTS

5. July 1, 1995 derivation of normal cost (dollars in thousands)

	1967 Plan			Plan 87					
	Municipal	Police	Fire	Municipal (M)	Municipal (Y)	Elected	Police	Fire	Total
1. Number of active members	16,975	4,102	1,776	1,370	2,933	21	2,217	577	29,971
2. Total normal cost									
a. Service retirement	$ 30,438	$ 15,203	$ 6,461	$ 1,864	$ 3,331	143	$ 4,781	$ 1,265	$ 63,486
b. Preretirement death	4,167	1,104	502	258	494	12	365	108	7,011
c. Disability retirement	6,409	4,304	1,887	309	840	12	1,863	545	16,170
d. Vested termination	6,954	782	361	402	708	8	1,074	263	10,551
e. Refund of nonvested members' contributions	3,519	620	293	139	243	12	354	90	5,270
f. Health care benefit	0	28	13	0	0	0	9	3	53
g. Administrative expenses	2,528	918	353	97	205	2	157	41	4,300
h. Total	$ 54,016	$ 22,960	$ 9,870	$ 3,068	$ 5,821	$ 189	$ 8,603	$ 2,315	$ 106,841
3. Expected employee contributions	$ 21,359	$ 9,479	$ 4,085	$ 920	$ 1,746	$ 112	$ 3,589	$ 908	$ 42,200
4. City normal cost *(2h) - (3)*	$ 32,657	$ 13,480	$ 5,785	$ 2,148	$ 4,075	$ 77	$ 5,013	$ 1,407	$ 64,642
5. Current total annual payroll	$ 573,047	$158,079	$68,087	$41,799	$ 74,038	$ 1,440	$ 71,787	$18,157	$1,006,434
6. City normal cost as a percent of pay assuming beginning-of-year payment *(4) ÷ (5)*	5.699%	8.527%	8.496%	5.138%	5.503%	5.382%	6.983%	7.748%	6.423%
7. City normal cost as a percent of pay assuming end-of-year payment *(6) x 1.09*	6.212%	9.294%	9.261%	5.600%	5.998%	5.866%	7.611%	8.445%	7.001%

Note: Numbers may not add because of rounding.

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6. Derivation of unfunded actuarial accrued liability as of July 1, 1995 (dollars in thousands)

	1967 Plan			Plan 87					
	Municipal	Police	Fire	Municipal (M)	Municipal (Y)	Elected	Police	Fire	Total
1. Number of members									
a. Active	16,975	4,102	1,776	1,370	2,933	21	2,217	577	29,971
b. Retired	16,389	6,613	2,668	11	1	7	15	4	25,708
c. Disabled	2,207	2,374	602	0	0	0	12	1	5,196
d. Terminated vested	658	66	11	3	0	0	0	0	738
e. Total	36,229	13,155	5,057	1,384	2,934	28	2,244	582	61,613
2. Total annual benefits									
a. Retired	$ 152,489	$ 90,259	$ 33,890	$ 36	$ 4	$ 147	$ 84	$ 21	$ 276,929
b. Disabled	24,288	33,975	9,441	0	0	0	284	6	67,993
c Terminated vested	7,254	627	95	16	0	0	0	0	7,992
e. Total	$ 184,031	$ 124,861	$ 43,426	$ 52	$ 4	$ 147	$ 368	$ 27	$ 352,914
3. Present value of benefits									
a. Active members									
Service retirement	$1,160,858	$ 563,249	$263,349	$31,693	$40,007	$ 4,655	$ 78,981	$19,455	$2,162,248
Preretirement death	127,729	31,526	15,453	4,342	6,111	322	5,625	1,546	192,655
Disability retirement	161,844	85,903	38,146	5,635	10,041	306	28,677	7,689	338,241
Vested termination	164,840	7,054	1,778	7,370	8,935	146	18,071	4,083	212,276
Refund of nonvested members 'contributions	3,904	132	21	1,472	2,700	21	5,156	1,245	14,651
Healthcare benefit	0	528	251	0	0	0	147	42	968
Subtotal	$1,619,175	$ 688,392	$318,998	$50,513	$67,795	$ 5,450	$136,657	$34,060	$2,921,040
b. Nonactive members									
Service retired	$1,172,172	$ 783,602	$272,808	$ 339	$ 23	$ 1,315	$ 817	$ 112	$2,231,189
Disabled	184,804	302,166	82,149	0	0	0	3,003	64	572,186
Terminated vested	39,517	5,565	766	94	0	0	0	0	45,941
Nonvested members' contributions	1,776	151	33	95	7	0	66	0	2,129
Health care benefit	0	4,176	2,404	0	0	0	511	86	7,177
Subtotal	$1,398,269	$1,095,661	$358,159	$ 528	$ 30	$ 1,315	$ 4,397	$ 262	$2,858,622
c. Total	$3,017,444	$1,784,053	$677,158	$51,040	$67,825	$ 6,765	$141,054	$34,323	$5,779,662

Note: Numbers may not add because of rounding.

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6. Derivation of unfunded actuarial accrued liability as of July 1, 1995 (thousands) — (continued)

	1967 Plan			Plan 87					
	Municipal	Police	Fire	Municipal (M)	Municipal (Y)	Elected	Police	Fire	Total
4. Present value of future normal costs									
a. Service retirement	$ 268,023	$ 119,137	$ 45,741	$ 18,162	$ 35,274	$ 985	$ 58,862	$ 14,787	$ 560,973
b. Preretirement death	38,588	8,572	3,549	2,701	5,517	99	4,540	1,272	64,839
c. Disability retirement	57,842	33,572	13,355	3,448	9,296	103	22,702	6,333	146,651
d. Vested termination	68,961	6,083	2,474	4,513	8,080	62	13,603	3,225	107,000
e. Refund of nonvested members' contributions	32,785	4,670	1,980	1,405	2,512	79	4,422	1,067	48,920
f. Health care benefit	0	216	89	0	0	0	118	34	458
g. Total	$ 466,199	$ 172,251	$ 67,188	$ 30,230	$ 60,679	$ 1,329	$104,246	$ 26,718	$ 928,842
5. Actuarial accrued liability *(3) - (4)*									
a. Active members									
Service retirement	$ 892,835	$ 444,112	$217,608	$ 13,531	$ 4,733	$ 3,670	$ 20,119	$ 4,668	$ 1,601,275
Preretirement death	89,141	22,954	11,904	1,641	594	223	1,085	274	127,816
Disability retirement	104,002	52,331	24,791	2,187	745	203	5,975	1,356	191,590
Vested termination	95,879	971	(696)	2,857	855	84	4,468	858	105,276
Refund of nonvested members' contributions	(28,881)	(4,538)	(1,959)	67	188	(58)	734	178	(34,269)
Health care benefit	0	312	162	0	0	0	29	8	510
Subtotal	$1,152,976	$ 516,141	$251,810	$ 20,283	$ 7,116	$ 4,121	$ 32,411	$ 7,342	$ 1,992,198
b. Nonactive members									
Service retired	$1,172,172	$ 783,602	$272,808	$ 339	$ 23	$ 1,315	$ 817	$ 112	$ 2,231,189
Disabled	184,804	302,166	82,149	0	0	0	3,003	64	572,186
Terminated vested	39,517	5,565	766	94	0	0	0	0	45,941
Nonvested members' contributions	1,776	151	33	95	7	0	66	0	2,129
Health care benefit	0	4,176	2,404	0	0	0	511	86	7,177
Subtotal	$1,398,269	$1,095,661	$358,159	$ 528	$ 30	$ 1,315	$ 4,397	$ 262	$ 2,858,622
c. Total	$2,551,245	$1,611,802	$609,969	$ 20,811	$ 7,146	$ 5,436	$ 36,808	$ 7,604	$ 4,850,820
6. Assets for valuation purposes	$1,252,900	$ 684,869	$288,048	$ 25,259	$ 6,919	$ 2,178	$ 41,822	$ 10,107	$ 2,312,103
7. Unfunded actuarial accrued liability *(5c) - (6)*	$1,298,344	$ 926,933	$321,922	$ (4,449)	$ 226	$ 3,259	$ (5,014)	$ (2,503)	$ 2,538,718

Note: Numbers may not add because of rounding.

7. Development of the expected unfunded actuarial accrued liability for fiscal year ending June 30, 1997 (thousands)

	1967 Plan			Plan 87					
	Municipal	Police	Fire	Municipal (M)	Municipal (Y)	Elected	Police	Fire	Total
1. Expected July 1, 1995 unfunded actuarial accrued liability based on July 1, 1994 valuation	$1,263,333	$ 916,411	$322,670	$ (5,167)	$ (941)	$ 3,501	$ (4,573)	$ (2,058)	$2,493,176
2. Changes in July 1, 1995 unfunded actuarial accrued liability due to:									
a. Actuarial experience	$ 35,011	$ 10,522	$ (748)	$ (175)	$1,168	$ (243)	$ (441)	$ (445)	$ 44,649
b. Active plan	0	0	0	893	0	0	0	0	893
c. Subtotal	$ 35,011	$ 10,522	$ (748)	$ 718	$1,168	$ (243)	$ (441)	$ (445)	$ 45,542
3. Actual unfunded actuarial accrued liability, July 1, 1995 *(1) + (2)*	$1,298,344	$ 926,933	$321,922	$ (4,449)	$ 226	$ 3,259	$ (5,014)	$ (2,503)	$2,538,718
4. Expected changes in unfunded actuarial accrued liability from July 1, 1995 to July 1, 1996:									
a. Interest *(2c) x .09*	$ 3,151	$ 947	$ (67)	$ 65	$ 105	$ (22)	$ (40)	$ (40)	$ 4,099
b. Increase in unfunded actuarial accrued liability from July 1, 1995 to July 1, 1996 according to amortization schedule per 1995 valuation report	33,563	11,576	7,095	252	32	(173)	291	97	52,734
c. Subtotal	$ 36,714	$ 12,523	$ 7,028	$ 316	$ 137	$ (195)	$ 251	$ 57	$ 56,833
5. Expected July 1, 1996 unfunded actuarial accrued liability *(3) + (4c)*	$1,335,059	$ 939,456	$328,950	$ (4,132)	$ 364	$ 3,064	$ (4,762)	$ (2,447)	$2,595,551

Note: Numbers may not add because of rounding.

8. Development of municipal division (1967 Plan) annual end-of-year payment toward the unfunded actuarial accrued liability for fiscal year ending June 30, 1997 (thousands)

		Fiscal Year Ending June 30, 1997		
	Outstanding Balance July 1, 1995	Expected Balance July 1, 1996	Amortization Period Remaining	Annual End-of-Year Payment[a]
1. Expected July 1, 1995 unfunded actuarial accrued liability based on July 1, 1994 valuation				
a. Dombrowski	$ 15,671	$ 15,068	13	$ 2,013
b. Remaining	1,247,663	1,281,828	—	82,618[b,c]
c. Subtotal	$1,263,333	$1,296,897	—	$ 84,630
2. Changes in unfunded actuarial accrued liability, July 1, 1995				
(Gains)/losses	$ 35,011	$ 38,162	15	$ 4,734
3. Total *(1c) + (2)*	$1,298,344	$1,335,059	—	$ 89,364

Note: Numbers may not add because of rounding.

a. Includes interest at 9% to year-end.

b. Payments toward unfunded liability as of July 1, 1985, increasing at 5.5% per year. All other payments are level dollar amounts.

c. Includes $78 payable solely by the Parking Authority due to the 1993 early retirement window.

9. Development of police division (1967 Plan) annual end-of-year payment toward the unfunded actuarial accrued liability for fiscal year ending June 30, 1997 (thousands)

	Outstanding Balance July 1, 1995	Fiscal Year Ending June 30, 1997: Expected Balance July 1, 1996	Fiscal Year Ending June 30, 1997: Amortization Period Remaining	Annual End-of-Year Payment[a]
1. Expected July 1, 1995 unfunded actuarial accrued liability based on July 1, 1994 valuation				
a. Dombrowski	$ 10,024	$ 9,639	13	$ 1,287
b. Remaining	906,386	918,348	—	72,499[b]
c. Subtotal	$ 916,411	$ 927,987	—	$ 73,787
2. Changes in unfunded actuarial accrued liability, July 1, 1995				
(Gains)/losses	$ 10,522	$ 11,469	15	$ 1,423
3. Total *(1c) + (2)*	$ 926,933	$ 939,456	—	$ 75,209

Note: Numbers may not add because of rounding.

a. Includes interest at 9% to year-end.

b. Payments toward unfunded liability as of July 1, 1985, increasing at 5.5% per year. All other payments are level dollar amounts.

10. Development of fire division (1967 Plan) annual end-of-year payment toward the unfunded actuarial accrued liability for fiscal year ending June 30, 1997 (thousands)

		Fiscal Year Ending June 30, 1997		
	Outstanding Balance July 1, 1995	Expected Balance July 1, 1996	Amortization Period Remaining	Annual End-of-Year Payment[a]
1. Expected July 1, 1995 unfunded actuarial accrued liability based on July 1, 1994 valuation				
a. Dombrowski	$ 3,992	$ 3,838	13	$ 513
b. Remaining	318,678	325,927	—	22,583[b]
c. Subtotal	$ 322,670	$ 329,765	—	$ 23,096
2. Changes in unfunded actuarial accrued liability, July 1, 1995				
(Gains)/losses	$ (748)	$ (815)	15	$ (101)
3. Total *(1c) + (2)*	$ 321,922	$ 328,950	—	$ 22,995

Note: Numbers may not add because of rounding.

a. Includes interest at 9% to year-end.

b. Payments toward unfunded liability as of July 1, 1985, increasing at 5.5% per year. All other payments are level dollar amounts.

11. Development of Plan M municipal division (Plan 87) annual end-of-year payment toward the unfunded actuarial accrued liability for fiscal year ending June 30, 1997 (thousands)

		Fiscal Year Ending June 30, 1997		
	Outstanding Balance July 1, 1995	Expected Balance July 1, 1996	Amortization Period Remaining	Annual End-of-Year Payment[a]
1. Expected July 1, 1995 unfunded actuarial accrued liability based on July 1, 1994 valuation	$ (5,167)	$ (4,915)	—	$ (717)
2. Changes in unfunded actuarial accrued liability, July 1, 1995				
a. (Gains)/losses	$ (175)	$ (190)	15	$ (24)
b. Active plan amendment	893	973	20	107
c. Subtotal	$ 718	$ 783		$ 83
3. Total *(1) + (2c)*	$ (4,449)	$ (4,132)	—	$ (634)

Note: Numbers may not add because of rounding.

a. Includes interest at 9% to year-end.

12. Development of Plan Y municipal division (Plan 87) annual end-of-year payment toward the unfunded actuarial accrued liability for fiscal year ending June 30, 1997 (thousands)

		Fiscal Year Ending June 30, 1997		
	Outstanding Balance July 1, 1995	Expected Balance July 1, 1996	Amortization Period Remaining	Annual End-of-Year Payment[a]
1. Expected July 1, 1995 unfunded actuarial accrued liability based on July 1, 1994 valuation	$ (941)	$ (909)	—	$ (117)
2. Changes in unfunded actuarial accrued liability, July 1, 1995				
(Gains)/losses	$1,168	$1,273	15	$ 158
3. Total *(1) + (2)*	$ 226	$ 364	—	$ 41

Note: Numbers may not add because of rounding.

a. Includes interest at 9% to year-end.

13. Development of elected division (Plan 87) annual end-of-year payment toward the unfunded actuarial accrued liability for fiscal year ending June 30, 1997 (thousands)

		Fiscal Year Ending June 30, 1997		
	Outstanding Balance July 1, 1995	Expected Balance July 1, 1996	Amortization Period Remaining	Annual End-of-Year Payment[a]
1. Expected July 1, 1995 unfunded actuarial accrued liability based on July 1, 1994 valuation	$ 3,501	$ 3,329	—	$ 488
2. Changes in unfunded actuarial accrued liability, July 1, 1995				
(Gains)/losses	$ (243)	$ (265)	15	$ (33)
3. Total *(1)* + *(2)*	$ 3,259	$ 3,064	—	$ 455

Note: Numbers may not add because of rounding.

a. Includes interest at 9% to year-end.

14. Development of police division (Plan 87) annual end-of-year payment toward the unfunded actuarial accrued liability for fiscal year ending June 30, 1997 (thousands)

		Fiscal Year Ending June 30, 1997		
	Outstanding Balance July 1, 1995	Expected Balance July 1, 1996	Amortization Period Remaining	Annual End-of-Year Payment[a]
1. Expected July 1, 1995 unfunded actuarial accrued liability based on July 1, 1994 valuation	$ (4,573)	$ (4,282)	—	$ (703)
2. Changes in unfunded actuarial accrued liability, July 1, 1995				
(Gains)/losses	$ (441)	$ (480)	15	$ (60)
3. Total *(1)* + *(2)*	$ (5,014)	$ (4,762)	—	$ (762)

Note: Numbers may not add because of rounding.

a. Includes interest at 9% to year-end.

15. Development of fire division (Plan 87) annual end-of-year payment toward the unfunded actuarial accrued liability for fiscal year ending June 30, 1997 (thousands)

		Fiscal Year Ending June 30, 1997		
	Outstanding Balance July 1, 1995	Expected Balance July 1, 1996	Amortization Period Remaining	Annual End-of-Year Payment[a]
1. Expected July 1, 1995 unfunded actuarial accrued liability based on July 1, 1994 valuation	$ (2,058)	$ (1,961)	—	$ (282)
2. Changes in unfunded actuarial accrued liability, July 1, 1995				
(Gains)/losses	$ (445)	$ (485)	15	$ (60)
3. Total *(1)* + *(2)*	$ (2,503)	$ (2,447)	—	$ (342)

Note: Numbers may not add because of rounding.

a. Includes interest at 9% to year-end.

16. Development of total division annual end-of-year payment toward the unfunded actuarial accrued liability for fiscal year ending June 30, 1997 (thousands)

		Fiscal Year Ending June 30, 1997		
	Outstanding Balance July 1, 1995	Expected Balance July 1, 1996	Amortization Period Remaining	Annual End-of-Year Payment[a]
1. Expected July 1, 1995 unfunded actuarial accrued liability based on July 1, 1994 valuation				
a. Dombrowski	$ 29,687	$ 28,546	13	$ 3,813
b. Remaining	2,463,489	2,517,364	—	176,370[b]
c. Subtotal	$ 2,493,176	$ 2,545,910	—	$ 180,182
2. Changes in unfunded actuarial accrued liability, July 1, 1995				
a. (Gains)/losses	$ 44,649	$ 48,668	15	$ 6,038
b. Active plan amendment	893	973	20	107
c. Subtotal	$ 45,542	$ 49,641		$ 6,144
3. Total *(1c) + (2c)*	$ 2,538,718	$ 2,595,551	—	$ 186,327

Note: Numbers may not add because of rounding.

a. Includes interest at 9% to year-end.

b. Payment towards unfunded liability as of July 1, 1985, increasing at 5.5% per year. All other payments are level dollar amounts. Includes $78 payable solely by the Parking Authority due to the 1993 early retirement window.

GAAP funding requirements comparison

GAAP-specified standards require the unfunded actuarial accrued liability to be funded over 40 years in level dollar payments. The City's funding policy requires the July 1, 1985 unfunded actuarial accrued liability be amortized over 40 years ending June 30, 2019, with payments increasing 5.5% per year. Changes in the actuarial accrued liability realized after July 1, 1985 are amortized in level dollar payments in accordance with Act 205 as follows:

- Changes in actuarial assumptions — 20 years
- Experience gains and losses — 15 years
- Active members' benefit modifications — 20 years
- Nonactive members' benefit modifications — 10 years.

The Dombrowski unfunded actuarial accrued liability is amortized in level dollar payments over 40 years ending June 30, 2009, as ordered by the Court of Common Pleas of Philadelphia County.

Table 18 compares the City's funding policy to amortize the unfunded actuarial accrued liability with the GAAP-specified funding standards.

For Table 18, the anticipated July 1, 1981 unfunded actuarial accrued liability was the starting point. Adjustments resulting from benefit modifications, changes in assumptions, funding method, and/or actuarial experience recognized in subsequent valuations are reflected. Under GAAP standards, adjustments determined under subsequent valuations are amortized over a 40-year period from when first recognized.

Table 18 shows the annual and accumulated *deficit* between the funding policies of the City and those under GAAP. Because the City's funding policy results in the complete amortization of the unfunded actuarial accrued liability, the accumulated deficit between the City's funding policy and GAAP decreases to zero at the end of the last 40-year GAAP amortization period.

18. Comparison of official unfunded accrued liability funding with funding under the provisions of APB No. 8 (thousands)

Fiscal Year Ending June 30	Schedule of Annual End-of-Year Payments to Fund the Anticipated July 1, 1996 Unfunded Accrued Liability: 1967 Plan Municipal	1967 Plan Police	1967 Plan Fire	Plan 87 Municipal (M)	Plan 87 Municipal (Y)	Plan 87 Elected	Plan 87 Police	Plan 87 Fire	Total	Comparison of Official Schedule and 40-Year Amortization Under GAAP: GAAP 40-Year Amortization	GAAP Deficit	Accumulated Deficit
1982	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	$ 68,257	$ 136,206	$ 67,950	$ 67,950
1983	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	72,118	136,206	64,088	138,153
1984	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	73,696	130,870	57,173	207,761
1985	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	77,912	130,870	52,958	279,417
1986	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	84,717	125,707	40,989	345,554
1987	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	95,276	136,909	41,633	418,287
1988	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	88,533	129,411	40,878	496,810
1989	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	96,819	131,435	34,616	576,139
1990	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	116,105	141,451	25,346	653,338
1991	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	132,959	148,192	15,233	727,372
1992	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	143,477	151,090	7,613	800,448
1993	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	144,362	150,243	5,880	878,369
1994	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	165,694	160,641	(5,054)	952,368
1995	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	163,562	147,348	(16,213)	1,021,868
1996	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	171,652	147,351	(24,300)	1,089,536
1997	$ 89,364	$ 75,209	$ 22,995	$ (634)	$ 41	$ 455	$ (762)	$ (342)	186,327	151,966	(34,361)	1,153,233
1998	93,665	77,713	24,001	(634)	41	455	(762)	(342)	194,136	151,966	(42,171)	1,214,854
1999	98,667	80,924	25,282	(634)	41	455	(762)	(342)	203,629	151,966	(51,664)	1,272,527
2000	103,943	84,313	26,633	(634)	41	455	(762)	(342)	213,647	151,966	(61,681)	1,325,373
2001	109,510	82,689	25,962	(634)	41	455	(762)	(342)	216,918	151,966	(64,952)	1,379,705
2002	115,383	86,461	27,466	(634)	41	455	(762)	(342)	228,067	151,966	(76,101)	1,427,777
2003	130,547	94,460	31,182	(634)	41	455	(762)	(342)	254,946	151,966	(102,981)	1,453,297
2004	137,034	96,482	32,408	(634)	41	455	(770)	(361)	264,655	151,966	(112,689)	1,471,404
2005	137,208	94,877	33,444	(535)	41	307	(704)	(335)	264,302	151,966	(112,336)	1,491,494
2006	145,154	95,905	34,109	(465)	41	318	(656)	(306)	274,100	151,966	(122,134)	1,503,594
2007	159,149	91,680	34,266	(275)	41	319	(143)	(233)	284,804	151,966	(132,838)	1,506,080
2008	165,589	98,424	36,841	(150)	41	224	2	(210)	300,761	151,966	(148,795)	1,492,832
2009	160,574	103,919	39,015	(354)	41	111	93	(150)	303,249	151,966	(151,284)	1,475,903
2010	173,974	112,717	42,557	(211)	43	131	243	(135)	329,319	151,966	(177,353)	1,431,382
2011	183,607	118,341	45,997	104	159	(32)	(28)	(48)	348,099	151,966	(196,133)	1,364,073

a. Includes $78 payable solely by the Parking Authority due to the 1993 early retirement window.

FosterHiggins

18. Comparison of official unfunded accrued liability funding with funding under the provisions of APB No. 8 (thousands) (continued)

Fiscal Year Ending June 30	Schedule of Annual End-of-Year Payments to Fund the Anticipated July 1, 1996 Unfunded Accrued Liability: 1967 Plan			Plan 87						Comparison of Official Schedule and 40-Year Amortization Under GAAP		
	Municipal	Police	Fire	Municipal (M)	Municipal (Y)	Elected	Police	Fire	Total	GAAP 40-Year Amortization	GAAP Deficit	Accumulated Deficit
2012	$ 188,905	$ 123,361	$ 48,668	$ 127	$ 1	$ 1	$ 31	$ 12	$ 361,106	$ 151,966	$ (209,140)	$ 1,277,699
2013	199,488	130,158	51,379	127	1	1	31	12	381,198	151,966	(229,232)	1,163,460
2014	210,525	137,329	54,240	127	1	1	31	12	402,266	151,966	(250,300)	1,017,872
2015	225,957	145,122	57,884	107	0	0	0	0	429,070	151,966	(277,104)	832,376
2016	238,385	153,104	61,067	107	0	0	0	0	452,663	151,966	(300,697)	606,593
2017	251,496	161,525	64,426	0	0	0	0	0	477,447	151,966	(325,481)	335,705
2018	265,329	170,409	67,969	0	0	0	0	0	503,707	151,966	(351,741)	14,177
2019	279,922	179,781	71,708	0	0	0	0	0	531,411	151,966	(379,445)	(363,992)
2020	0	0	0	0	0	0	0	0	0	151,966	151,966	(244,785)
2021	0	0	0	0	0	0	0	0	0	151,966	151,966	(114,850)
2022	0	0	0	0	0	0	0	0	0	15,759	15,759	(109,427)
2023	0	0	0	0	0	0	0	0	0	15,759	15,759	(103,516)
2024	0	0	0	0	0	0	0	0	0	21,096	21,096	(91,736)
2025	0	0	0	0	0	0	0	0	0	21,096	21,096	(78,897)
2026	0	0	0	0	0	0	0	0	0	26,259	26,259	(59,738)
2027	0	0	0	0	0	0	0	0	0	15,057	15,057	(50,058)
2028	0	0	0	0	0	0	0	0	0	22,555	22,555	(32,008)
2029	0	0	0	0	0	0	0	0	0	20,531	20,531	(14,358)
2030	0	0	0	0	0	0	0	0	0	10,514	10,514	(5,136)
2031	0	0	0	0	0	0	0	0	0	3,774	3,774	(1,825)
2032	0	0	0	0	0	0	0	0	0	876	876	(1,113)
2033	0	0	0	0	0	0	0	0	0	1,723	1,723	510
2034	0	0	0	0	0	0	0	0	0	(8,675)	(8,675)	(8,119)
2035	0	0	0	0	0	0	0	0	0	4,617	4,617	(4,233)
2036	0	0	0	0	0	0	0	0	0	4,615	4,615	0

Note: Numbers may not add because of rounding.

Estimated pension fund progress

Table 19 shows the pension fund's estimated progress for fiscal years 1996 through 2015. The July 1, 1995 adjusted market value of fund assets is the starting point. This projection shows the emerging benefit payments of the fund and the concurrent fund growth. The projection is based on the same assumptions used to determine the Retirement System's annual cost and related liabilities.

The City contribution of normal cost plus the scheduled payments toward amortizing the unfunded actuarial accrued liability is used in the projection. The first year of the projection reflects the anticipated City contribution as of the July 1, 1994 valuation. Subsequent contributions are based on the July 1, 1995 valuation. The contribution's normal cost component increases 5.5% annually, reflecting anticipated increases in covered payroll. The projected employee contributions also increase annually, reflecting assumed salary increases at 5.5%.

The fund projection is limited to the period with the fiscal year ending June 30, 2015. Fluctuations from the figures shown in this 20-year period are to be expected.

The fund's underlying growth trend tends to follow that shown in Table 19, even though the actual numbers vary. The projection shows that City and employee combined fund contributions do not exceed the benefits paid. However, expected contributions combined with expected investment earnings cover the cash flow requirements to meet benefit payments and allow for continued fund growth.

19. Estimated progress of City of Philadelphia Municipal Retirement System Fund for July 1, 1995 through June 30, 2015 (dollars in thousands)

Fiscal Year Ending June 30	Fund at Beginning of Year	City Contributions[a]	Employee Contributions[a]	Benefit Payments[a]	Investment Income	Net Increase	Fund at End of Year
1996	$2,312,103	$242,650	$42,322	$346,334	$194,409	$133,046	$2,445,149
1997	2,445,149	260,661	46,463	355,694	206,148	157,578	2,602,726
1998	2,602,726	272,560	49,018	366,387	219,964	175,155	2,777,881
1999	2,777,881	286,366	51,714	378,608	235,299	194,772	2,972,653
2000	2,972,653	300,934	54,558	391,807	252,363	216,048	3,188,700
2001	3,188,700	309,006	57,559	406,014	271,303	231,854	3,420,554
2002	3,420,554	325,220	60,725	421,566	291,612	255,990	3,676,544
2003	3,676,544	357,442	64,065	439,477	313,995	296,025	3,972,569
2004	3,972,569	372,789	67,588	459,006	339,917	321,288	4,293,857
2005	4,293,857	378,383	71,305	478,869	368,107	338,927	4,632,784
2006	4,632,784	394,455	75,227	500,550	397,811	366,944	4,999,728
2007	4,999,728	411,779	79,365	522,484	430,035	398,694	5,398,422
2008	5,398,422	434,719	83,730	544,876	465,106	438,679	5,837,101
2009	5,837,101	444,575	88,335	566,446	503,824	470,289	6,307,390
2010	6,307,390	478,418	93,193	587,947	545,401	529,066	6,836,455
2011	6,836,455	505,398	98,319	609,895	592,260	586,083	7,422,538
2012	7,422,538	530,057	103,727	631,611	644,274	646,445	8,068,983
2013	8,068,983	556,276	109,432	653,226	701,738	714,219	8,783,202
2014	8,783,202	586,973	115,450	674,318	765,339	793,445	9,576,647
2015	9,576,647	623,936	121,800	693,711	836,162	888,188	10,464,835

Note: Numbers may not add because of rounding.

a. City contributions are assumed to be made at year-end with interest. Employee contributions and benefit payments are assumed to be made mid-year.

Data for active, retired, disabled, and terminated vested members as of July 1, 1995 was provided by the Philadelphia Board of Pensions and Retirement to determine benefit liabilities and annual costs.

The active member data, supplied on tape and list, contained information for all Retirement System members as of July 1, 1995. The data contained basic identifying information on each employee in addition to the annual rate of base compensation, overtime pay, longevity payments, and employee contribution totals. We reviewed the data for consistency and completeness and verified it against the July 1, 1994 data for continued active member coverage.

The nonactive member data, also supplied on tape and list, contained information for all retired, beneficiary, disabled, and terminated vested members as of July 1, 1995.

Table 20 illustrates a net decrease in total plan membership during the period.

20. Total plan membership net change

	Number of Members	Percentage Increase (Decrease)
Active	+ 229	+ 0.8%
Retired	+ 296	+ 1.7
Surviving spouses	+ 100	+ 1.4
Other beneficiaries	+ 66	+ 6.3
Disabled	- 7	- 0.1
Terminated vested	+ 10	+ 1.4

Table 21 summarizes the changes in plan membership between valuations. Using the information provided, we identified changes in status due to retirement, disablement, death, and new entrants. However, no information regarding transfers, return to employment, and data corrections was available. *Net Other Terminations* consists of:

- Active
  - Terminated and left member contributions on deposit
  - Died during the period
  - Returned to employment
  - Transferred from one division to another

- Retired or disabled
  - Died during the period
  - Returned to employment

- Terminated vested
  - Retired or died during the period
  - Returned to employment

Table 22 breaks down active members' payroll and nonactive members' benefit payments.

21. Reconciliation of included members

	1967 Plan			Plan 87					
	Municipal	Police	Fire	Municipal (M)	Municipal (Y)	Elected	Police	Fire	Total
Active members									
Active, July 1, 1994	18,200	4,359	1,819	1,484	1,490	22	1,887	481	29,742
New entrants and rehires	+ 368	+ 11	+ 1	+ 83	+ 1,573	0	+ 344	+ 114	+ 2,494
Separations from active service									
Refunded contributions	- 197	- 12	0	- 97	- 93	0	- 14	- 7	- 420
Terminated vested	- 18	- 2	0	0	0	0	0	0	- 20
Became disabled	- 81	- 16	- 3	0	0	0	0	0	- 100
Retired	- 559	- 212	- 41	- 1	0	0	0	0	- 813
Net other terminations[a]	- 738	- 26	0	- 99	- 37	- 1	0	- 11	- 912
Active, July 1, 1995	16,975	4,102	1,776	1,370	2,933	21	2,217	577	29,971
Retired members									
Retired, July 1, 1994	11,109	4,465	1,657	1	0	6	0	0	17,238
New retirees	+ 559	+ 212	+ 41	+ 1	0	0	0	0	+ 813
Net other terminations	- 407	- 77	- 35	+ 1	+1	0	0	0	- 517
Retired, July 1, 1995	11,261	4,600	1,663	3	1	6	0	0	17,534
Surviving spouses									
Receiving benefit, July 1, 1994	4,158	1,833	970	2	0	1	3	0	6,967
New spouses	+ 215	+ 83	+ 40	+ 1	0	0	+ 2	+ 1	+ 342
Net other terminations	- 135	- 62	- 47	+ 2	0	0	0	0	- 242
Receiving benefit, July 1, 1995	4,238	1,854	963	5	0	1	5	1	7,067

a. Includes terminated employees who left contributions on deposit, deaths, and transfers among plans.

21. Reconciliation of included members (continued)

	1967 Plan			Plan 87					
	Municipal	Police	Fire	Municipal (M)	Municipal (Y)	Elected	Police	Fire	Total
Other beneficiaries									
Receiving benefit, July 1, 1994	836	154	40	3	0	0	7	1	1,041
New beneficiaries	+ 50	+ 4	+ 2	0	0	0	+ 1	+ 2	+ 59
Net other terminations	+ 4	+ 1	0	0	0	0	+ 2	0	+ 7
Receiving benefit, July 1, 1995	890	159	42	3	0	0	10	3	1,107
Disabled members									
Disabled, July 1, 1994	2,175	2,402	613	0	0	0	12	1	5,203
New disabilities	+ 81	+ 16	+ 3	0	0	0	0	0	+ 100
Net other terminations	- 49	- 44	- 14	0	0	0	0	0	- 107
Disabled, July 1, 1995	2,207	2,374	602	0	0	0	12	1	5,196
Terminated vested members									
Terminated vested, July 1, 1994	642	68	15	3	0	0	0	0	728
New vested terminations	+ 18	+ 2	0	0	0	0	0	0	+ 20
Net other terminations	- 2	- 4	- 4	0	0	0	0	0	- 10
Terminated vested, July 1, 1995	658	66	11	3	0	0	0	0	738

22. Summary of annual payroll and annual benefits (thousands)

	1967 Plan			Plan 87					
	Municipal	Police	Fire	Municipal (M)	Municipal (Y)	Elected	Police	Fire	Total
Active members									
Active as of July 1, 1994	$ 583,766	$ 164,277	$ 68,206	$ 43,741	$ 36,661	$ 1,499	$ 60,795	$ 15,334	$ 974,279
New entrants and pay increases	(10,719)	(6,198)	(119)	(1,942)	37,377	(59)	10,992	2,823	32,155
Active as of July 1, 1995	$ 573,047	$ 158,079	$ 68,087	$ 41,799	$ 74,038	$ 1,440	$ 71,787	$ 18,157	$1,006,434
Retired members									
Retired as of July 1, 1994	$ 123,227	$ 74,970	$ 28,151	$ 4	$ 0	$ 143	$ 0	$ 0	$ 226,496
Net new retirees	7,750	4,637	767	9	4	0	0	0	13,166
Retired as of July 1, 1995	$ 130,977	$ 79,607	$ 28,918	$ 13	$ 4	$ 143	$ 0	$ 0	$ 239,662
Surviving spouses									
Receiving benefit as of July 1, 1994	$ 16,951	$ 9,463	$ 4,717	$ 1	$ 0	$ 4	$ 20	$ 0	$ 31,156
Net new spouses	975	453	40	4	0	0	14	4	1,490
Receiving benefit as of July 1, 1995	$ 17,926	$ 9,916	$ 4,757	$ 5	$ 0	$ 4	$ 34	$ 4	$ 32,646
Other beneficiaries									
Receiving benefit as of July 1, 1994	$ 3,215	$ 683	$ 221	$ 17	$ 0	$ 0	$ 31	$ 7	$ 4,173
Net new beneficiaries	372	52	(6)	0	0	0	19	10	448
Receiving benefit as of July 1, 1995	$ 3,587	$ 735	$ 215	$ 17	$ 0	$ 0	$ 50	$ 17	$ 4,621

Note: Numbers may not add because of rounding.

22. Summary of annual payroll and annual benefits (thousands)

	1967 Plan			Plan 87					
	Municipal	Police	Fire	Municipal (M)	Municipal (Y)	Elected	Police	Fire	Total
Disabled members									
Disabled as of July 1, 1994	$ 23,104	$ 34,093	$ 9,469	$ 0	$ 0	$ 0	$ 284	$ 6	$ 66,956
Net new disabilities	1,184	(118)	(28)	0	0	0	0	0	1,037
Disabled as of July 1, 1995	$ 24,288	$ 33,975	$ 9,441	$ 0	$ 0	$ 0	$ 284	$ 6	$ 67,993
Terminated vested members									
Terminated vested as of July 1, 1994	$ 6,884	$ 607	$ 131	$ 16	$ 0	$ 0	$ 0	$ 0	$ 7,638
Net new vested terminations	370	20	(36)	0	0	0	0	0	355
Terminated vested as of July 1, 1995	$ 7,254	$ 627	$ 95	$ 16	$ 0	$ 0	$ 0	$ 0	$ 7,993

Note: Numbers may not add because of rounding.

A distribution of the active employees' annual earnings for each division by age and service group as of July 1, 1995 appears in Tables 23 through 46.

A distribution of terminated vested members by age and monthly pension is shown in Table 47. Tables 48, 49, and 50 present distributions of the 1967 Plan municipal division retired and disabled members by number of members, total monthly pensions, and the average monthly pension. This information is shown separately for members retiring before and after July 1, 1994. Similarly, Tables 51 through 71 show this information for the remaining groups with retired and disabled members.

23. Municipal (1967 Plan) annual earnings by age groups (dollars in thousands)

	Male			Female			All		
Age Group	Number of People	Total Annual Earnings	Average Annual Earnings	Number of People	Total Annual Earnings	Average Annual Earnings	Number of People	Total Annual Earnings	Average Annual Earnings
0-19	1	20	20	0	0	0	1	20	20
20-24	46	1,187	26	31	723	23	77	1,910	25
25-29	323	10,221	32	293	7,793	27	616	18,014	29
30-34	868	28,233	33	679	19,710	29	1,547	47,943	31
35-39	1,519	53,647	35	1,171	35,764	31	2,690	89,411	33
40-44	1,838	67,544	37	1,315	39,972	30	3,153	107,516	34
45-49	2,251	85,255	38	1,409	45,127	32	3,660	130,382	36
50-54	1,499	57,614	38	1,161	35,484	31	2,660	93,099	35
55-59	816	31,254	38	680	19,990	29	1,496	51,243	34
60-64	386	13,765	36	343	9,348	27	729	23,113	32
65-69	124	4,261	34	116	3,072	26	240	7,333	31
70-74	38	1,448	38	33	767	23	71	2,214	31
75-79	9	275	31	12	282	23	21	557	27
80-84	8	133	17	4	88	22	12	221	18
85+	1	65	65	1	5	5	2	70	35
TOTAL	9,727	354,923	36	7,248	218,124	30	16,975	573,047	34

Note: Age represents attained age

24. Municipal (1967 Plan) annual earnings by service groups (dollars in thousands)

	Male			Female			All		
Service Group	Number of People	Total Annual Earnings	Average Annual Earnings	Number of People	Total Annual Earnings	Average Annual Earnings	Number of People	Total Annual Earnings	Average Annual Earnings
0	62	1,830	30	34	1,055	31	96	2,885	30
1	30	858	29	20	504	25	50	1,362	27
2	15	481	32	23	625	27	38	1,106	29
3	344	10,966	32	381	9,057	24	725	20,023	28
4	336	10,006	30	188	5,348	28	524	15,355	29
5	533	17,595	33	602	15,768	26	1,135	33,363	29
6-10	2,317	77,322	33	2,251	62,777	28	4,568	140,099	31
11-15	1,833	67,934	37	1,332	43,511	33	3,165	111,444	35
16-20	1,640	62,568	38	770	25,012	32	2,410	87,581	36
21-25	1,556	61,370	39	772	25,358	33	2,328	86,728	37
26-30	761	30,911	41	535	17,621	33	1,296	48,531	37
31+	300	13,082	44	340	11,487	34	640	24,569	38
TOTAL	9,727	354,923	36	7,248	218,124	30	16,975	573,047	34

25. Municipal (1967 Plan) service groups by age groups

Age Group	Service Group 0	1	2	3	4	5	6-10	11-15	Over	Total
Male										
0-19	1	0	0	0	0	0	0	0	0	1
20-24	11	5	2	16	5	2	5	0	0	46
25-29	15	3	2	54	55	96	94	4	0	323
30-34	13	4	1	66	68	121	466	128	1	868
35-39	6	4	3	53	73	103	572	527	178	1,519
40-44	4	6	3	60	59	92	390	426	798	1,838
45-49	9	2	1	44	28	51	348	353	1;415	2,251
50-54	1	4	2	21	24	34	178	184	1,051	1,499
55-59	1	2	1	16	19	20	140	105	512	816
60-64	1	0	0	13	3	10	81	62	216	386
65-69	0	0	0	1	2	3	33	27	58	124
70-74	0	0	0	0	0	0	7	14	17	38
75-79	0	0	0	0	0	0	2	2	5	9
80-84	0	0	0	0	0	1	1	1	5	8
85+	0	0	0	0	0	0	0	0	1	1
TOTAL	62	30	15	344	336	533	2,317	1,833	4,257	9,727
Female										
0-19	0	0	0	0	0	0	0	0	0	0
20-24	1	2	1	14	3	5	5	0	0	31
25-29	4	4	5	56	22	70	131	1	0	293
30-34	5	2	2	65	28	118	335	121	3	679
35-39	11	4	1	96	41	128	475	302	113	1,171
40-44	5	3	5	56	34	106	448	266	392	1,315
45-49	5	1	3	37	30	68	362	265	638	1,409
50-54	2	2	3	30	8	50	233	176	657	1;161
55-59	1	1	2	8	19	35	147	107	360	680
60-64	0	1	1	16	2	16	84	60	163	343
65-69	0	0	0	3	0	5	24	25	59	116
70-74	0	0	0	0	0	1	5	6	21	33
75-79	0	0	0	0	1	0	2	3	6	12
80-84	0	0	0	0	0	0	0	0	4	4
85+	0	0	0	0	0	0	0	0	1	1
TOTAL	34	20	23	381	188	602	2,251	1,332	2,417	7,248

Note: Age represents attained age

26. Police (1967 Plan) annual earnings by age groups (dollars in thousands)

	Male			Female			All		
Age Group	Number of People	Total Annual Earnings	Average Annual Earnings	Number of People	Total Annual Earnings	Average Annual Earnings	Number of People	Total Annual Earnings	Average Annual Earnings
0-19	0	0	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0	0	0
25-29	19	661	35	9	311	35	28	972	35
30-34	271	9,947	37	95	3,408	36	366	13,355	36
35-39	654	24,576	38	179	6,524	36	833	31,100	37
40-44	955	37,336	39	180	6,677	37	1,135	44,014	39
45-49	954	37,276	39	110	4,031	37	1,064	41,307	39
50-54	458	18,359	40	22	807	37	480	19,166	40
55-59	146	5,909	40	4	145	36	150	6,055	40
60-64	32	1,492	47	0	0	0	32	1,492	47
65-69	12	531	44	0	0	0	12	531	44
70-74	2	89	44	0	0	0	2	89	44
75-79	0	0	0	0	0	0	0	0	0
80-84	0	0	0	0	0	0	0	0	0
85+	0	0	0	0	0	0	0	0	0
TOTAL	3,503	136,176	39	599	21,903	37	4,102	158,079	39

Note: Age represents attained age

27. Police (1967 Plan) annual earnings by service groups (dollars in thousands)

	Male			Female			All		
Service Group	Number of People	Total Annual Earnings	Average Annual Earnings	Number of People	Total Annual Earnings	Average Annual Earnings	Number of People	Total Annual Earnings	Average Annual Earnings
0	1	26	26	0	0	0	1	26	26
1	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0
3	3	98	33	4	130	33	7	229	33
4	1	35	35	1	35	35	2	70	35
5	10	342	34	3	106	35	13	448	34
6-10	572	20,621	36	279	9,952	36	851	30,573	36
11-15	635	24,101	38	195	7,239	37	830	31,340	38
16-20	720	27,818	39	81	3,082	38	801	30,900	39
21-25	1,014	40,257	40	30	1,110	37	1,044	41,367	40
26-30	436	17,613	40	5	208	42	441	17,820	40
31+	111	5,264	47	1	41	41	112	5,305	47
TOTAL	3,503	136,176	39	599	21,903	37	4,102	158,079	39

28. Police (1967 Plan) service groups by age groups

Age Group	Service Group 0	1	2	3	4	5	6-10	11-15	Over	Total
Male										
0-19	0	0	0	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0	0	0	0
25-29	0	0	0	1	1	4	13	0	0	19
30-34	0	0	0	2	0	5	205	58	1	271
35-39	1	0	0	0	0	0	210	343	100	654
40-44	0	0	0	0	0	1	111	158	685	955
45-49	0	0	0	0	0	0	32	73	849	954
50-54	0	0	0	0	0	0	0	3	455	458
55-59	0	0	0	0	0	0	0	0	146	146
60-64	0	0	0	0	0	0	0	0	32	32
65-69	0	0	0	0	0	0	1	0	11	12
70-74	0	0	0	0	0	0	0	0	2	2
75-79	0	0	0	0	0	0	0	0	0	0
80-84	0	0	0	0	0	0	0	0	0	0
85+	0	0	0	0	0	0	0	0	0	0
TOTAL	1	0	0	3	1	10	572	635	2,281	3,503
Female										
0-19	0	0	0	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0	0	0	0
25-29	0	0	0	1	0	2	6	0	0	9
30-34	0	0	0	1	1	1	71	21	0	95
35-39	0	0	0	0	0	0	101	64	14	179
40-44	0	0	0	1	0	0	67	64	48	180
45-49	0	0	0	1	0	0	34	44	31	110
50-54	0	0	0	0	0	0	0	1	21	22
55-59	0	0	0	0	0	0	0	1	3	4
60-64	0	0	0	0	0	0	0	0	0	0
65-69	0	0	0	0	0	0	0	0	0	0
70-74	0	0	0	0	0	0	0	0	0	0
75-79	0	0	0	0	0	0	0	0	0	0
80-84	0	0	0	0	0	0	0	0	0	0
85+	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	4	1	3	279	195	117	599

Note: Age represents attained age

29. Fire (1967 Plan) annual earnings by age groups (dollars in thousands)

	Male			Female			All		
Age Group	Number of People	Total Annual Earnings	Average Annual Earnings	Number of People	Total Annual Earnings	Average Annual Earnings	Number of People	Total Annual Earnings	Average Annual Earnings
0-19	0	0	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0	0	0
25-29	3	86	29	1	35	35	4	120	30
30-34	67	2,346	35	1	27	27	68	2,373	35
35-39	187	6,742	36	0	0	0	187	6,742	36
40-44	477	18,283	38	2	71	35	479	18,354	38
45-49	672	26,078	39	0	0	0	672	26,078	39
50-54	272	10,597	39	0	0	0	272	10,597	39
55-59	84	3,415	41	0	0	0	84	3,415	41
60-64	9	361	40	0	0	0	9	361	40
65-69	1	47	47	0	0	0	1	47	47
70-74	0	0	0	0	0	0	0	0	0
75-79	0	0	0	0	0	0	0	0	0
80-84	0	0	0	0	0	0	0	0	0
85+	0	0	0	0	0	0	0	0	0
TOTAL	1,772	67,954	38	4	132	33	1,776	68,086	38

Note: Age represents attained age

30. Fire (1967 Plan) annual earnings by service groups (dollars in thousands)

	Male			Female			All		
Service Group	Number of People	Total Annual Earnings	Average Annual Earnings	Number of People	Total Annual Earnings	Average Annual Earnings	Number of People	Total Annual Earnings	Average Annual Earnings
0	0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0
4	1	34	34	0	0	0	1	34	34
5	0	0	0	0	0	0	0	0	0
6-10	240	8,499	35	3	105	35	243	8,604	35
11-15	194	7,097	37	1	27	27	195	7,124	37
16-20	472	17,989	38	0	0	0	472	17,989	38
21-25	445	17,446	39	0	0	0	445	17,446	39
26-30	318	12,603	40	0	0	0	318	12,603	40
31+	102	4,286	42	0	0	0	102	4,286	42
TOTAL	1,772	67,954	38	4	132	33	1,776	68,086	38

31. Fire (1967 Plan) service groups by age groups

Age Group	Service Group 0	1	2	3	4	5	6-10	11-15	Over	Total
Male										
0-19	0	0	0	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0	0	0	0
25-29	0	0	0	0	1	0	2	0	0	3
30-34	0	0	0	0	0	0	56	11	0	67
35-39	0	0	0	0	0	0	102	79	6	187
40-44	0	0	0	0	0	0	65	74	338	477
45-49	0	0	0	0	0	0	15	30	627	672
50-54	0	0	0	0	0	0	0	0	272	272
55-59	0	0	0	0	0	0	0	0	84	84
60-64	0	0	0	0	0	0	0	0	9	9
65-69	0	0	0	0	0	0	0	0	1	1
70-74	0	0	0	0	0	0	0	0	0	0
75-79	0	0	0	0	0	0	0	0	0	0
80-84	0	0	0	0	0	0	0	0	0	0
85+	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	1	0	240	194	1,337	1,772
Female										
0-19	0	0	0	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	1	0	0	1
30-34	0	0	0	0	0	0	0	1	0	1
35-39	0	0	0	0	0	0	0	0	0	0
40-44	0	0	0	0	0	0	2	0	0	2
45-49	0	0	0	0	0	0	0	0	0	0
50-54	0	0	0	0	0	0	0	0	0	0
55-59	0	0	0	0	0	0	0	0	0	0
60-64	0	0	0	0	0	0	0	0	0	0
65-69	0	0	0	0	0	0	0	0	0	0
70-74	0	0	0	0	0	0	0	0	0	0
75-79	0	0	0	0	0	0	0	0	0	0
80-84	0	0	0	0	0	0	0	0	0	0
85+	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	3	1	0	4

Note: Age represents attained age

32. Municipal (Plan 87) annual earnings by age groups (dollars in thousands)

	Male			Female			All		
Age Group	Number of People	Total Annual Earnings	Average Annual Earnings	Number of People	Total Annual Earnings	Average Annual Earnings	Number of People	Total Annual Earnings	Average Annual Earnings
0-19	11	67	6	1	5	5	12	72	6
20-24	13	219	17	29	550	19	42	768	18
25-29	72	1,987	28	100	2,695	27	172	4,682	27
30-34	120	4,132	34	168	5,423	32	288	9,555	33
35-39	94	3,472	37	93	2,666	29	187	6,138	33
40-44	89	3,444	39	108	3,602	33	197	7,047	36
45-49	56	2,090	37	102	3,031	30	158	5,122	32
50-54	43	1,759	41	50	1,621	32	93	3,381	36
55-59	37	1,289	35	45	1,078	24	82	2,367	29
60-64	20	522	26	42	865	21	62	1,386	22
65-69	16	484	30	22	284	13	38	768	20
70-74	10	239	24	12	52	4	22	292	13
75-79	5	148	30	10	40	4	15	188	13
80-84	1	30	30	1	4	4	2	34	17
85+	0	0	0	0	0	0	0	0	0
TOTAL	587	19,881	34	783	21,918	28	1,370	41,799	31

Note: Age represents attained age

33. Municipal (Plan 87) annual earnings by service groups (dollars in thousands)

	Male			Female			All		
Service Group	Number of People	Total Annual Earnings	Average Annual Earnings	Number of People	Total Annual Earnings	Average Annual Earnings	Number of People	Total Annual Earnings	Average Annual Earnings
0	8	206	26	7	146	21	15	352	23
1	10	130	13	25	354	14	35	484	14
2	40	776	19	29	743	26	69	1,519	22
3	113	4,554	40	135	3,916	29	248	8,470	34
4	61	1,882	31	66	1,668	25	127	3,550	28
5	102	3,347	33	180	5,284	29	282	8,631	31
6-10	241	8,392	35	332	9,409	28	573	17,801	31
11-15	7	389	56	3	90	30	10	479	48
16-20	2	55	28	3	143	48	5	198	40
21-25	2	111	56	3	165	55	5	276	55
26-30	1	40	40	0	0	0	1	40	40
31+	0	0	0	0	0	0	0	0	0
TOTAL	587	19,881	34	783	21,918	28	1,370	41,799	31

34. Municipal (Plan 87) service groups by age groups

Age Group	Service Group 0	1	2	3	4	5	6-10	11-15	Over	Total
Male										
0-19	0	2	9	0	0	0	0	0	0	11
20-24	0	4	4	1	2	2	0	0	0	13
25-29	1	2	7	20	8	16	17	1	0	72
30-34	1	1	8	25	14	25	45	1	0	120
35-39	3	0	2	16	6	23	43	0	1	94
40-44	1	0	2	16	12	13	42	2	1	89
45-49	0	0	1	8	7	7	30	2	1	56
50-54	1	0	3	9	5	5	20	0	0	43
55-59	0	0	1	5	4	6	18	1	2	37
60-64	1	0	2	8	0	3	6	0	0	20
65-69	0	1	0	2	1	1	11	0	0	16
70-74	0	0	1	2	1	0	6	0	0	10
75-79	0	0	0	1	1	1	2	0	0	5
80-84	0	0	0	0	0	0	1	0	0	1
85+	0	0	0	0	0	0	0	0	0	0
TOTAL	8	10	40	113	61	102	241	7	5	587
Female										
0-19	0	1	0	0	0	0	0	0	0	1
20-24	1	9	2	7	2	7	1	0	0	29
25-29	3	6	9	24	7	27	24	0	0	100
30-34	1	2	3	29	22	45	65	1	0	168
35-39	0	3	2	7	7	23	50	1	0	93
40-44	0	2	4	22	9	18	50	0	3	108
45-49	0	0	2	17	5	24	53	0	1	102
50-54	0	1	1	9	3	10	26	0	0	50
55-59	1	0	3	5	1	10	24	0	1	45
60-64	0	1	0	9	3	7	20	1	1	42
65-69	1	0	2	4	5	2	8	0	0	22
70-74	0	0	1	2	1	5	3	0	0	12
75-79	0	0	0	0	1	2	7	0	0	10
80-84	0	0	0	0	0	0	1	0	0	1
85+	0	0	0	0	0	0	0	0	0	0
TOTAL	7	25	29	135	66	180	332	3	6	783

Note: Age represents attained age

35. Plan Y (Plan 87) annual earnings by age groups (dollars in thousands)

	Male			Female			All		
Age Group	Number of People	Total Annual Earnings	Average Annual Earnings	Number of People	Total Annual Earnings	Average Annual Earnings	Number of People	Total Annual Earnings	Average Annual Earnings
0-19	2	2	1	5	84	17	7	86	12
20-24	130	3,061	24	143	3,146	22	273	6,207	23
25-29	320	8,688	27	330	7,964	24	650	16,651	26
30-34	313	8,672	28	263	6,131	23	576	14,803	26
35-39	272	7,623	28	218	5,136	24	490	12,759	26
40-44	201	5,824	29	176	4,214	24	377	10,038	27
45-49	138	3,852	28	91	2,233	25	229	6,085	27
50-54	71	2,418	34	76	1,717	23	147	4,135	28
55-59	39	1,115	29	43	821	19	82	1,936	24
60-64	23	464	20	29	472	16	52	937	18
65-69	11	160	15	20	121	6	31	281	9
70-74	4	8	2	11	61	6	15	69	5
75-79	2	46	23	2	5	3	4	52	13
80-84	0	0	0	0	0	0	0	0	0
85+	0	0	0	0	0	0	0	0	0
TOTAL	1,526	41,934	27	1,407	32,104	22	2,933	74,038	25

Note: Age represents attained age

36. Plan Y (Plan 87) annual earnings by service groups (dollars in thousands)

	Male			Female			All		
Service Group	Number of People	Total Annual Earnings	Average Annual Earnings	Number of People	Total Annual Earnings	Average Annual Earnings	Number of People	Total Annual Earnings	Average Annual Earnings
0	634	16,207	26	619	14,009	23	1,253	30,216	24
1	594	16,885	28	538	11,978	22	1,132	28,863	25
2	249	7,428	30	173	4,151	24	422	11,579	27
3	8	218	27	14	316	23	22	534	24
4	5	98	20	8	199	25	13	297	23
5	6	163	27	7	176	25	13	339	26
6-10	16	483	30	32	901	28	48	1,384	29
11-15	7	191	27	7	187	27	14	378	27
16-20	5	218	44	5	111	22	10	329	33
21-25	1	20	20	0	0	0	1	20	20
26-30	1	23	23	3	56	19	4	79	20
31+	0	0	0	1	20	20	1	20	20
TOTAL	1,526	41,934	27	1,407	32,104	22	2,933	74,038	25

37. Plan Y (Plan 87) service groups by age groups

Age Group	Service Group 0	1	2	3	4	5	6-10	11-15	Over	Total
Male										
0-19	0	1	1	0	0	0	0	0	0	2
20-24	61	47	19	2	0	1	0	0	0	130
25-29	140	135	42	0	0	2	1	0	0	320
30-34	126	129	50	0	2	0	6	0	0	313
35-39	108	102	57	0	0	0	3	2	0	272
40-44	93	62	29	2	2	1	3	4	5	201
45-49	56	54	21	2	0	2	2	0	1	138
50-54	25	28	16	1	0	0	0	1	0	71
55-59	15	14	7	1	0	0	1	0	1	39
60-64	6	13	3	0	1	0	0	0	0	23
65-69	2	7	2	0	0	0	0	0	0	11
70-74	2	2	0	0	0	0	0	0	0	4
75-79	0	0	2	0	0	0	0	0	0	2
80-84	0	0	0	0	0	0	0	0	0	0
85+	0	0	0	0	0	0	0	0	0	0
TOTAL	634	594	249	8	5	6	16	7	7	1,526
Female										
0-19	3	2	0	0	0	0	0	0	0	5
20-24	72	60	8	2	0	1	0	0	0	143
25-29	156	121	38	6	1	3	5	0	0	330
30-34	112	102	32	4	3	1	8	1	0	263
35-39	87	87	28	1	2	1	7	4	1	218
40-44	80	61	29	0	1	1	4	0	0	176
45-49	38	34	9	0	0	0	5	2	3	91
50-54	37	22	11	1	1	0	1	0	3	76
55-59	19	16	7	0	0	0	1	0	0	43
60-64	6	15	5	0	0	0	1	0	2	29
65-69	4	12	4	0	0	0	0	0	0	20
70-74	4	6	1	0	0	0	0	0	0	11
75-79	1	0	1	0	0	0	0	0	0	2
80-84	0	0	0	0	0	0	0	0	0	0
85+	0	0	0	0	0	0	0	0	0	0
TOTAL	619	538	173	14	8	7	32	7	9	1,407

Note: Age represents attained age

38. Elected (Plan 87) annual earnings by age groups (dollars in thousands)

Age Group	Male: Number of People	Male: Total Annual Earnings	Male: Average Annual Earnings	Female: Number of People	Female: Total Annual Earnings	Female: Average Annual Earnings	All: Number of People	All: Total Annual Earnings	All: Average Annual Earnings
0-19	0	0	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0	0	0
30-34	0	0	0	0	0	0	0	0	0
35-39	3	195	65	0	0	0	3	195	65
40-44	1	70	70	0	0	0	1	70	70
45-49	3	197	66	0	0	0	3	197	66
50-54	3	255	85	1	65	65	4	320	80
55-59	0	0	0	3	195	65	3	195	65
60-64	0	0	0	5	333	67	5	333	67
65-69	0	0	0	0	0	0	0	0	0
70-74	1	65	65	0	0	0	1	65	65
75-79	0	0	0	0	0	0	0	0	0
80-84	1	65	65	0	0	0	1	65	65
85+	0	0	0	0	0	0	0	0	0
TOTAL	12	847	71	9	593	66	21	1,440	69

Note: Age represents attained age

39. Elected (Plan 87) annual earnings by service groups (dollars in thousands)

	Male			Female			All		
Service Group	Number of People	Total Annual Earnings	Average Annual Earnings	Number of People	Total Annual Earnings	Average Annual Earnings	Number of People	Total Annual Earnings	Average Annual Earnings
0	0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0
3	3	195	65	2	130	65	5	325	65
4	0	0	0	0	0	0	0	0	0
5	1	70	70	0	0	0	1	70	70
6-10	1	65	65	0	0	0	1	65	65
11-15	4	275	69	5	327	65	9	602	67
16-20	1	110	110	1	68	68	2	178	89
21-25	1	67	67	0	0	0	1	67	67
26-30	1	65	65	0	0	0	1	65	65
31+	0	0	0	1	68	68	1	68	68
TOTAL	12	847	71	9	593	66	21	1,440	69

40. Elected (Plan 87) service groups by age groups

Age Group	Service Group 0	1	2	3	4	5	6-10	11-15	Over	Total
Male										
0-19	0	0	0	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0	0	0	0
30-34	0	0	0	0	0	0	0	0	0	0
35-39	0	0	0	2	0	0	1	0	0	3
40-44	0	0	0	0	0	1	0	0	0	1
45-49	0	0	0	0	0	0	0	1	2	3
50-54	0	0	0	1	0	0	0	1	1	3
55-59	0	0	0	0	0	0	0	0	0	0
60-64	0	0	0	0	0	0	0	0	0	0
65-69	0	0	0	0	0	0	0	0	0	0
70-74	0	0	0	0	0	0	0	1	0	1
75-79	0	0	0	0	0	0	0	0	0	0
80-84	0	0	0	0	0	0	0	1	0	1
85+	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	3	0	1	1	4	3	12
Female										
0-19	0	0	0	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0	0	0	0
30-34	0	0	0	0	0	0	0	0	0	0
35-39	0	0	0	0	0	0	0	0	0	0
40-44	0	0	0	0	0	0	0	0	0	0
45-49	0	0	0	0	0	0	0	0	0	0
50-54	0	0	0	0	0	0	0	1	0	1
55-59	0	0	0	2	0	0	0	1	0	3
60-64	0	0	0	0	0	0	0	3	2	5
65-69	0	0	0	0	0	0	0	0	0	0
70-74	0	0	0	0	0	0	0	0	0	0
75-79	0	0	0	0	0	0	0	0	0	0
80-84	0	0	0	0	0	0	0	0	0	0
85+	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	2	0	0	0	5	2	9

Note: Age represents attained age

41. Police (Plan 87) annual earnings by age groups (dollars in thousands)

Age Group	Male			Female			All		
	Number of People	Total Annual Earnings	Average Annual Earnings	Number of People	Total Annual Earnings	Average Annual Earnings	Number of People	Total Annual Earnings	Average Annual Earnings
0-19	0	0	0	0	0	0	0	0	0
20-24	179	5,188	29	54	1,576	29	233	6,764	29
25-29	703	22,688	32	171	5,409	32	874	28,097	32
30-34	505	16,704	33	162	5,333	33	667	22,037	33
35-39	206	6,922	34	111	3,739	34	317	10,662	34
40-44	67	2,234	33	54	1,854	34	121	4,089	34
45-49	1	26	26	2	50	25	3	75	25
50-54	1	36	36	1	26	26	2	63	31
55-59	0	0	0	0	0	0	0	0	0
60-64	0	0	0	0	0	0	0	0	0
65-69	0	0	0	0	0	0	0	0	0
70-74	0	0	0	0	0	0	0	0	0
75-79	0	0	0	0	0	0	0	0	0
80-84	0	0	0	0	0	0	0	0	0
85+	0	0	0	0	0	0	0	0	0
TOTAL	1,662	53,799	32	555	17,988	32	2,217	71,787	32

Note: Age represents attained age

42. Police (Plan 87) annual earnings by service groups (dollars in thousands)

	Male			Female			All		
Service Group	Number of People	Total Annual Earnings	Average Annual Earnings	Number of People	Total Annual Earnings	Average Annual Earnings	Number of People	Total Annual Earnings	Average Annual Earnings
0	227	5,710	25	85	2,137	25	312	7,847	25
1	187	5,161	28	53	1,466	28	240	6,627	28
2	150	4,310	29	35	1,015	29	185	5,325	29
3	165	5,743	35	57	1,974	35	222	7,717	35
4	99	3,452	35	39	1,361	35	138	4,813	35
5	587	20,663	35	167	5,840	35	754	26,503	35
6-10	244	8,651	35	117	4,132	35	361	12,783	35
11-15	2	71	35	2	65	32	4	135	34
16-20	1	36	36	0	0	0	1	36	36
21-25	0	0	0	0	0	0	0	0	0
26-30	0	0	0	0	0	0	0	0	0
31+	0	0	0	0	0	0	0	0	0
TOTAL	1,662	53,799	32	555	17,988	32	2,217	71,787	32

43. Police (Plan 87) service groups by age groups

Age Group	Service Group 0	1	2	3	4	5	6-10	11-15	Over	Total
Male										
0-19	0	0	0	0	0	0	0	0	0	0
20-24	61	37	28	17	9	26	1	0	0	179
25-29	97	92	57	82	50	241	84	0	0	703
30-34	45	40	51	48	27	197	97	0	0	505
35-39	16	16	8	16	11	98	40	1	0	206
40-44	7	2	6	2	2	25	22	1	0	67
45-49	1	0	0	0	0	0	0	0	0	1
50-54	0	0	0	0	0	0	0	0	1	1
55-59	0	0	0	0	0	0	0	0	0	0
60-64	0	0	0	0	0	0	0	0	0	0
65-69	0	0	0	0	0	0	0	0	0	0
70-74	0	0	0	0	0	0	0	0	0	0
75-79	0	0	0	0	0	0	0	0	0	0
80-84	0	0	0	0	0	0	0	0	0	0
85+	0	0	0	0	0	0	0	0	0	0
TOTAL	227	187	150	165	99	587	244	2	1	1,662
Female										
0-19	0	0	0	0	0	0	0	0	0	0
20-24	19	12	4	10	6	3	0	0	0	54
25-29	35	22	15	22	12	40	25	0	0	171
30-34	19	14	4	15	11	50	48	1	0	162
35-39	6	4	11	9	7	45	28	1	0	111
40-44	4	1	1	1	3	28	16	0	0	54
45-49	2	0	0	0	0	0	0	0	0	2
50-54	0	0	0	0	0	1	0	0	0	1
55-59	0	0	0	0	0	0	0	0	0	0
60-64	0	0	0	0	0	0	0	0	0	0
65-69	0	0	0	0	0	0	0	0	0	0
70-74	0	0	0	0	0	0	0	0	0	0
75-79	0	0	0	0	0	0	0	0	0	0
80-84	0	0	0	0	0	0	0	0	0	0
85+	0	0	0	0	0	0	0	0	0	0
TOTAL	85	53	35	57	39	167	117	2	0	555

Note: Age represents attained age

44. Fire (Plan 87) annual earnings by age groups (dollars in thousands)

	Male			Female			All		
Age Group	Number of People	Total Annual Earnings	Average Annual Earnings	Number of People	Total Annual Earnings	Average Annual Earnings	Number of People	Total Annual Earnings	Average Annual Earnings
0-19	0	0	0	0	0	0	0	0	0
20-24	32	799	25	0	0	0	32	799	25
25-29	145	4,280	30	1	24	24	146	4,305	29
30-34	211	6,748	32	11	367	33	222	7,116	32
35-39	124	4,117	33	3	103	34	127	4,219	33
40-44	40	1,379	34	1	24	24	41	1,404	34
45-49	9	315	35	0	0	0	9	315	35
50-54	0	0	0	0	0	0	0	0	0
55-59	0	0	0	0	0	0	0	0	0
60-64	0	0	0	0	0	0	0	0	0
65-69	0	0	0	0	0	0	0	0	0
70-74	0	0	0	0	0	0	0	0	0
75-79	0	0	0	0	0	0	0	0	0
80-84	0	0	0	0	0	0	0	0	0
85+	0	0	0	0	0	0	0	0	0
TOTAL	561	17,638	31	16	519	32	577	18,157	31

Note: Age represents attained age

45. Fire (Plan 87) annual earnings by service groups (dollars in thousands)

	Male			Female			All		
Service Group	Number of People	Total Annual Earnings	Average Annual Earnings	Number of People	Total Annual Earnings	Average Annual Earnings	Number of People	Total Annual Earnings	Average Annual Earnings
0	108	2,616	24	3	73	24	111	2,689	24
1	108	2,785	26	3	77	26	111	2,862	26
2	1	26	26	0	0	0	1	26	26
3	147	5,057	34	1	35	35	148	5,092	34
4	21	795	38	2	77	39	23	872	38
5	83	3,024	36	4	157	39	87	3,181	37
6-10	91	3,260	36	3	101	34	94	3,361	36
11-15	0	0	0	0	0	0	0	0	0
16-20	1	35	35	0	0	0	1	35	35
21-25	0	0	0	0	0	0	0	0	0
26-30	1	40	40	0	0	0	1	40	40
31+	0	0	0	0	0	0	0	0	0
TOTAL	561	17,638	31	16	519	32	577	18,157	31

46. Fire (Plan 87) service groups by age groups

Age Group	Service Group 0	1	2	3	4	5	6-10	11-15	Over	Total
Male										
0-19	0	0	0	0	0	0	0	0	0	0
20-24	24	7	0	1	0	0	0	0	0	32
25-29	49	30	1	39	9	13	4	0	0	145
30-34	25	48	0	71	7	29	31	0	0	211
35-39	5	23	0	31	4	28	33	0	0	124
40-44	4	0	0	5	1	11	18	0	1	40
45-49	1	0	0	0	0	2	5	0	1	9
50-54	0	0	0	0	0	0	0	0	0	0
55-59	0	0	0	0	0	0	0	0	0	0
60-64	0	0	0	0	0	0	0	0	0	0
65-69	0	0	0	0	0	0	0	0	0	0
70-74	0	0	0	0	0	0	0	0	0	0
75-79	0	0	0	0	0	0	0	0	0	0
80-84	0	0	0	0	0	0	0	0	0	0
85+	0	0	0	0	0	0	0	0	0	0
TOTAL	108	108	1	147	21	83	91	0	2	561
Female										
0-19	0	0	0	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0	0	0	0
25-29	1	0	0	0	0	0	0	0	0	1
30-34	1	2	0	1	1	3	3	0	0	11
35-39	0	1	0	0	1	1	0	0	0	3
40-44	1	0	0	0	0	0	0	0	0	1
45-49	0	0	0	0	0	0	0	0	0	0
50-54	0	0	0	0	0	0	0	0	0	0
55-59	0	0	0	0	0	0	0	0	0	0
60-64	0	0	0	0	0	0	0	0	0	0
65-69	0	0	0	0	0	0	0	0	0	0
70-74	0	0	0	0	0	0	0	0	0	0
75-79	0	0	0	0	0	0	0	0	0	0
80-84	0	0	0	0	0	0	0	0	0	0
85+	0	0	0	0	0	0	0	0	0	0
TOTAL	3	3	0	1	2	4	3	0	0	16

Note: Age represents attained age

47. Terminated vested (1967 Plan and Plan 87) members, July 1, 1995

	Municipal Members		Police Members		Fire Members	
Age	People	Monthly Pension	People	Monthly Pension	People	Monthly Pension
UNDER 40	38	$ 29,215	9	$ 6,340	1	$ 722
40-44	138	130,061	46	38,331	9	6,724
45-49	230	233,065	9	5,937	0	0
50-54	197	184,082	1	594	0	0
55-59	38	24,638	0	0	0	0
60-64	7	2,942	0	0	1	502
OVER 64	13	1,870	1	1,068	0	0
TOTAL	661	$605,873	66	$52,270	11	$7,948

Average Monthly Pension

Municipal	$917
Police	$792
Fire	$723

48. Number of disabled and retired municipal (1967 Plan) members, July 1, 1995

	Number of People or Plan Members								
	Disabled			Retired			Total		
Age	Prior	New	Total	Prior	New	Total	Prior	New	Total
UNDER 45	147	15	162	445	34	479	592	49	641
45-49	183	17	200	154	9	163	337	26	363
50-54	268	35	303	204	10	214	472	45	517
55-59	326	11	337	1,188	335	1,523	1,514	346	1,860
60-64	338	7	345	2,271	185	2,456	2,609	192	2,801
65-69	321	0	321	3,024	112	3,136	3,345	112	3,457
70-74	281	0	281	2,965	58	3,023	3,246	58	3,304
75-79	156	0	156	2,419	40	2,459	2,575	40	2,615
80-84	80	0	80	1,535	29	1,564	1,615	29	1,644
OVER 84	22	0	22	1,349	23	1,372	1,371	23	1,394
TOTAL	2,122	85	2,207	15,554	835	16,389	17,676	920	18,596

Note: *Prior* indicates plan members whose benefit payments began more than one year before the valuation date; *new* indicates plan members whose benefit payments began in the year preceding the valuation date.

49. Total monthly pensions of disabled and retired municipal (1967 Plan) members, July 1, 1995

	Total Monthly Pension Amounts								
	Disabled			Retired			Total		
Age	Prior	New	Total	Prior	New	Total	Prior	New	Total
UNDER 45	185,140.39	17,982.42	203,122.81	142,856.50	21,439.41	164,295.91	327,996.89	39,421.83	367,418.72
45-49	205,670.27	22,622.19	228,292.46	65,972.05	7,104.70	73,076.75	271,642.32	29,726.89	301,369.21
50-54	296,894.26	55,338.30	352,232.56	103,063.21	8,190.70	111,253.91	399,957.47	63,529.00	463,486.47
55-59	344,575.06	17,429.13	362,004.19	1,470,661.00	501,511.65	1,972,172.65	1,815,236.06	518,940.78	2,334,176.84
60-64	292,261.77	9,480.91	301,742.68	2,536,895.81	268,230.07	2,805,125.88	2,829,157.58	277,710.98	3,106,868.56
65-69	245,452.08	0.00	245,452.08	2,929,885.21	115,161.85	3,045,047.06	3,175,337.29	115,161.85	3,290,499.14
70-74	180,212.08	0.00	180,212.08	2,153,054.15	30,024.56	2,183,078.71	2,333,266.23	30,024.56	2,363,290.79
75-79	93,351.51	0.00	93,351.51	1,280,971.31	23,501.12	1,304,472.43	1,374,322.82	23,501.12	1,397,823.94
80-84	46,910.60	0.00	46,910.60	620,720.54	11,453.44	632,173.98	667,631.14	11,453.44	679,084.58
OVER 84	10,669.79	0.00	10,669.79	409,765.53	6,995.40	416,760.93	420,435.32	6,995.40	427,430.72
TOTAL	1,901,137.81	122,852.95	2,023,990.76	11,713,845.31	993,612.90	12,707,458.21	13,614,983.12	1,116,465.85	14,731,448.97

Note: *Prior* indicates lives whose benefit payments began more than one year before the valuation date; *new* indicates lives whose benefit payments began in the year preceding the valuation date.

50. Average monthly pension of disabled and retired municipal (1967 Plan) members, July 1, 1995

	Average Monthly Pension Amounts								
	Disabled			Retired			Total		
Age	Prior	New	Total	Prior	New	Total	Prior	New	Total
UNDER 45	1,259.46	1,198.83	1,253.84	321.03	630.57	343.00	554.05	804.53	573.20
45-49	1,123.88	1,330.72	1,141.46	428.39	789.41	448.32	806.06	1,143.34	830.22
50-54	1,107.81	1,581.09	1,162.48	505.21	819.07	519.88	847.37	1,411.76	896.49
55-59	1,056.98	1,584.47	1,074.20	1,237.93	1,497.05	1,294.93	1,198.97	1,499.83	1,254.93
60-64	864.68	1,354.42	874.62	1,117.08	1,449.89	1,142.15	1,084.38	1,446.41	1,109.20
65-69	764.65	0.00	764.65	968.88	1,028.23	971.00	949.28	1,028.23	951.84
70-74	641.32	0.00	641.32	726.16	517.66	722.16	718.81	517.66	715.28
75-79	598.41	0.00	598.41	529.55	587.53	530.49	533.72	587.53	534.54
80-84	586.38	0.00	586.38	404.38	394.95	404.20	413.39	394.95	413.07
OVER 84	484.99	0.00	484.99	303.76	304.15	303.76	306.66	304.15	306.62
TOTAL	895.92	1,445.33	917.08	753.11	1,189.96	775.37	770.25	1,213.55	792.18

Note: *Prior* indicates plan members whose benefit payments commenced more than one year before the valuation date; *new* indicates plan members whose benefit payments began in the year preceding the valuation date.

51. Number of disabled and retired police (1967 Plan) members, July 1, 1995

	Number of People or Plan Members								
	Disabled			Retired			Total		
Age	Prior	New	Total	Prior	New	Total	Prior	New	Total
UNDER 45	289	10	299	131	10	141	420	20	440
45-49	402	4	406	419	150	569	821	154	975
50-54	468	1	469	1,050	60	1,110	1,518	61	1,579
55-59	286	2	288	1,071	25	1,096	1,357	27	1,384
60-64	313	0	313	1,018	23	1,041	1,331	23	1,354
65-69	301	0	301	871	11	882	1,172	11	1,183
70-74	161	0	161	467	12	479	628	12	640
75-79	92	0	92	443	11	454	535	11	546
80-84	32	0	32	386	3	389	418	3	421
OVER 84	13	0	13	449	3	452	462	3	465
TOTAL	2,357	17	2,374	6,305	308	6,613	8,662	325	8,987

Note: *Prior* indicates plan members whose benefit payments began more than one year before the valuation date; *new* indicates plan members whose benefit payments began in the year preceding the valuation date.

52. Total monthly pensions of disabled and retired police (1967 Plan) members, July 1, 1995

Total Monthly Pension Amounts

	Disabled			Retired			Total		
Age	Prior	New	Total	Prior	New	Total	Prior	New	Total
UNDER 45	488,968.20	15,316.83	504,285.03	71,296.46	9,308.80	80,605.26	560,264.66	24,625.63	584,890.29
45-49	626,563.39	7,460.33	634,023.72	613,625.66	264,666.11	878,291.77	1,240,189.05	272,126.44	1,512,315.49
50-54	593,910.64	1,716.23	595,626.87	1,582,832.44	129,964.87	1,712,797.31	2,176,743.08	131,681.10	2,308,424.18
55-59	308,496.84	3,554.21	312,051.05	1,458,887.69	56,994.93	1,515,882.62	1,767,384.53	60,549.14	1,827,933.67
60-64	283,441.80	0.00	283,441.80	1,249,863.00	32,378.96	1,282,241.96	1,533,304.80	32,378.96	1,565,683.76
65-69	260,717.87	0.00	260,717.87	988,085.73	12,555.58	1,000,641.31	1,248,803.60	12,555.58	1,261,359.18
70-74	132,893.33	0.00	132,893.33	427,901.87	4,602.43	432,504.30	560,795.20	4,602.43	565,397.63
75-79	74,583.79	0.00	74,583.79	254,492.81	3,892.99	258,385.80	329,076.60	3,892.99	332,969.59
80-84	24,553.52	0.00	24,553.52	188,356.65	1,244.03	189,600.68	212,910.17	1,244.03	214,154.20
OVER 84	9,046.09	0.00	9,046.09	169,471.47	1,126.69	170,598.16	178,517.56	1,126.69	179,644.25
TOTAL	2,803,175.47	28,047.60	2,831,223.07	7,004,813.78	516,735.39	7,521,549.17	9,807,989.25	544,782.99	10,352,772.24

Note: *Prior* indicates plan members whose benefit payments began more than one year before the valuation date; *new* indicates plan members whose benefit payments began in the year preceding the valuation date.

53. Average monthly pension of disabled and retired police (1967 Plan) members, July 1, 1995

	Average Monthly Pension Amounts								
	Disabled			Retired			Total		
Age	Prior	New	Total	Prior	New	Total	Prior	New	Total
UNDER 45	1,691.93	1,531.68	1,686.57	544.25	930.88	571.67	1,333.96	1,231.28	1,329.30
45-49	1,558.62	1,865.08	1,561.63	1,464.50	1,764.44	1,543.57	1,510.58	1,767.05	1,551.09
50-54	1,269.04	1,716.23	1,269.99	1,507.46	2,166.08	1,543.06	1,433.95	2,158.71	1,461.95
55-59	1,078.66	1,777.11	1,083.51	1,362.17	2,279.80	1,383.10	1,302.42	2,242.56	1,320.76
60-64	905.56	0.00	905.56	1,227.76	1,407.78	1,231.74	1,151.99	1,407.78	1,156.34
65-69	866.17	0.00	866.17	1,134.43	1,141.42	1,134.51	1,065.53	1,141.42	1,066.24
70-74	825.42	0.00	825.42	916.28	383.54	902.93	892.99	383.54	883.43
75-79	810.69	0.00	810.69	574.48	353.91	569.13	615.10	353.91	609.83
80-84	767.30	0.00	767.30	487.97	414.68	487.41	509.35	414.68	508.68
OVER 84	695.85	0.00	695.85	377.44	375.56	377.43	386.40	375.56	386.33
TOTAL	1,189.30	1,649.86	1,192.60	1,110.99	1,677.71	1,137.39	1,132.30	1,676.26	1,151.97

Note: *Prior* indicates plan members whose benefit payments began more than one year before the valuation date; *new* indicates plan members whose benefit payments began in the year preceding the valuation date.

54. Number of disabled and retired fire (1967 Plan) members, July 1, 1995

Number of People or Plan Members

	Disabled			Retired			Total		
Age	Prior	New	Total	Prior	New	Total	Prior	New	Total
UNDER 45	43	2	45	31	3	34	74	5	79
45-49	98	0	98	110	25	135	208	25	233
50-54	129	1	130	294	14	308	423	15	438
55-59	87	0	87	293	8	301	380	8	388
60-64	52	0	52	246	3	249	298	3	301
65-69	46	0	46	251	4	255	297	4	301
70-74	67	0	67	373	9	382	440	9	449
75-79	41	0	41	436	10	446	477	10	487
80-84	26	0	26	350	5	355	376	5	381
OVER 84	10	0	10	198	5	203	208	5	213
TOTAL	599	3	602	2,582	86	2,668	3,181	89	3,270

Note: *Prior* indicates plan members whose benefit payments began more than one year before the valuation date; *new* indicates plan members whose benefit payments began in the year preceding the valuation date.

55. Total monthly pensions of disabled and retired fire (1967 Plan) members, July 1, 1995

	Total Monthly Pension Amounts								
	Disabled			Retired			Total		
Age	Prior	New	Total	Prior	New	Total	Prior	New	Total
UNDER 45	69,512.31	3,403.67	72,915.98	16,316.15	1,378.00	17,694.15	85,828.46	4,781.67	90,610.13
45-49	149,934.62	0.00	149,934.62	164,866.40	45,055.41	209,921.81	314,801.02	45,055.41	359,856.43
50-54	180,571.37	2,093.11	182,664.48	494,179.13	30,369.56	524,548.69	674,750.50	32,462.67	707,213.17
55-59	128,172.45	0.00	128,172.45	498,067.84	20,260.77	518,328.61	626,240.29	20,260.77	646,501.06
60-64	74,641.90	0.00	74,641.90	354,974.00	1,049.92	356,023.92	429,615.90	1,049.92	430,665.82
65-69	51,012.93	0.00	51,012.93	269,142.16	4,146.17	273,288.33	320,155.09	4,146.17	324,301.26
70-74	64,016.12	0.00	64,016.12	337,286.16	3,446.96	340,733.12	401,302.28	3,446.96	404,749.24
75-79	34,750.17	0.00	34,750.17	292,766.38	4,427.39	297,193.77	327,516.55	4,427.39	331,943.94
80-84	20,822.74	0.00	20,822.74	195,716.37	1,761.17	197,477.54	216,539.11	1,761.17	218,300.28
OVER 84	7,832.79	0.00	7,832.79	86,282.64	2,675.71	88,958.35	94,115.43	2,675.71	96,791.14
TOTAL	781,267.40	5,496.78	786,764.18	2,709,597.23	114,571.06	2,824,168.29	3,490,864.63	120,067.84	3,610,932.47

Note: *Prior* indicates plan members whose benefit payments began more than one year before the valuation date; *new* indicates plan members whose benefit payments began in the year preceding the valuation date.

56. Average monthly pension of disabled and retired fire (1967 Plan) members, July 1, 1995

	Average Monthly Pension Amounts								
	Disabled			Retired			Total		
Age	Prior	New	Total	Prior	New	Total	Prior	New	Total
UNDER 45	1,616.57	1,701.84	1,620.36	526.33	459.33	520.42	1,159.84	956.33	1,146.96
45-49	1,529.95	0.00	1,529.95	1,498.79	1,802.22	1,554.98	1,513.47	1,802.22	1,544.45
50-54	1,399.78	2,093.11	1,405.11	1,680.88	2,169.25	1,703.08	1,595.15	2,164.18	1,614.64
55-59	1,473.25	0.00	1,473.25	1,699.89	2,532.60	1,722.02	1,648.00	2,532.60	1,666.24
60-64	1,435.42	0.00	1,435.42	1,442.98	349.97	1,429.81	1,441.66	349.97	1,430.78
65-69	1,108.98	0.00	1,108.98	1,072.28	1,036.54	1,071.72	1,077.96	1,036.54	1,077.41
70-74	955.46	0.00	955.46	904.25	383.00	891.97	912.05	383.00	901.45
75-79	847.57	0.00	847.57	671.48	442.74	666.35	686.62	442.74	681.61
80-84	800.87	0.00	800.87	559.19	352.23	556.27	575.90	352.23	572.97
OVER 84	783.28	0.00	783.28	435.77	535.14	438.22	452.48	535.14	454.42
TOTAL	1,304.29	1,832.26	1,306.92	1,049.42	1,332.22	1,058.53	1,097.41	1,349.08	1,104.26

Note: *Prior* indicates plan members whose benefit payments began more than one year before the valuation date; *new* indicates plan members whose benefit payments began in the year preceding the valuation date.

57. Number of disabled and retired municipal (Plan 87) members, July 1, 1995

	Number of People or Plan Members								
	Disabled			Retired			Total		
Age	Prior	New	Total	Prior	New	Total	Prior	New	Total
UNDER 45	0	0	0	3	0	3	3	0	3
45-49	0	0	0	0	0	0	0	0	0
50-54	0	0	0	1	0	1	1	0	1
55-59	0	0	0	0	2	2	0	2	2
60-64	0	0	0	2	0	2	2	0	2
65-69	0	0	0	3	0	3	3	0	3
70-74	0	0	0	0	0	0	0	0	0
75-79	0	0	0	0	0	0	0	0	0
80-84	0	0	0	0	0	0	0	0	0
OVER 84	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	9	2	11	9	2	11

Note: *Prior* indicates plan members whose benefit payments began more than one year before the valuation date; *new* indicates plan members whose benefit payments began in the year preceding the valuation date.

58. Total monthly pensions of disabled and retired municipal (Plan 87) members, July 1, 1995

	Total Monthly Pension Amounts								
	Disabled			Retired			Total		
Age	Prior	New	Total	Prior	New	Total	Prior	New	Total
UNDER 45	0.00	0.00	0.00	1,434.13	0.00	1,434.13	1,434.13	0.00	1,434.13
45-49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50-54	0.00	0.00	0.00	135.74	0.00	135.74	135.74	0.00	135.74
55-59	0.00	0.00	0.00	0.00	442.57	442.57	0.00	442.57	442.57
60-64	0.00	0.00	0.00	117.92	0.00	117.92	117.92	0.00	117.92
65-69	0.00	0.00	0.00	831.99	0.00	831.99	831.99	0.00	831.99
70-74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
75-79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
80-84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OVER 84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL	0.00	0.00	0.00	2,519.78	442.57	2,962.35	2,519.78	442.57	2,962.35

Note: *Prior* indicates plan members whose benefit payments began more than one year before the valuation date; *new* indicates plan members whose benefit payments began in the year preceding the valuation date.

59. Average monthly pension of disabled and retired municipal (Plan 87) members, July 1, 1995

	Average Monthly Pension Amounts								
	Disabled			Retired			Total		
Age	Prior	New	Total	Prior	New	Total	Prior	New	Total
UNDER 45	0.00	0.00	0.00	478.04	0.00	478.04	478.04	0.00	478.04
45-49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50-54	0.00	0.00	0.00	135.74	0.00	135.74	135.74	0.00	135.74
55-59	0.00	0.00	0.00	0.00	221.28	221.28	0.00	221.28	221.28
60-64	0.00	0.00	0.00	58.96	0.00	58.96	58.96	0.00	58.96
65-69	0.00	0.00	0.00	277.33	0.00	277.33	277.33	0.00	277.33
70-74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
75-79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
80-84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OVER 84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL	0.00	0.00	0.00	279.98	221.28	269.30	279.98	221.28	269.30

Note: *Prior* indicates plan members whose benefit payments began more than one year before the valuation date; *new* indicates plan members whose benefit payments began in the year preceding the valuation date.

60. Number of disabled and retired Plan Y (Plan 87) members, July 1, 1995

Number of People or Plan Members

	Disabled			Retired			Total		
Age	Prior	New	Total	Prior	New	Total	Prior	New	Total
UNDER 45	0	0	0	0	0	0	0	0	0
45-49	0	0	0	0	0	0	0	0	0
50-54	0	0	0	0	0	0	0	0	0
55-59	0	0	0	0	0	0	0	0	0
60-64	0	0	0	0	0	0	0	0	0
65-69	0	0	0	0	0	0	0	0	0
70-74	0	0	0	0	1	1	0	1	1
75-79	0	0	0	0	0	0	0	0	0
80-84	0	0	0	0	0	0	0	0	0
OVER 84	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	1	1	0	1	1

Note: *Prior* indicates plan members whose benefit payments began more than one year before the valuation date; *new* indicates plan members whose benefit payments began in the year preceding the valuation date.

61. Total monthly pensions of disabled and retired Plan Y (Plan 87) members, July 1, 1995

	Total Monthly Pension Amounts								
	Disabled			Retired			Total		
Age	Prior	New	Total	Prior	New	Total	Prior	New	Total
UNDER 45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
45-49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50-54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
55-59	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
60-64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
65-69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
70-74	0.00	0.00	0.00	0.00	304.40	304.40	0.00	304.40	304.40
75-79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
80-84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OVER 84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL	0.00	0.00	0.00	0.00	304.40	304.40	0.00	304.40	304.40

Note: *Prior* indicates lives whose benefit payments began more than one year before the valuation date; *new* indicates lives whose benefit payments began in the year preceding the valuation date.

62. Average monthly pension of disabled and retired Plan Y (Plan 87) members, July 1, 1995

	Average Monthly Pension Amounts								
	Disabled			Retired			Total		
Age	Prior	New	Total	Prior	New	Total	Prior	New	Total
UNDER 45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
45-49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50-54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
55-59	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
60-64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
65-69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
70-74	0.00	0.00	0.00	0.00	304.40	304.40	0.00	304.40	304.40
75-79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
80-84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OVER 84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL	0.00	0.00	0.00	0.00	304.40	304.40	0.00	304.40	304.40

Note: *Prior* indicates plan members whose benefit payments commenced more than one year before the valuation date; *new* indicates plan members whose benefit payments began in the year preceding the valuation date.

63. Number of disabled and retired elected (Plan 87) members, July 1, 1995

	Number of People or Plan Members								
	Disabled			Retired			Total		
Age	Prior	New	Total	Prior	New	Total	Prior	New	Total
UNDER 45	0	0	0	0	0	0	0	0	0
45-49	0	0	0	0	0	0	0	0	0
50-54	0	0	0	0	0	0	0	0	0
55-59	0	0	0	3	0	3	3	0	3
60-64	0	0	0	3	0	3	3	0	3
65-69	0	0	0	0	0	0	0	0	0
70-74	0	0	0	1	0	1	1	0	1
75-79	0	0	0	0	0	0	0	0	0
80-84	0	0	0	0	0	0	0	0	0
OVER 84	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	7	0	7	7	0	7

Note: *Prior* indicates plan members whose benefit payments began more than one year before the valuation date; *new* indicates plan members whose benefit payments began in the year preceding the valuation date.

64. Total monthly pensions of disabled and retired elected (Plan 87) members, July 1, 1995

	Total Monthly Pension Amounts								
	Disabled			Retired			Total		
Age	Prior	New	Total	Prior	New	Total	Prior	New	Total
UNDER 45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
45-49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50-54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
55-59	0.00	0.00	0.00	4,480.38	0.00	4,480.38	4,480.38	0.00	4,480.38
60-64	0.00	0.00	0.00	4,375.59	0.00	4,375.59	4,375.59	0.00	4,375.59
65-69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
70-74	0.00	0.00	0.00	3,383.89	0.00	3,383.89	3,383.89	0.00	3,383.89
75-79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
80-84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OVER 84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL	0.00	0.00	0.00	12,239.86	0.00	12,239.86	12,239.86	0.00	12,239.86

Note: *Prior* indicates lives whose benefit payments began more than one year before the valuation date; *new* indicates lives whose benefit payments began in the year preceding the valuation date.

65. Average monthly pension of disabled and retired elected (Plan 87) members, July 1, 1995

	Average Monthly Pension Amounts								
	Disabled			Retired			Total		
Age	Prior	New	Total	Prior	New	Total	Prior	New	Total
UNDER 45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
45-49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50-54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
55-59	0.00	0.00	0.00	1,493.46	0.00	1,493.46	1,493.46	0.00	1,493.46
60-64	0.00	0.00	0.00	1,458.53	0.00	1,458.53	1,458.53	0.00	1,458.53
65-69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
70-74	0.00	0.00	0.00	3,383.89	0.00	3,383.89	3,383.89	0.00	3,383.89
75-79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
80-84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OVER 84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL	0.00	0.00	0.00	1,748.55	0.00	1,748.55	1,748.55	0.00	1,748.55

Note: *Prior* indicates plan members whose benefit payments commenced more than one year before the valuation date; *new* indicates plan members whose benefit payments began in the year preceding the valuation date.

66. Number of disabled and retired police (Plan 87) members, July 1, 1995

	Number of People or Plan Members								
	Disabled			Retired			Total		
Age	Prior	New	Total	Prior	New	Total	Prior	New	Total
UNDER 45	12	0	12	7	2	9	19	2	21
45-49	0	0	0	2	0	2	2	0	2
50-54	0	0	0	1	0	1	1	0	1
55-59	0	0	0	0	0	0	0	0	0
60-64	0	0	0	1	0	1	1	0	1
65-69	0	0	0	0	0	0	0	0	0
70-74	0	0	0	0	0	0	0	0	0
75-79	0	0	0	0	0	0	0	0	0
80-84	0	0	0	0	0	0	0	0	0
OVER 84	0	0	0	1	1	2	1	1	2
TOTAL	12	0	12	12	3	15	24	3	27

Note: *Prior* indicates plan members whose benefit payments began more than one year before the valuation date; *new* indicates plan members whose benefit payments began in the year preceding the valuation date.

67. Total monthly pensions of disabled and retired police (Plan 87) members, July 1, 1995

	Total Monthly Pension Amounts								
	Disabled			Retired			Total		
Age	Prior	New	Total	Prior	New	Total	Prior	New	Total
UNDER 45	23,629.23	0.00	23,629.23	3,403.06	1,193.74	4,596.80	27,032.29	1,193.74	28,226.03
45-49	0.00	0.00	0.00	499.39	0.00	499.39	499.39	0.00	499.39
50-54	0.00	0.00	0.00	589.62	0.00	589.62	589.62	0.00	589.62
55-59	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
60-64	0.00	0.00	0.00	586.10	0.00	586.10	586.10	0.00	586.10
65-69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
70-74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
75-79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
80-84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OVER 84	0.00	0.00	0.00	300.91	434.60	735.51	300.91	434.60	735.51
TOTAL	23,629.23	0.00	23,629.23	5,379.08	1,628.34	7,007.42	29,008.31	1,628.34	30,636.65

Note: *Prior* indicates plan members whose benefit payments began more than one year before the valuation date; *new* indicates plan members whose benefit payments began in the year preceding the valuation date.

68. Average monthly pension of disabled and retired police (Plan 87) members, July 1, 1995

	Average Monthly Pension Amounts								
	Disabled			Retired			Total		
Age	Prior	New	Total	Prior	New	Total	Prior	New	Total
UNDER 45	1,969.10	0.00	1,969.10	486.15	596.87	510.76	1,422.75	596.87	1,344.10
45-49	0.00	0.00	0.00	249.70	0.00	249.70	249.70	0.00	249.70
50-54	0.00	0.00	0.00	589.62	0.00	589.62	589.62	0.00	589.62
55-59	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
60-64	0.00	0.00	0.00	586.10	0.00	586.10	586.10	0.00	586.10
65-69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
70-74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
75-79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
80-84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OVER 84	0.00	0.00	0.00	300.91	434.60	367.75	300.91	434.60	367.75
TOTAL	1,969.10	0.00	1,969.10	448.26	542.78	467.16	1,208.68	542.78	1,134.69

Note: *Prior* indicates plan members whose benefit payments began more than one year before the valuation date; *new* indicates plan members whose benefit payments began in the year preceding the valuation date.

69. Number of disabled and retired fire (Plan 87) members, July 1, 1995

	Number of People or Plan Members								
	Disabled			Retired			Total		
Age	Prior	New	Total	Prior	New	Total	Prior	New	Total
UNDER 45	1	0	1	0	1	1	1	1	2
45-49	0	0	0	0	0	0	0	0	0
50-54	0	0	0	0	0	0	0	0	0
55-59	0	0	0	0	0	0	0	0	0
60-64	0	0	0	0	0	0	0	0	0
65-69	0	0	0	1	0	1	1	0	1
70-74	0	0	0	0	0	0	0	0	0
75-79	0	0	0	0	0	0	0	0	0
80-84	0	0	0	0	0	0	0	0	0
OVER 84	0	0	0	0	2	2	0	2	2
TOTAL	1	0	1	1	3	4	2	3	5

Note: *Prior* indicates plan members whose benefit payments began more than one year before the valuation date; *new* indicates plan members whose benefit payments began in the year preceding the valuation date.

70. Total monthly pensions of disabled and retired fire (Plan 87) members, July 1, 1995

	Total Monthly Pension Amounts								
	Disabled			Retired			Total		
Age	Prior	New	Total	Prior	New	Total	Prior	New	Total
UNDER 45	514.70	0.00	514.70	0.00	296.32	296.32	514.70	296.32	811.02
45-49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50-54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
55-59	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
60-64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
65-69	0.00	0.00	0.00	566.05	0.00	566.05	566.05	0.00	566.05
70-74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
75-79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
80-84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OVER 84	0.00	0.00	0.00	0.00	849.72	849.72	0.00	849.72	849.72
TOTAL	514.70	0.00	514.70	566.05	1,146.04	1,712.09	1,080.75	1,146.04	2,226.79

Note: *Prior* indicates plan members whose benefit payments began more than one year before the valuation date; *new* indicates plan members whose benefit payments began in the year preceding the valuation date.

71. Average monthly pension of disabled and retired fire (Plan 87) members, July 1, 1995

	Average Monthly Pension Amounts								
	Disabled			Retired			Total		
Age	Prior	New	Total	Prior	New	Total	Prior	New	Total
UNDER 45	514.70	0.00	514.70	0.00	296.32	296.32	514.70	296.32	405.51
45-49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50-54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
55-59	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
60-64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
65-69	0.00	0.00	0.00	566.05	0.00	566.05	566.05	0.00	566.05
70-74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
75-79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
80-84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OVER 84	0.00	0.00	0.00	0.00	424.86	424.86	0.00	424.86	424.86
TOTAL	514.70	0.00	514.70	566.05	382.01	428.02	540.38	382.01	445.36

Note: *Prior* indicates plan members whose benefit payments began more than one year before the valuation date; *new* indicates plan members whose benefit payments began in the year preceding the valuation date.

The July 1, 1995 Retirement System assets are $2,294,625,893 on a market value basis and $2,095,606,923 on a cost value basis. Table 72 contains a summary of assets and liabilities, and Table 73 shows receipts and disbursements. Table 74 itemizes City contributions for the year ending June 30, 1995, and Table 75 summarizes 1995 fiscal year administrative expenses. Table 76 shows July 1, 1995 adjusted market value of assets under the five-year spread gain asset valuation method. Table 77 shows the July 1, 1995 allocation of the adjusted assets among all divisions.

Table 73, showing the fund's receipts and disbursements during the fiscal year ending June 30, 1995, also notes that employee, City, and state contributions are approximately 59% of the yearly receipts. On the disbursement side, benefit payments were approximately 96% of all disbursements, on a market value basis.

Below is a summary of the approximate rates of return for this fiscal year compared to last year.

Rates of return comparison

	Fiscal Year Ending	
	June 30, 1994	**June 30, 1995**
Cost value	8.5%	8.6%
Market value	1.6%	11.7%
Adjusted market value	7.8%	7.8%

Table 76 shows the adjusted market value of assets used in the cost calculations. All assets are valued each year at market value and compared to the expected value of assets based on a 9% return assumption. The difference is spread equally over the current year and the next 4 years.

As required under Act 205, experience gains and losses and changes in the unfunded actuarial accrued liability due to plan amendments and/or changes in actuarial assumptions must be reported separately for each participating division. For the valuation, assets must be allocated among divisions (Table 77). This allocation does not constitute a legal separation of the assets, however.

Table 77 begins with July 1, 1994 valuation assets. The noninvestment transactions (item 2), other than administrative expenses attributable to each division, were provided by the City of Philadelphia's Finance Department. Administrative expenses were allocated according to the member count of each division at the beginning of the fiscal year. Investment income (after investment expenses) was allocated in proportion to the mean fund balance as of the valuation date before recognizing fund earnings.

72. Statement of assets and liabilities (fiscal year ending June 30, 1995)

	Cost Value	Market Value
Assets		
Cash	$ 79,025,473	$ 79,025,473
Investment accounts	2,004,271,774[a]	2,203,290,744
Due from other funds	—	—
Accounts receivable[b]	6,680,163	6,680,163
Interest and dividends receivable	12,819,559	12,819,559
Due from other governmental units	1,065,312	1,065,312
Other assets	11,220	11,220
Total assets	$2,103,873,501	$ 2,302,892,471
Liabilities		
Vouchers payable	$ 87,714	$ 87,714
Accounts payable	2,284,790	2,284,790
Salaries and wages payable	67,785	67,785
Accrued expenses	1,415,387	1,415,387
Funds held in escrow	3,066	3,066
Deferred revenue	4,038,785	4,038,785
Other liabilities	369,051	369,051
Total liabilities	$ 8,266,578	$ 8,266,578
Fund balance	$2,095,606,923	$ 2,294,625,893

a. Includes $15,238,178 loss on permanent decline in the cost value of investments.

b. Includes employee contributions receivable of $548,235 because of plan amendment changing District Council 47 employees' plan status.

73. Statement of receipts and disbursements

	Cost Value	Market Value
Balance as of July 1, 1994	$2,023,484,198	$2,133,653,221
Receipts		
Contributions:		
Commonwealth of Pennsylvania		
Supplemental State Assistance (Act 205)	$ 1,314,748	$ 1,314,748
City of Philadelphia[a]	212,837,965	212,837,965
Employees[b]	44,040,351	44,040,351
Quasi-public agencies	4,556,618	4,556,618
Interest and dividends	110,428,051	110,428,051
Gain from sale of investments	68,467,185	68,467,185
Miscellaneous operating revenues	957,776	957,776
Total receipts	$ 442,602,694	$ 442,602,694
Disbursements		
Withdrawals	$ 3,729,717	$ 3,729,717
Benefit payments	338,648,506	338,648,506
Administrative expenses	4,188,969	4,188,969
Investment manager fees	8,674,599	8,674,599
Total disbursements	$ 355,241,791	$ 355,241,791
Change in unrealized appreciation/(depreciation)	$ (15,238,178)[c]	$ 73,611,769
Balance as of July 1, 1995	$2,095,606,923	$2,294,625,893
Approximate return on investments during year	8.6%	11.7%

a. Includes Commonwealth of Pennsylvania general state assistance ($30,713,262) and COLA reimbursement ($4,233,344).

b. Includes $548,235 in employee contributions receivable because of plan amendment changing District Council 47 employees' plan status.

c. Loss on permanent decline in cost value of investments.

74. Fiscal 1995 City contributions

Date	Amount
July 29, 1994	$ 98,177,614
August 23, 1994	50,000,000
October 21, 1994	61,504,000
June 30, 1995	3,156,351
Various	3,491,305[a]
Accrued	1,065,313[b]
Total	$ 217,394,583

a. Quasi-public agencies.

b. City-accrued contributions are $0; quasi-public agencies accrued contributions are $1,065,313.

75. Statement of administrative expenses for year ending June 30, 1995

Personal services	$ 1,615,817
Purchase of services	1,677,068
Materials and supplies	55,484
Employer's share of fringe benefits	701,562
Miscellaneous	139,038
Total	$ 4,188,969

76. Derivation of assets for valuation purposes as of July 1, 1995
5-year spread gain method

July 1	Total Gain or (Loss)	1991	1992	1993	1994	1995	Unrecognized Amount
1991	$ (81,684,057)	$(16,336,811)	$(16,336,811)	$(16,336,811)	$(16,336,812)	$(16,336,812)	$ 0
1992	18,670,166	—	3,734,034	3,734,033	3,734,033	3,734,033	3,734,033
1993	72,425,272	—	—	14,485,055	14,485,055	14,485,054	28,970,108
1994	(157,677,827)	—	—	—	(31,535,565)	(31,535,565)	(94,606,697)
1995	55,532,304	—	—	—	—	11,106,461	44,425,843
Total							$ (17,476,713)

1.	July 1, 1995 market value	$2,294,625,893
2.	Unrecognized gain/(loss)	(17,476,713)
3.	July 1, 1995 adjusted market *(1) - (2)*	$2,312,102,606
4.	Approximate return on investments during year	7.8%

77. Allocation of assets for valuation purposes between divisions as of June 30, 1995 (thousands)

	1967 Plan			Plan 87					
	Municipal	Police	Fire	Municipal (M)	Municipal (Y)	Elected	Police	Fire	Total
1. Assets for valuation purposes as of June 30, 1994	$1,210,307	$670,389	$279,607	$ 21,223	$1,979	$1,664	$32,531	$ 7,508	$2,225,209
2. Transactions during period July 1, 1994 - June 30, 1995:									
a. Contributions									
City and commonwealth	$ 99,792	$ 76,710	$ 26,217	$ 1,751	$3,248	$ 378	$ 3,650	$ 1,092	$ 212,838
Employees	22,280	10,096	4,254	999	1,484	137	3,328	915	43,492
Quasi-public agencies	4,557	0	0	0	0	0	0	0	4,557
Employee contributions receivable[a]	548	0	0	0	0	0	0	0	548
b. Miscellaneous income and expenses	1,297	465	239	48	63	4	123	33	2,273
c. Pension benefits	172,943	122,038	43,107	34	0	147	359	21	338,649
d. Withdrawals	2,541	544	48	364	85	0	101	46	3,730
e. Administrative expenses[b]	2,552	913	352	103	102	2	131	33	4,189
f. Net transactions *(a) + (b) - (c) - (d) - (e)*	$ (49,562)	$ (36,224)	$ (12,798)	$ 2,297	$4,608	$ 370	$ 6,509	$ 1,940	$ (82,860)
3. Mean fund balance prior to allocation of realized and unrealized income *(1) + [1/2 x (2f)]*	1,185,526	652,277	273,209	22,372	4,283	1,849	35,786	8,478	2,183,779
4. Realized and unrealized income for period July 1, 1994 - June 30, 1995 *(allocated in proportion to (3))*	92,155	50,704	21,238	1,739	333	144	2,782	659	169,753
5. Assets for valuation purposes as of June 30, 1995 *(1) + (2f) + (4)*	1,252,900	684,869	288,048	25,259	6,919	2,178	41,822	10,107	2,312,103

Note: Numbers may not add because of rounding.

a. Due to plan amendment changing District Council 47 employees' plan status.

b. Allocated in proportion to the number of active and nonactive members in each division as of July 1, 1994.

	1967 PLAN	
	MUNICIPAL (PLAN J)	*UNIFORMED (PLANS D AND X)*
Participation	Full-time employees participate on their date of employment. Temporary employees participate after completing six months employment. Participation is limited to employees hired before January 8, 1987. District Council 33 members continue to be Plan participants regardless of hire date. Current District Council 47 members hired after January 8, 1987 were switched from Plan 87 to 1967 Plan effective on their hire dates.	Same as municipal.
Credited service	Credited service means the period of employment with the City during which the employee makes contributions to the Retirement System. Certain leaves of absence may also be credited.	Same as municipal.
Total compensation	Total compensation means: ■ For members represented by AFSCME District Council 33, AFL-CIO or District Council 47, AFL-CIO or employees of the Common Pleas Court, the base rate of pay, longevity payments, and overtime received during a 12-month period. ■ For members who hold an elected office, exempt position or other position not represented by a union, the base rate of pay and longevity payments received during 12-month period.	Total compensation means the base rate of pay and longevity payments received during a 12-month period.
Final compensation	Final compensation means whichever is greater: annual base rate of pay at the time of termination or the total compensation received during the 12 months immediately preceding termination.	Same as municipal.

	1967 PLAN	
	MUNICIPAL (PLAN J)	*UNIFORMED (PLANS D AND X)*
Average final compensation	Average final compensation means: ■ For members represented by AFSCME District Council 33, AFL-CIO or District Council 47, AFL-CIO or employees of the Common Pleas Court, Municipal Court, or Traffic Court, the arithmetic average of the total compensation received during the three calendar or anniversary years that produces the highest average ■ For members who hold an elected office, exempt position or other positions not represented by a union, the arithmetic average of the total compensation received during the three calendar or anniversary years that produces the highest average.	Average final compensation means the highest of: ■ The total compensation received during the 12-month period; or ■ The annual base rate of pay, excluding longevity payments, calculated from the final pay period; or ■ The arithmetic average of the total compensation received during five calendar years of employment.
Employee contributions	Each employee who participates in the Social Security System, contributes 3¾% of total compensation up to the taxable wage base ($60,600 in 1994 and $61,200 in 1995) and 6% of total compensation above the taxable wage base to the Retirement System. Each employee who does not participate in the Social Security System contributes 6% of his total compensation to the Retirement System.	Same as municipal.
Service retirement		
Eligibility	Each municipal employee is eligible to retire and receive a service pension at age 55.	Each uniformed employee is eligible to retire and receive a service pension at age 45.
Benefit amount	The service pension equals 2½% of the employee's average final compensation multiplied by years credited service to a maximum of 20 years plus 2% of the employee's average final compensation multiplied by years credited service above 20, to a maximum of 80% of the employee's average final compensation.	The service pension equals a 2½% of the employee's average final compensation multiplied by years credited service, subject to a maximum of 100% of average final compensation.

	1967 PLAN	
	MUNICIPAL (PLAN J)	*UNIFORMED (PLANS D AND X)*
Deferred vested retirement		
Eligibility	A terminating employee who has completed 10 or more years credited service is eligible for a deferred vested retirement benefit.	Same as municipal.
Benefit amount	The annual deferred vested benefit is determined the same as service pensions, using average final compensation and credited service at termination. This benefit begins at service retirement date. If the member dies before the deferred vested benefit begins, an ordinary death benefit is payable (see Ordinary Death below). As an alternative before benefits begin, a plan member who is terminating employment may ask to have employee contributions returned (without interest) instead of receiving the deferred vested benefit.	
Withdrawal benefit	Each employee terminating who has completed less than 10 years credited service will receive a withdrawal benefit equal to his or her employee contributions (without interest).	Same as municipal.
Service-connected death		
Eligibility	The beneficiary of each active employee who dies solely from the performance of duties of the employee's position with the City is eligible for an immediate death benefit.	Same as municipal.
Benefit amount	The death benefit equals total employee contributions paid to the Retirement System, plus a yearly payment of 60% of the employee's final compensation reduced by any death benefits payable under the Workers' Compensation Act.	Same as municipal.

	1967 PLAN	
	MUNICIPAL (PLAN J)	*UNIFORMED (PLANS D AND X)*
	This benefit is payable to the spouse until his or her death or remarriage. The spouse is entitled to an additional yearly payment of 10% of final compensation for each dependent child (up to two children) until the child reaches age 18.	
	If there is no spouse, or if the spouse dies or remarries, each dependent child (up to three children) is entitled to receive a yearly payment of 25% of final compensation until the child reaches age 18. If there is no spouse or dependent children, each dependent parent is entitled to receive a yearly payment of a 15% of final compensation for life.	
Ordinary death		
Eligibility	The beneficiary of an active employee (or a terminated vested employee who did not withdraw employee contributions) who dies after completing 10 years credited service or reaching age 55 is eligible for an immediate death benefit equal to a yearly pension or a lump sum payment.	The beneficiary of any employee who dies while actively employed (or a terminated vested employee who did not withdraw employee contributions) is eligible for a death benefit equal to a yearly pension or a lump sum payment.
	The beneficiary of an active employee who dies before completing 10 years credited service and reaching age 55 is eligible for a lump sum payment.	The beneficiary may be any relative by blood or marriage.
	The beneficiary may be any relative by blood or marriage.	
Annual pension	The annual ordinary death pension, payable for life, is equal to the regular service pension the employee would have received if eligible to retire on the day before he dying and had elected option 2, joint and 100% contingent annuitant (see Survival Benefits below).	The annual ordinary death pension, payable for life, is equal to the regular service pension the employee would have received (based on a minimum of 10 years service) had the person been eligible to retire on the day before dying and had elected option 2, joint and 100% contingent annuitant (see Survival Benefits below).

	1967 PLAN	
	MUNICIPAL (PLAN J)	*UNIFORMED (PLANS D AND X)*
Lump sum payment	The lump sum payment is equal to 10% of the deceased employee's average final compensation multiplied by years of credited service to a maximum of 10, plus the deceased employee's contributions to the Retirement System, minus the total amount of the deceased employee's City-paid life insurance.	Same as municipal.
Service-connected disability		
Eligibility	An active employee found by the Board of Pensions and Retirement to be mentally or physically permanently incapacitated (unable to perform duties) solely as the result of accident or injury during the performance of duties is eligible for an immediate service-connected disability pension.	Same as municipal.
Benefit amount	The service-connected disability benefit is equal to the employee's Retirement System contributions, plus a yearly benefit of 70% of the employee's final compensation, reduced by any disability benefits payable under the Workers' Compensation Act. If he or she withdraws contributions, the benefit is payable for his or her lifetime only. If the employee leaves employee contributions with the Retirement System, he or she may choose a survivor benefit option (see Survival Benefit below) and the beneficiary will continue receiving benefit payments after his or her death.	Same as municipal.
Benefit offset	If the employee collects his or her disability benefit and subsequently becomes employed, the disability benefit will be reduced $1 for every $3 earned in outside wages until age 65.	If the employee collects his or her disability benefit and subsequently becomes employed, the disability benefit will be reduced $1 for every $2 earned in outside wages until age 45. The earned income offset does not apply to fire employees.

	1967 PLAN	
	MUNICIPAL (PLAN J)	*UNIFORMED (PLANS D AND X)*
Ordinary disability		
Eligibility	An active employee found by the Board of Pension and Retirement to be mentally or physically permanently incapacitated (unable to perform duties) solely as the result of accident or injury during the performance of duties is eligible for an immediate service-connected disability pension.	Same as municipal.
Benefit amount	The annual ordinary disability benefit is equal to the benefit determined under the service pension formula using average final compensation and credited service as of the date of disablement.	Same as municipal, except each eligible employee is automatically credited with a minimum of 10 years service for purposes of calculating the annual benefit.
Benefit offset	If the employee collects his or her disability benefit and subsequently becomes employed, the disability benefit will be reduced $1 for every $2 earned in outside wages until age 55.	If the employee collects his or her disability benefit and subsequently becomes employed, the disability benefit will be reduced $1 for every $2 earned in outside wages until age 45. The earned income offset does not apply to fire employees.
Service-connected disability periodic adjustment		
Eligibility	An employee who is receiving a service-connected disability benefit who is *totally disabled* and does not collect Social Security disability insurance benefits is eligible for a periodic adjustment.	Not applicable.
Benefit amount	The disabled employee's pension will be increased in the eighth year after separation by the percentage raise given in the previous year to active employees in his or her job class. The adjustment will continue each year until the employee's 65th birthday.	Not applicable.
Survivor benefit	Service pensions, deferred vested benefits, service-connected disability benefits (if employee contributions are left on deposit), and ordinary disability benefits are payable under 4 optional forms. Options 1, 2, and 3 provide benefits actuarially equivalent to a lifetime only pension while option 4 has no reduction.	Same as municipal.

	1967 PLAN	
	MUNICIPAL (PLAN J)	*UNIFORMED (PLANS D AND X)*
	Option 1 – A benefit is payable to the employee with the provision that upon death, the beneficiary will receive a lump sum equal to the excess, if any, of the employee's contributions over the sum of the payments received. *Option 2* – A reduced benefit payable to the employee with the provision that 100% of the reduced benefit will be paid to the designated beneficiary for life after the death of the employee. *Option 3* – Same as option 2 except only 50% of the reduced benefit is continued to the designated beneficiary. *Option 4* – Upon the employee's death, 50% of the benefit will continue to be paid to the surviving spouse for life, provided the employee and spouse were married for two years before retirement. If there is no eligible spouse at the time the employee dies, or the spouse dies before the full amount of the contributions have been returned, 50% of the benefit is continued to dependent children until age 18, or if no dependent children, payments are given to dependent parents for the remainder of their lives. In addition, option 4 provides for a guaranteed return of employee contributions as described in option 1 above.	
Minimum pension	The monthly minimum pension to a pensioner is equal to $25 multiplied by the number of the pensioner's completed years of credited service, to a 10 year maximum.	The monthly minimum pension to pensioners is $500. The monthly minimum pension to all other pensioners is $440 providing such pension will increase to $500 at the time the pensioner reaches age 60.
Waiver of benefit	Any employee at service retirement age with less than three but more than one year credited service, may waive the right to receive a monthly benefit and in lieu thereof, receive a lump sum payment of twice his or her employee contributions without interest.	Same as municipal.

	1967 PLAN	
	MUNICIPAL (PLAN J)	*UNIFORMED (PLANS D AND X)*
Service-connected health care benefit	Not applicable.	If a uniformed employee dies during the performance of duties, a service-connected health care benefit may be payable to the surviving spouse and dependent children. Regular payments will be made of the appropriate cost of maintaining medical, dental, optical, and prescription drug benefits that were in force at the time of the employee's death. Payments to the spouse cease upon remarriage and to dependent children at age 18 (age 22 if full-time student).

PLAN 87

	MUNICIPAL (PLANS M AND Y)	*UNIFORMED (PLANS A AND B)*
Participation	Full-time employees participate on their date of employment. Temporary employees participate after completing six months employment. Plan M participation is limited to employees hired on or after January 8, 1987 and before October 2, 1992. Municipal members hired on or after October 2, 1992 will participate in Plan Y. Any member of the 1967 Plan may irrevocably elect to participate in Plan 87.	Same as municipal.
Credited service	Credited service means the period of employment with the City during which the employee makes contributions to the Retirement System. Certain leaves of absence may also be credited.	Same as municipal.
Total compensation	Total compensation means the base rate of pay and longevity payments received during a 12-month period. For Plan Y municipal members, total compensation shall include overtime or holiday overtime.	Same as municipal.
Final compensation	Final compensation means the annual base rate of pay at the time of termination, including supplementary compensation received under Civil Service Regulation No. 32.	Same as municipal.
Average final compensation	Average final compensation means the arithmetic average of the total compensation received during the three calendar or anniversary years producing the highest average.	Average final compensation means the arithmetic average of the total compensation received during the two calendar or anniversary years producing the highest average.
Employee contributions	Total employee contributions equal 30% of the gross normal cost for all members in the municipal division.	Total employee contributions equal 5% of total compensation, but not less than 30% or greater than 50% of gross normal cost for members in the uniformed division.
Service retirement		
Eligibility	Each municipal employee is eligible to retire and receive a service pension at age 60 and if he or she has 10 or more years of credited service.	Each uniformed employee is eligible to retire and receive a service pension upon reaching age 50 and 10 or more years of credited service.

PLAN 87

	MUNICIPAL (PLANS M AND Y)	UNIFORMED (PLANS A AND B)
Benefit amount	The service pension equals 2.2% of the employee's average final compensation for the first 10 years of credited service, plus 2% of the employee's average final compensation multiplied by years of service over 10.	The service pension equals 2.2% of the employee's average final compensation multiplied by years of credited service to a maximum of 20 years, plus 2% of the employee's average final compensation multiplied by years of credited service over 20.
Early retirement		
Eligibility	Each municipal employee is eligible to retire and receive a reduced service pension at age 52 if he has 10 or more years credited service. As an alternative, a member is eligible if he or she has 33 years credited service, regardless of age.	Each uniformed employee is eligible to retire and receive a reduced service pension at age 40. Alternatively, a member is eligible if he has 25 years credited service, regardless of age.
Benefit amount	The annual amount is calculated the same as service retirement, reduced by ½ of 1% for each month the employee is younger than minimum retirement age. Benefits are not reduced if the employee has 33 or more years of credited service.	The annual amount is calculated the same as service retirement, reduced by ½ of 1% for each month the employee is younger than his minimum retirement age. Benefits are not reduced if the employee has 25 or more years of credited service.
Deferred vested retirement		
Eligibility	A employee terminating employment and who completed 10 or more years credited service is eligible for a deferred vested retirement benefit if his or her contributions have not been withdrawn.	Same as municipal.
Benefit amount	The annual deferred vested benefit is determined the same as service pensions, based on average final compensation and credited service at termination. This benefit begins at the service retirement date. If a member dies before the deferred vested benefit begins, an ordinary death benefit is payable (see Ordinary Death below). As an alternative, the person terminating employment may request at any time before benefits begin a return of employee contributions (without interest) instead of the deferred vested benefit.	
Withdrawal benefit	Each terminating employee who has completed fewer than 10 years of credited service will receive a withdrawal benefit equal to employee contributions (without interest).	Same as municipal.

	PLAN 87	
	MUNICIPAL (PLANS M AND Y)	*UNIFORMED (PLANS A AND B)*
Service-connected death		
Eligibility	The beneficiary of each active employee who dies solely from the performance of duties of the employee's position with the City is eligible for an immediate death benefit.	Same as municipal.
Benefit amount	The death benefit equals the sum of the total employee contributions paid to the Retirement System (without interest), plus a yearly payment of 60% of the employee's final compensation reduced by any death benefits payable under the Workers' Compensation Act. This benefit is payable to the spouse until his or her death or remarriage, whichever occurs first. The spouse is entitled to an additional 10% of final compensation yearly payment for each dependent child (up to two children) until the child reaches age 18. This total benefit shall not exceed 80% of final compensation. If there is no spouse, or if the spouse dies or remarries, each dependent child (up to three children) is eligible for a yearly payment of 25% of final compensation until the child reaches age 18. If there is no spouse or dependent children, each dependent parent is entitled to a 15% of final compensation yearly payment for life.	Same as municipal.
Ordinary death		
Eligibility	The beneficiary of an active employee (or a terminated vested employee who did not withdraw his employee contributions) who dies after completing 10 years credited service or who has reached 60 is eligible for an immediate death benefit equal to an annual pension or a lump sum payment, whichever the beneficiary chooses. The beneficiary of an active employee who dies before completing 10 years credited service or reaching age 60 is eligible for a lump sum payment. The beneficiary may be any relative by blood or marriage.	The beneficiary of any employee who dies while actively employed (or a terminated vested employee who did not withdraw employee contributions) is eligible for a death benefit equal to an annual pension or a lump sum payment, whichever the beneficiary chooses. The beneficiary may be any relative by blood or marriage.

PLAN 87

	MUNICIPAL (PLANS M AND Y)	UNIFORMED (PLANS A AND B)
Annual pension	The annual ordinary death pension, payable for life, is equal to the regular service pension the employee would have received had he or she been eligible to retire on the day before death and had elected option 2, joint and 100% contingent annuitant (see Ordinary Disability below).	The annual ordinary death pension, payable for life, is equal to the regular service pension the employee would have received (based on a minimum of 10 years service) had he been eligible to retire on the day before death and had elected option 2, joint and 100% contingent annuitant (see Ordinary Disability below).
Lump sum payment	The lump sum payment is equal to 10% of the deceased employee's average final compensation multiplied by years credited service to a maximum of 10, plus the deceased employee's contributions to the Retirement System (without interest), minus the total amount of the deceased employee's life insurance which was paid by the City.	Same as municipal.
Service-connected disability		
Eligibility	An active employee found by the Board of Pensions and Retirement to be mentally or physically permanently incapacitated from any further performance of duties due solely to the result of the performance of duties is eligible for an immediate service-connected disability pension. The application for benefit must be made within one year after termination of employment.	Same as municipal.
Benefit amount	The service-connected disability benefit is equal to the employee's contributions to the Retirement System, plus a yearly benefit of 70% of the employee's final compensation, reduced by any disability benefits payable under the Workers' Compensation Act.	Same as municipal.
Benefit offset	If the employee collects his or her disability benefit and subsequently becomes employed, the disability benefit will be reduced $1 for every $3 earned in outside wages until age 65.	If the employee collects his or her disability benefit and subsequently becomes employed, the disability benefit will be reduced $1 for every $2 earned in outside wages until age 50. The earned income offset does not apply to fire employees.

PLAN 87		
	MUNICIPAL (PLANS M AND Y)	*UNIFORMED (PLANS A AND B)*
Ordinary disability		
Eligibility	An active employee found by the board to be mentally or physically permanently incapacitated from the further performance of duties due to an accident or illness not caused by the performance of duties is eligible for an immediate ordinary disability benefit provided he or she has completed at least 10 years credited service. The application for benefits must be made within one year after termination.	An active employee found by the Board to be mentally or physically permanently incapacitated from the further performance of duties due to an accident or illness not caused by the performance of duties is eligible for an immediate ordinary disability benefit provided he has completed at least five years of credited service and is a fireman. If the disability is permanent and partial and the employee is a policeman, he or she must have completed at least 10 years credited service. If the disability is permanent and total and the employee is a policeman, there is no service requirement. The application for benefits must be made within one year after termination.
Benefit amount	The annual ordinary disability benefit is equal to the benefit determined under the service pension formula using average final compensation and credited service as of the date of disablement.	Same as municipal, except each eligible employee is automatically credited with a minimum of 10 years service to calculate the annual benefit.
Benefit Offset	If the employee collects his or her disability benefit and subsequently becomes employed, the disability benefit will be reduced $1 for every $2 earned in outside wages until age 60.	If the employee collects his or her disability benefit and subsequently becomes employed, the disability benefit will be reduced $1 for every $2 earned in outside wages until age 50. The earned income offset does not apply to fire employees.
Service-connected disability periodic adjustment		
Eligibility	An employee who is receiving a service-connected disability benefit who is *totally disabled* and does not collect Social Security disability insurance benefits is eligible for a periodic adjustment.	Not applicable.
Benefit amount	The disabled employee's pension will be increased in the eighth year after separation by the percentage raise given in the previous year to active employees in his or her job class. The adjustment will continue each year until the employee's 65th birthday.	Not applicable.

PLAN 87

	MUNICIPAL (PLANS M AND Y)	UNIFORMED (PLANS A AND B)
Survivor benefits	Service pensions, deferred vested benefits, service-connected disability benefits, and ordinary disability benefits are payable under three optional forms. Options 2 and 3 provide benefits actuarially equivalent to a lifetime only pension while option 1 has no reduction. *Option 1* – A benefit is payable to the employee providing on his death, the beneficiary will receive a lump sum equal to the excess, if any, of the employee's contributions over the sum of the payments received. *Option 2* – A reduced benefit payable to the employee providing 100% of the reduced benefit will continue to be paid to the designated beneficiary for life after the death of the employee. *Option 3* – The same as option 2 except only 50% of the reduced benefit is continued to the designated beneficiary.	Same as municipal.
Service-connected health care benefit	Not applicable.	In the event of the death of a uniformed employee during the performance of his or her duties, a service-connected health care benefit may be payable to the surviving spouse and dependent children. Regular payments will be made of the appropriate cost of maintaining medical, dental, optical and pharmaceutical prescription benefits in force at the time of the employee's death. Payments to the spouse cease upon remarriage and to dependent children at age 18 (age 22 if a full-time student).

PLAN 87

	Elected Plan
Participation	Any City employee elected on or after January 8, 1987, in any general, municipal, or special election, participates in this Plan.
Credited service	Credited service means the period of employment with the City during which the employee makes contributions to the Retirement Systems. Certain leaves of absence may also be credited.
Total compensation	Total compensation means the base rate of pay and longevity payments received during a 12-month period.
Final compensation	Final compensation means the annual base rate of pay at the time of termination, including supplementary compensation received under Civil Service Regulation No. 32.
Average final compensation	Average final compensation means the arithmetic average of the total compensation received during the three calendar or anniversary years that produce the highest average.
Employee contributions	Total employee contributions equal 30% of the gross normal cost for all members in the elected division calculated under the municipal plan plus 100% of the gross normal cost that exceeds the cost for the municipal plan.
Service retirement	
Eligibility	Each elected official is eligible to retire and receive a service pension at age 55 if he or she has 10 or more years credited service.
Benefit amount	The service pension equals 3.5% of the employee's average final compensation multiplied by years credited service.
Early retirement	
Eligibility	Each elected official is eligible to retire if he or she has 33 years credited service, regardless of age.
Benefit amount	Benefits are not reduced if the employee has 33 or more years credited service.
Deferred vested retirement	
Eligibility	A person terminating employment and who has completed 10 or more years credited service is eligible for a deferred vested retirement benefit provided he or she has not withdrawn contributions.
Benefit amount	The annual deferred vested benefit is determined in the same manner as service pensions, based on average final compensation and credited service at the time of termination. This benefit begins at the service retirement date. If the member dies before beginning his or her deferred vested benefit, an ordinary death benefit is payable (see Ordinary Death below).

	PLAN 87
	Elected Plan
	As an alternative, the person terminating employment may request at any time before beginning benefits to receive a return of employee contributions (without interest) in lieu of the deferred vested benefit.
Withdrawal benefit	Each terminating employee who completed fewer than 10 years credited service will receive a withdrawal benefit equal to employee contributions (without interest).
Service-connected death	
Eligibility	The beneficiary of each active employee who dies solely from performing duties of the employee's position with the City is eligible for an immediate death benefit.
Benefit amount	The death benefit equals the sum of the total employee contributions paid to the Retirement System (without interest), plus a yearly payment of 60% of the employee's final compensation reduced by any death benefits payable under the Workers' Compensation Act. This benefit is payable to the spouse until death or remarriage, whichever occurs first. The spouse is entitled to an additional yearly payment of 10% of final compensation for each dependent child (up to two children) until the child reaches age 18. This total benefit shall not exceed 80% of final compensation. If there is no spouse, or if the spouse dies or remarries each dependent child (up to three children) is eligible for a 25% of final compensation yearly payment until the child reaches age 18. If there is no spouse or dependent children, each dependent parent is entitled to a 15% of final compensation yearly payment for the remainder of his lifetime.
Ordinary death	
Eligibility	The beneficiary of an active employee (or a terminated vested employee who did not withdraw employee contributions) who dies after completing 10 years credited service or reaching age 55 is eligible for an immediate death benefit equal to an annual pension or a lump sum payment, whichever the beneficiary chooses. The beneficiary of an active employee who dies before completing 10 years credited service or reaching age 55 is eligible for a lump sum payment. The beneficiary may be any relative by blood or marriage.
Annual pension	The annual ordinary death pension, payable for life, is equal to the regular services pension the employee would have received had he or she been eligible to retire on the day before death and had elected option 2, joint and 100% contingent annuitant (see Survivor Benefits below).

PLAN 87	
	Elected Plan
Lump sum payment	The lump sum payment is equal to 10% of the deceased employee's average final compensation multiplied by years credited service to a maximum of 10, plus the deceased employee's contributions to the Retirement System (without interest); minus the total amount of the deceased employee's life insurance which was paid by the City.
Service-connected disability	
Eligibility	An active employee found by the Board of Pensions and Retirement to be mentally or physically permanently incapacitated from any further performance of duties due solely to the result of the performance of duties is eligible for an immediate service-connected disability pension.
Benefit amount	The service-connected disability benefit is equal to the employee's contributions to the Retirement System, plus a yearly benefit of 70% of the employee's final compensation; reduced by any disability benefits payable under the Workers' Compensation Act.
Benefit offset	If the employee collects his or her disability benefit and subsequently becomes employed, the disability benefit will be reduced $1 for every $3 earned in outside wages until age 65.
Ordinary disability	
Eligibility	An active employee found by the Board to be mentally or physically permanently incapacitated from the further performance of duties due to an accident or illness not caused by the performance of duties is eligible for an immediate ordinary disability benefit provided he or she has completed at least 10 years credited service.
Benefit amount	The annual ordinary disability benefit is equal to the benefit determined under the service pension formula using average final compensation and credited service as of the date of disablement.
Benefit offset	If the employee collects his or her disability benefit and subsequently becomes employed, their disability benefit will be reduced $1 for every $2 earned in outside wages. The offset will continue until age 60.
Service-connected disability periodic adjustment	
Eligibility	An employee who is receiving a service-connected disability benefit who is *totally disabled* and does not collect Social Security disability insurance benefits is eligible for a periodic adjustment.
Benefit amount	The disabled employee's pension will be increased in the eighth year after separation by the percentage raise given in the previous year to active employees in his or her job class. The adjustment will continue each year until the employee's 65th birthday.

PLAN 87	
	Elected Plan
Survivor benefits	Service pensions, deferred vested benefits, service-connected disability benefits, and ordinary disability benefits are payable under three optional forms. Options 2 and 3 provide benefits actuarially equivalent to a lifetime only pension while option 1 has no reduction. *Option 1* – A benefit is payable to the employee providing upon death, the beneficiary will receive a lump sum equal to the excess, if any, of the employee's contributions over the sum of the payments received. *Option 2* – A reduced benefit payable to the employee providing 100% of the reduced benefit will continue to be paid to the designated beneficiary for life after the death of the employee. *Option 3* – Same as option 2 except only 50% of the reduced benefit is continued to the designated beneficiary.
Service-connected health care benefit	Not applicable.

The actuarial cost method, factors, and assumptions used in determining cost estimates are described below.

Member data

The member data used to determine cost estimates is pertinent information on active, retired, disabled, and deferred vested municipal and uniformed members of the City of Philadelphia Municipal Retirement System as supplied by the Philadelphia Board of Pensions and Retirement to the actuary.

Valuation date

The plans were valued as of July 1, 1995.

Actuarial cost method

Costs were determined according to the individual entry age actuarial cost method. The Dombrowski unfunded actuarial accrued liability is amortized in level dollar payments over 40 years ending June 30, 2009, as ordered by the Court of Common Pleas of Philadelphia County. Effective July 1, 1993, the remaining July 1, 1985 unfunded actuarial accrued liability is amortized over 40 years ending June 30, 2019, with payments increasing 5.5% per year. Changes in the actuarial accrued liability realized after July 1, 1985 are amortized in level dollar payments:

- Changes in actuarial assumptions – 20 years
- Experience gains and losses – 15 years
- Active members' benefit modifications – 20 years
- Nonactive members' benefit modifications – 10 years.

For Act 205's MMO the July 1, 1985 unfunded actuarial accrued liability is amortized over 40 years ending June 30, 2025, with payments increasing 5.5% per year.

Annual rate of withdrawal prior to retirement

The assumed annual rates of withdrawal are shown in Table 78.

78. Withdrawal probabilities at 5-year intervals

Attained Age	Municipal and Elected Officials: Males	Municipal and Elected Officials: Females	Uniformed: Males and Females
20	.144026	.131649	.029400
25	.108391	.120606	.028420
30	.066612	.087748	.023162
35	.038656	.059405	.013787
40	.027700	.042868	.007829
45	.021811	.034272	.000000
50	.017562	.027690	.000000
55	.000000	.000000	.000000

In addition, we assumed that a vested employee terminating employment (with 10 years service) will elect an employee contributions refund unless his or her age plus years of service at termination equal 55 or more (rule of 55). Otherwise, we assumed the person would elect a deferred pension beginning at service retirement age.

Annual rate of disability prior to retirement

The assumed annual disability rates appear on Table 79.

79. Disability probabilities at 5-year intervals

Attained Age	Municipal and Elected Officials: Males	Municipal and Elected Officials: Females	Uniformed: Males and Females
20	.000009	.000010	.000795
25	.000025	.000043	.000976
30	.000305	.000184	.001812
35	.001023	.000482	.003686
40	.002395	.001138	.006934
45	.005166	.002630	.012991
50	.009635	.005799	.016000
55	.012774	.008360	.016000
60	.013500	.009000	.016000
65	.000000	.000000	.000000

In addition, we assumed that 70% of all disabilities among municipal and elected members are ordinary (30% are service-connected) and 50% of all disabilities among uniformed members are ordinary (50% are service-connected).

Annual rate of mortality prior to retirement

We assumed that deaths of active municipal and elected male members would be at 80% of the UP-84 Mortality Table with ages set forward one year and deaths of municipal and elected female members at 80% of the UP-84 Mortality Table with ages set back four years. In addition, we assumed that 97.5% of all deaths of active municipal and elected members are ordinary (2.5% are service-connected).

We assumed that deaths of active uniformed male members would be at 80% of the UP-84 Mortality Table with ages set forward one year and deaths of uniformed female members would be at 80% of the UP-84 Mortality Table with ages set back four years. In addition, we assumed that 95% of all deaths of active uniformed members are ordinary (5% are service-connected).

Service retirement

We assumed that active members in the 1967 Plan will retire according to the rates in Table 80.

80. 1967 plan service retirement rates

Age	Municipal and Elected Officials: Males	Municipal and Elected Officials: Females	Uniformed: Males and Females
45	—	—	.200
46	—	—	.077
47	—	—	.077
48	—	—	.084
49	—	—	.084
50	—	—	.084
51	—	—	.088
52	—	—	.102
53	—	—	.112
54	—	—	.112
55	.238	.188	.119
56	.084	.063	.140
57	.084	.077	.140
58	.070	.077	.140
59	.077	.070	.168
60	.077	.081	.168
61	.091	.081	.168
62	.210	.175	.196
63	.126	.126	.196
64	.147	.126	.224
65	.224	.196	.245
66	.140	.161	.245
67	.175	.161	.245
68	.140	.161	.245
69	.140	.175	.245
70+	1.000	1.000	1.000

The corresponding rates for members under Plan 87 are in Table 81.

81. Plan 87 service retirement rates

	Municipal and Elected Officials			Uniformed		
		Full Benefits			Full Benefits	
Age	Reduced Benefits	First Year Eligible[a]	Subsequent Years	Reduced Benefits	First Year Eligible[a]	Subsequent Years
40	--	--	--	.028	.500	.125
41	--	--	--	.028	.500	.125
42	--	--	--	.028	.500	.125
43	--	--	--	.028	.500	.125
44	--	--	--	.028	.500	.125
45	--	--	--	.028	.500	.125
46	--	--	--	.028	.480	.125
47	--	--	--	.028	.460	.125
48	--	--	--	.028	.440	.125
49	--	--	--	.028	.420	.125
50	--	--	--	.028	.400	.125
51	--	--	--	.028	.400	.125
52	.0264	.450	.060	.028	.400	.140
53	.0264	.420	.060	.028	.400	.150
54	.0264	.390	.060	.028	.400	.170
55	.0264	.360	.060	.028	.400	.190
56	.0264	.330	.060	.028	.400	.215
57	.0264	.300	.060	.028	.400	.225
58	.0264	.300	.060	.028	.400	.225
59	.0264	.300	.080	.028	.400	.230
60	.0264	.300	.100	.028	.400	.230
61	.0264	.350	.150	.028	.400	.245
62	.0264	.430	.300	.028	.400	.295
63	.0264	.500	.187	.028	.400	.265
64	.0264	.500	.199	.028	.400	.260
65	.0264	.600	.309	1.000	.400	1.000
66	.0264	.600	.232	--	--	--
67	.0264	.600	.214	--	--	--
68	.0264	.600	.214	--	--	--
69	.0264	.600	.238	--	--	--
70	1.000	.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 105% of the UP-84 Mortality Table with ages set forward one year for males and 105% of the UP-84 Mortality Table with ages set back four years for females. We assumed that post-disablement mortality will follow the above-mentioned tables with the adjustment factors in Table 82 applied at each age for municipal and the adjustment factors in Table 83 for police and fire.

82. Post-disablement mortality adjustment factors (municipal)

	Adjustment Factor			Adjustment Factor	
Age	Male	Female	Age	Male	Female
47 and earlier	4.86	6.21	62	1.41	1.80
48	4.13	5.28	63	1.36	1.74
49	3.69	4.72	64	1.31	1.67
50	3.40	4.35	65	1.26	1.61
51	3.11	3.98	66	1.22	1.56
52	2.87	3.66	67	1.19	1.51
53	2.57	3.29	68	1.17	1.49
54	2.33	2.98	69	1.17	1.49
55	2.14	2.74	70	1.12	1.43
56	1.94	2.48	71	1.07	1.37
57	1.75	2.23	72	1.07	1.37
58	1.66	2.12	73	1.02	1.31
59	1.56	1.99	74	0.99	1.27
60	1.50	1.93	75 and later	0.97	1.24
61	1.46	1.86			

83. Post-disablement mortality adjustment factors (uniformed)

Age	Adjustment Factor Male	Adjustment Factor Female	Age	Adjustment Factor Male	Adjustment Factor Female
47 and earlier	2.70	3.45	62	1.10	1.10
48	2.30	2.94	63	1.10	1.10
49	2.05	2.62	64	1.10	1.10
50	1.89	2.42	65	1.10	1.10
51	1.73	2.21	66	1.10	1.10
52	1.60	2.04	67	1.10	1.10
53	1.43	1.83	68	1.10	1.10
54	1.30	1.66	69	1.10	1.10
55	1.19	1.52	70	1.10	1.10
56	1.10	1.38	71	1.10	1.10
57	1.10	1.24	72	1.10	1.10
58	1.10	1.18	73	1.10	1.10
59	1.10	1.11	74	1.10	1.10
60	1.10	1.10	75 and later	1.10	1.10
61	1.10	1.10			

Salary scale

We assumed that salaries, including longevity and overtime, will increase at a compound annual rate of 5.5% per year.

Rate of investment return

We assumed that assets of the fund will accumulate at a compound annual rate of 9% 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. This rate is supported by the experience studies for the five-year periods ending June 30, 1989 and June 30, 1993.

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.

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 members will elect Option 4 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 5.5% per year. This is supported by the actuarial experience studies for the five-year periods ending June 30, 1989 and June 30, 1993, which showed that the adjusted growth rate of covered payroll averaged 5.8% and 4.7%, respectively.