

Foster Higgins

May 5, 1994

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, 1993 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, 1995.

A summary of the results from the actuarial valuation is shown in Table 1.

1. Summary of results, actuarial valuation as of July 1, 1993 (thousands)

Actuarial accrued liability as of July 1, 1993	\$4,502,055
Assets as of July 1, 1993 for valuation purposes	\$2,113,944
Unfunded actuarial accrued liability as of July 1, 1993	\$2,388,111

City normal cost as a percent of payroll for the year, assuming payment is made at the beginning of year:

1967 Plan

Municipal Division	5.769%
Police Division	8.437%
Fire Division	8.423%

Plan 87

Municipal Division (Plan M)	4.936%
Municipal Division (Plan Y)	5.665%
Elected Division	5.247%
Police Division	6.886%
Fire Division	7.654%

Combined Plans

6.474%

The actuarial assumptions underlying the results are our best estimate of anticipated future experience of the Retirement System. The valuation was prepared using the Board-approved changes in actuarial assumptions resulting from the July 1, 1993 five-year experience study. These changes reduced the normal cost by \$1,215,000 and increased the unfunded liability payment by \$2,955,000.

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, 1994 and ending June 30, 1995, policy requirements call for the payments shown in Table 2.

2. Annual payment toward unfunded actuarial accrued liability (thousands)*

	Payments	
	Beginning of Year	End of Year
Dombrowski liability	\$ 3,498	\$ 3,813
Initial July 1, 1985 unfunded liability and changes effective July 1, 1985	134,879	147,018
Changes effective July 1, 1986	(12,275)	(13,380)
Changes effective July 1, 1987	2,479	2,702
Changes effective July 1, 1988	12,263	13,367
Changes effective July 1, 1989	9,706	10,580
Changes effective July 1, 1990	3,549	3,868
Changes effective July 1, 1991	(1,037)	(1,130)
Changes effective July 1, 1992	12,715	13,859
Changes effective July 1, 1993	<u>(15,720)</u>	<u>(17,135)</u>
Total payment	\$150,057	\$163,562

a. Not to be used for determining the City's Minimum Municipal Obligation.

The amortization schedule for determining the City's Minimum Municipal Obligation for the fiscal year ending June 30, 1995 is included in Table 70 of this report.

The plan's funding status is measured by the ratio of the actuarial value of assets to the actuarial accrued liability. A comparison of this ratio as of July 1, 1992 and July 1, 1993 is shown in Table 3.

3. Funding status comparison

	(thousands)	
	1992	1993
Actuarial value of assets	\$1,981,786	\$2,113,944
Actuarial accrued liability	\$4,425,507	4,502,055
Funding ratio	44.8%	47.0%

The enclosed report contains supporting data and background material pertinent to determining the normal cost and accrued liabilities of the Retirement System.

Sincerely,



Albert Pike, 3rd, FCA
Principal

AP:sc:thr
PCYR4301.ST7

Enclosure

**City of Philadelphia
Municipal Retirement System**

July 1, 1993

Actuarial Valuation Report

Foster Higgins

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5. July 1, 1993 derivation of normal cost (dollars in thousands)

	1967 Plan			Plan 87					Total
	Municipal	Police	Fire	Municipal (M)	Municipal (Y)	Elected	Police	Fire	
1. Number of active members	19,381	4,583	1,877	1,680	333	23	1,579	368	29,824
2. Total normal cost									
a. Service retirement	\$ 33,173	\$ 16,599	\$ 6,675	\$ 2,001	\$ 400	\$ 160	\$ 3,514	\$ 861	\$ 63,384
b. Preretirement death	4,522	1,208	518	284	57	14	262	74	6,938
c. Disability retirement	6,996	4,693	1,945	344	100	13	1,329	371	15,791
d. Vested termination	7,219	809	350	439	79	7	757	182	9,841
e. Refund of nonvested members' contributions	3,316	614	270	155	30	10	257	59	4,711
f. Health care benefit	0	21	11	0	0	0	4	2	38
g. Administrative expenses	2,695	954	368	119	24	2	112	26	4,300
h. Total	\$ 57,920	\$ 24,898	\$10,138	\$ 3,342	\$ 690	\$ 206	\$ 6,236	\$ 1,574	\$105,003
3. Expected employee contributions	\$ 22,736	\$ 10,346	\$ 4,217	\$ 1,002	\$ 207	\$ 124	\$ 2,623	\$ 622	\$ 41,878
4. City normal cost (2h) - (3)	\$ 35,184	\$ 14,552	\$ 5,921	\$ 2,339	\$ 483	\$ 82	\$ 3,612	\$ 952	\$ 63,125
5. Current total annual payroll	\$609,889	\$172,481	\$70,289	\$47,387	\$8,532	\$ 1,564	\$52,463	\$12,439	\$975,043
6. City normal cost as a percent of pay assuming beginning-of-year payment (4) ÷ (5)	5.769%	8.437%	8.423%	4.936%	5.665%	5.247%	6.886%	7.654%	6.474%
7. City normal cost as a percent of pay assuming end-of-year payment (6) x 1.09	6.288%	9.196%	9.181%	5.380%	6.175%	5.719%	7.506%	8.343%	7.057%

Note: Numbers may not add because of rounding.

6. Derivation of unfunded actuarial accrued liability as of July 1, 1993 (dollars in thousands)

	1967 Plan			Plan 87					Total
	Municipal	Police	Fire	Municipal (M)	Municipal (Y)	Elected	Police	Fire	
1. Number of members									
a. Active	19,381	4,583	1,877	1,680	333	23	1,579	368	29,824
b. Retired	15,868	6,324	2,660	0	0	0	0	0	24,852
c. Disabled	2,168	2,431	627	0	0	0	0	0	5,226
d. Terminated vested	500	76	11	0	0	0	0	0	587
e. Total	37,917	13,414	5,175	1,680	333	23	1,579	368	60,489
2. Total annual benefits									
a. Retired	\$ 136,078	\$ 79,822	\$ 32,084	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 247,984
b. Disabled	22,258	34,171	9,627	0	0	0	0	0	66,056
c. Terminated vested	4,887	675	79	0	0	0	0	0	5,641
e. Total	163,223	114,668	\$ 41,790	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 319,681
3. Present value of benefits									
a. Active members									
Service retirement	\$1,142,675	\$ 583,349	\$256,624	\$28,831	\$4,271	\$ 4,354	\$55,324	\$12,879	\$2,088,307
Preretirement death	128,961	32,853	14,831	4,115	633	315	3,934	1,047	186,688
Disability retirement	165,258	94,093	40,016	5,293	1,098	314	19,843	5,184	331,099
Vested termination	166,293	8,449	2,455	6,718	899	151	12,117	2,742	199,824
Refund of nonvested members' contributions	7,130	457	114	1,781	312	21	3,790	823	14,427
Health care benefit	0	381	216	0	0	0	66	22	685
Subtotal	\$1,610,317	\$ 719,582	\$314,256	\$46,737	\$7,212	\$ 5,154	\$95,073	\$22,698	\$2,821,030
b. Nonactive members									
Service retired	\$1,052,147	\$ 693,582	\$259,358	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$2,005,086
Disabled	169,779	309,190	85,331	0	0	0	0	0	564,301
Terminated vested	25,581	5,633	636	0	0	0	0	0	31,849
Nonvested members' contributions	998	51	11	0	0	0	0	0	1,060
Health care benefit	0	1,680	435	0	0	0	0	0	2,115
Subtotal	\$1,248,506	\$1,010,136	\$345,769	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$2,604,411
c. Total	\$2,858,823	\$1,729,717	\$660,026	\$46,737	\$7,212	\$ 5,154	\$95,073	\$22,698	\$5,425,441

Note: Numbers may not add because of rounding.

6. Derivation of unfunded actuarial accrued liability as of July 1, 1993 (thousands) - (continued)

	1967 Plan				Plan 87			
	Municipal	Police	Fire	Municipal (M)	Municipal (Y)	Elected	Police	Fire
4. Present value of future normal costs								
a. Service retirement	\$ 299,160	\$ 137,901	\$ 50,720	\$ 20,408	\$ 4,243	\$ 1,251	\$ 44,479	\$ 10,327
b. Preretirement death	42,948	9,937	3,928	3,039	630	122	3,338	891
c. Disability retirement	64,750	38,820	14,778	3,899	1,095	118	16,639	4,427
d. Vested termination	73,509	6,691	2,576	4,953	895	65	9,781	2,276
e. Refund of nonvested members' contributions	31,624	4,905	1,959	1,584	310	68	3,300	715
f. Health care benefit	0	168	85	0	0	0	56	19
g. Total	\$ 511,992	\$ 198,421	\$ 74,046	\$ 33,883	\$ 7,173	\$ 1,624	\$ 77,593	\$ 18,655
								\$ 568,489
								\$ 64,832
								\$ 144,527
								\$ 100,747
								\$ 44,464
								\$ 328
								\$ 923,386
5. Actuarial accrued liability (3) - (4)								
a. Active members								
Service retirement	\$ 843,514	\$ 445,447	\$ 205,904	\$ 8,423	\$ 29	\$ 3,103	\$ 10,845	\$ 2,553
Preretirement death	86,013	22,916	10,903	1,076	3	193	596	156
Disability retirement	100,508	55,274	25,238	1,393	3	195	3,204	757
Vested termination	92,783	1,758	(120)	1,765	4	85	2,335	466
Refund of nonvested members' contributions	(24,493)	(4,448)	(1,845)	197	1	(47)	490	108
Health care benefit	0	213	131	0	0	0	10	3
Subtotal	\$ 1,098,326	\$ 521,161	\$ 240,210	\$ 12,855	\$ 39	\$ 3,530	\$ 17,480	\$ 4,043
								\$ 357
								\$ 1,897,644
b. Nonactive members								
Service retired	\$ 1,052,147	\$ 693,582	\$ 259,358	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
Disabled	169,779	309,190	85,331	0	0	0	0	0
Terminated vested	25,581	5,633	636	0	0	0	0	0
Nonvested members' contributions	998	51	11	0	0	0	0	0
Health care benefit	0	1,680	435	0	0	0	0	0
Subtotal	\$ 1,248,506	\$ 1,010,136	\$ 345,769	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
								\$ 2,604,411
c. Total	\$ 2,346,831	\$ 1,531,296	\$ 585,980	\$ 12,855	\$ 39	\$ 3,530	\$ 17,480	\$ 4,043
								\$ 4,502,055
6. Assets for valuation purposes	\$ 1,151,321	\$ 646,541	\$ 268,668	\$ 15,894	\$ 49	\$ 1,137	\$ 24,802	\$ 5,533
								\$ 2,113,944
7. Unfunded actuarial accrued liability (5c) - (6)	\$ 1,195,511	\$ 884,755	\$ 317,311	\$ (3,040)	\$ (9)	\$ 2,393	\$ (7,322)	\$ (1,489)
								\$ 2,388,111

Note: Numbers may not add because of rounding.

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7. Development of the expected unfunded actuarial accrued liability for fiscal year ending June 30, 1995 (thousands)

	1967 Plan			Plan 87					Total
	Municipal	Police	Fire	Municipal (M)	Municipal (Y)	Elected	Police	Fire	
1. Expected July 1, 1993 unfunded actuarial accrued liability based on July 1, 1992 valuation	\$1,272,971	\$ 918,431	\$335,465	\$ (2,159)	\$ 0	\$ 2,538	\$ (6,471)	\$ (1,482)	\$2,519,293
2. Changes in July 1, 1993 unfunded actuarial accrued liability due to:									
a. Actuarial experience	(47,326)	(31,771)	(12,910)	(1,055)	(14)	(150)	(1,112)	(108)	(94,447)
b. Active plan amendment	(2,782)	(1,770)	0	(24)	5	(3)	(95)	0	(4,670)
c. Inactive plan amendment	459	0	0	0	0	0	0	0	459
d. Assumption changes	<u>(27,811)</u>	<u>(134)</u>	<u>(5,244)</u>	<u>198</u>	<u>0</u>	<u>8</u>	<u>356</u>	<u>101</u>	<u>(32,525)</u>
e. Subtotal	\$ (77,461)	\$ (33,675)	\$ (18,153)	\$ (881)	\$ (9)	\$ (145)	\$ (851)	\$ (8)	\$ (131,182)
3. Actual unfunded actuarial accrued liability, July 1, 1993 (1) + (2e)	\$1,195,511	\$ 884,755	\$317,311	\$ (3,040)	\$ (9)	\$ 2,393	\$ (7,322)	\$ (1,489)	\$2,388,111
4. Expected changes in unfunded actuarial accrued liability from July 1, 1993 to July 1, 1994:									
a. Interest (2e) x .09	\$ (6,971)	\$ (3,031)	\$ (1,634)	\$ (79)	\$ (1)	(13)	\$ (77)	\$ (1)	\$ (11,806)
b. Increase in unfunded actuarial accrued liability from July 1, 1993 to July 1, 1994 according to amortization schedule per 1993 valuation report	<u>36,991</u>	<u>15,745</u>	<u>7,969</u>	<u>113</u>	<u>0</u>	<u>(112)</u>	<u>276</u>	<u>60</u>	<u>61,042</u>
c. Subtotal	\$ 30,020	\$ 12,714	\$ 6,336	\$ 34	\$ (1)	\$ (125)	\$ 199	\$ 59	\$ 49,236
5. Expected July 1, 1994 unfunded actuarial accrued liability (3) + (4c)	\$1,225,531	\$ 897,469	\$323,647	\$ (3,006)	\$ (10)	\$ 2,268	\$ (7,122)	\$ (1,430)	\$2,437,347

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, 1995 (thousands)

	Fiscal Year Ending June 30, 1995			
	Outstanding Balance July 1, 1993	Expected Balance July 1, 1994	Amortization Period Remaining	Annual End-of-Year Payment ^a
1. Expected July 1, 1993 unfunded actuarial accrued liability based on July 1, 1992 valuation				
a. Dombrowski	\$ 16,730	\$ 16,223	15	\$ 2,013
b. Remaining	<u>1,256,241</u>	<u>1,293,739</u>	—	<u>83,466^b</u>
c. Subtotal	\$ 1,272,971	\$ 1,309,963	—	\$ 85,479
2. Changes in unfunded actuarial accrued liability, July 1, 1993				
a. (Gains)/losses	\$ (47,326)	\$ (51,586)	15	\$ (6,400)
b. Active plan amendment	(2,782)	(3,032)	20	(332)
c. Inactive plan amendment	459	500	10	78
d. Assumption changes	<u>(27,811)</u>	<u>(30,314)</u>	20	<u>(3,321)</u>
e. Subtotal	\$ (77,461)	\$ (84,432)	—	\$ (9,975)
3. Total (1c) + (2e)	\$ 1,195,511	\$ 1,225,531	—	\$ 75,504 ^c

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, 1995 (thousands)

	Outstanding Balance July 1, 1993	Fiscal Year Ending June 30, 1995		Annual End-of-Year Payment ^a
		Expected Balance July 1, 1994	Amortization Period Remaining	
1. Expected July 1, 1993 unfunded actuarial accrued liability based on July 1, 1992 valuation				
a. Dombrowski	\$ 10,702	\$ 10,378	15	\$ 1,287
b. Remaining	<u>907,729</u>	<u>923,798</u>	—	<u>70,702^b</u>
c. Subtotal	\$ 918,431	\$ 934,175	—	\$ 71,989
2. Changes in unfunded actuarial accrued liability, July 1, 1993				
a. (Gains)/losses	\$ (31,771)	\$ (34,631)	15	\$ (4,296)
b. Active plan amendment	(1,770)	(1,929)	20	(211)
c. Assumption changes	<u>(134)</u>	<u>(146)</u>	20	<u>(16)</u>
d. Subtotal	\$ (33,675)	\$ (36,706)	—	\$ (4,524)
3. Total (1c) + (2d)	\$ 884,755	\$ 897,469	—	\$ 67,466

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, 1995 (thousands)

	Outstanding Balance July 1, 1993	Fiscal Year Ending June 30, 1995		Annual End-of-Year Payment ^a
		Expected Balance July 1, 1994	Amortization Period Remaining	
1. Expected July 1, 1993 unfunded actuarial accrued liability based on July 1, 1992 valuation				
a. Domhrowski	\$ 4,262	\$ 4,132	15	\$ 513
b. Remaining	<u>331,203</u>	<u>339,302</u>	—	<u>23,734^b</u>
c. Subtotal	\$ 335,465	\$ 343,434	—	\$ 24,247
2. Changes in unfunded actuarial accrued liability, July 1, 1993				
a. (Gains)/losses	\$ (12,910)	\$ (14,072)	15	\$ (1,746)
b. Assumption changes	<u>(5,244)</u>	<u>(5,715)</u>	20	<u>(626)</u>
c. Subtotal	\$ (18,153)	\$ (19,787)	—	\$ (2,372)
3. Total (1c) + (2c)	\$ 317,311	\$ 323,647	—	\$ 21,875

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, 1995 (thousands)

	Outstanding Balance July 1, 1993	Fiscal Year Ending June 30, 1995		Annual End-of-Year Payment ^a
		Expected Balance July 1, 1994	Amortization Period Remaining	
1. Expected July 1, 1993 unfunded actuarial accrued liability based on July 1, 1992 valuation	\$ (2,159)	\$ (2,046)	—	\$ (307)
2. Changes in unfunded actuarial accrued liability, July 1, 1993				
a. (Gains)/losses	\$ (1,055)	\$ (1,150)	15	\$ (143)
b. Active plan amendment	(24)	(26)	20	(3)
c. Assumption change	<u>198</u>	<u>216</u>	20	<u>24</u>
d. Subtotal	\$ (881)	\$ (960)	—	\$ (122)
3. Total (1) + (2d)	\$ (3,040)	\$ (3,006)	—	\$ (429)

Note: Numbers may not add because of rounding.

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

COST DERIVATION**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, 1995 (thousands)**

	Outstanding Balance July 1, 1993	Fiscal Year Ending June 30, 1995		Annual End-of-Year Payment ^a
		Expected Balance July 1, 1994	Amortization Period Remaining	
1. Expected July 1, 1993 unfunded actuarial accrued liability based on July 1, 1992 valuation	\$ 0	\$ 0	—	\$ 0
2. Changes in unfunded actuarial accrued liability, July 1, 1993				
a. (Gains)/losses	\$ (14)	\$ (16)	15	\$ (2)
b. Active plan amendment	5	5	20	1
c. Assumption changes	<u>0</u>	<u>0</u>	20	<u>0</u>
d. Subtotal	\$ (9)	\$ (10)	—	\$ (1)
3. Total (1) + (2d)	\$ (9)	\$ (10)	—	\$ (1)

Note: Numbers may not add because of rounding.

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

COST DERIVATION**13. Development of elected division (Plan 87) annual end-of-year payment toward the unfunded actuarial accrued liability for fiscal year ending June 30, 1995 (thousands)**

	Fiscal Year Ending June 30, 1995			
	Outstanding Balance July 1, 1993	Expected Balance July 1, 1994	Amortization Period Remaining	Annual End-of-Year Payment ^a
1. Expected July 1, 1993 unfunded actuarial accrued liability based on July 1, 1992 valuation	\$ 2,538	\$ 2,426	—	\$ 340
2. Changes in unfunded actuarial accrued liability, July 1, 1993				
a. (Gains)/losses	\$ (150)	\$ (164)	15	\$ (20)
b. Active plan amendment	(3)	(3)	20	0
c. Assumption changes	<u>8</u>	<u>9</u>	20	<u>1</u>
d. Subtotal	\$ (145)	\$ (158)	—	\$ (20)
3. Total (1) + (2d)	\$ 2,393	\$ 2,268	—	\$ 320

Note: Numbers may not add because of rounding.

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

COST DERIVATION**14. Development of police division (Plan 87) annual end-of-year payment toward the unfunded actuarial accrued liability for fiscal year ending June 30, 1995 (thousands)**

	Outstanding Balance July 1, 1993	Fiscal Year Ending June 30, 1995		Annual End-of-Year Payment ^a
		Expected Balance July 1, 1994	Amortization Period Remaining	
1. Expected July 1, 1993 unfunded actuarial accrued liability based on July 1, 1992 valuation	\$ (6,471)	\$ (6,195)	—	\$ (858)
2. Changes in unfunded actuarial accrued liability, July 1, 1993				
a. (Gains)/losses	\$ (1,112)	\$ (1,212)	15	\$ (150)
b. Active plan amendment	(95)	(104)	20	(11)
c. Assumption changes	<u>356</u>	<u>388</u>	20	<u>43</u>
d. Subtotal	\$ (851)	\$ (927)	—	\$ (119)
3. Total (1) + (2c)	\$ (7,322)	\$ (7,122)	—	\$ (977)

Note: Numbers may not add because of rounding.

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

COST DERIVATION**15. Development of fire division (Plan 87) annual end-of-year payment toward the unfunded actuarial accrued liability for fiscal year ending June 30, 1995 (thousands)**

	Outstanding Balance July 1, 1993	Fiscal Year Ending June 30, 1995		Annual End-of-Year Payment*
		Expected Balance July 1, 1994	Amortization Period Remaining	
1. Expected July 1, 1993 unfunded actuarial accrued liability based on July 1, 1992 valuation	\$ (1,482)	\$ (1,422)	—	\$ (193)
2. Changes in unfunded actuarial accrued liability, July 1, 1993				
a. (Gains)/losses	\$ (108)	\$ (118)	15	\$ (15)
b. Assumption changes	<u>101</u>	<u>110</u>	20	<u>12</u>
c. Subtotal	\$ (8)	\$ (8)	—	\$ (3)
3. Total (1) + (2c)	\$ (1,489)	\$ (1,430)	—	\$ (196)

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, 1995 (thousands)

	Fiscal Year Ending June 30, 1995			
	Outstanding Balance July 1, 1993	Expected Balance July 1, 1994	Amortization Period Remaining	Annual End-of-Year Payment ^a
1. Expected July 1, 1993 unfunded actuarial accrued liability based on July 1, 1992 valuation				
a. Dombrowski	\$ 31,694	\$ 30,733	15	\$ 3,813
b. Remaining	<u>2,487,600</u>	<u>2,549,602</u>	—	<u>176,884^b</u>
c. Subtotal	\$ 2,519,293	\$ 2,580,335	—	\$ 180,697
2. Changes in unfunded actuarial accrued liability, July 1, 1993				
a. (Gains)/losses	\$ (94,447)	\$ (102,948)	15	\$ (12,772)
b. Active plan amendment	(4,670)	(5,090)	20	(558)
c. Inactive plan amendment	459	500	10	78
d. Assumption changes	<u>(32,525)</u>	<u>(35,452)</u>	20	<u>(3,884)</u>
e. Subtotal	\$ (131,182)	\$ (142,989)	—	\$ (17,135)
3. Total (1c) + (2e)	\$ 2,388,111	\$ 2,437,347	—	\$ 163,562 ^c

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.

c. 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)

Schedule of Annual End-of-Year Payments to Fund the Anticipated July 1, 1994 Unfunded Accrued Liability										Comparison of Official Schedule and 40-Year Amortization Under GAAP		
Fiscal Year Ending June 30	Unfunded Accrued Liability 1967 Plan			Unfunded Accrued Liability Plan 87						GAAP 40-Year Amortization	GAAP Deficit	Accumulated Deficit
	Municipal	Police	Fire	Municipal (M)	Municipal (Y)	Elected	Police	Fire	Total			
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	\$ 75,504 ^a	\$ 67,466	\$21,875	\$(429)	\$(1)	\$320	\$(977)	\$(196)	163,562	147,348	(16,213)	1,021,868
1996	79,763 ^a	70,201	22,966	(429)	(1)	320	(977)	(196)	171,648	147,348	(24,299)	1,089,537
1997	84,257 ^a	73,087	24,117	(429)	(1)	320	(977)	(196)	180,179	147,348	(32,830)	1,154,765
1998	88,557 ^a	75,591	25,123	(429)	(1)	320	(977)	(196)	187,988	147,348	(40,640)	1,218,054
1999	93,559 ^a	78,802	26,404	(429)	(1)	320	(977)	(196)	197,482	147,348	(50,133)	1,277,545
2000	98,835 ^a	82,191	27,756	(429)	(1)	320	(977)	(196)	207,499	147,348	(60,150)	1,332,374
2001	104,402 ^a	80,567	27,084	(429)	(1)	320	(977)	(196)	210,770	147,348	(63,421)	1,388,867
2002	110,275 ^a	84,339	28,588	(429)	(1)	320	(977)	(196)	221,919	147,348	(74,571)	1,439,294
2003	125,439 ^a	92,338	32,304	(429)	(1)	320	(977)	(196)	248,798	147,348	(101,450)	1,467,380
2004	131,926 ^a	94,360	33,531	(429)	(1)	320	(985)	(214)	258,507	147,348	(111,159)	1,488,286
2005	132,100	92,756	34,566	(330)	(1)	172	(919)	(189)	258,154	147,348	(110,806)	1,511,426
2006	140,046	93,783	35,232	(261)	(1)	183	(871)	(159)	267,952	147,348	(120,604)	1,526,851
2007	154,042	89,558	35,388	(70)	(1)	185	(358)	(87)	278,656	147,348	(131,307)	1,532,960
2008	160,481	96,303	37,964	55	(1)	89	(213)	(64)	294,613	147,348	(147,264)	1,523,662
2009	155,467	101,797	40,137	(149)	(1)	(24)	(122)	(3)	297,101	147,348	(149,753)	1,511,039
2010	168,867	110,595	43,679	(6)	1	(4)	28	11	323,171	147,348	(175,822)	1,471,210
2011	178,873	116,918	46,098	21	1	1	31	12	341,955	147,348	(194,606)	1,409,012

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

COST DERIVATION

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, 1994 Unfunded Accrued Liability									Comparison of Official Schedule and 40- Year Amortization Under GAAP		
	Unfunded Accrued Liability 1967 Plan			Unfunded Accrued Liability Plan 87						GAAP 40-Year Amortiza- tion	GAAP Deficit	Accumulated Deficit
	Municipal	Police	Fire	Municipal (M)	Municipal (Y)	Elected	Police	Fire	Total			
2012	\$188,905	\$123,361	\$48,668	\$21	\$1	\$1	\$31	\$12	\$360,999	\$147,348	\$(213,651)	\$1,322,173
2013	199,488	130,158	51,379	21	1	1	31	12	381,091	147,348	(233,743)	1,207,425
2014	210,525	137,329	54,240	21	1	1	31	12	402,159	147,348	(254,811)	1,061,283
2015	225,957	145,122	57,884	0	0	0	0	0	428,963	147,348	(281,615)	875,183
2016	238,385	153,104	61,067	0	0	0	0	0	452,556	147,348	(305,208)	648,742
2017	251,496	161,525	64,426	0	0	0	0	0	477,447	147,348	(330,099)	377,030
2018	265,329	170,409	67,969	0	0	0	0	0	503,707	147,348	(356,358)	54,604
2019	279,922	179,781	71,708	0	0	0	0	0	531,411	147,348	(384,062)	(324,543)
2020	0	0	0	0	0	0	0	0	0	147,348	147,348	(206,404)
2021	0	0	0	0	0	0	0	0	0	147,348	147,348	(77,632)
2022	0	0	0	0	0	0	0	0	0	11,142	11,142	(73,476)
2023	0	0	0	0	0	0	0	0	0	11,142	11,142	(68,947)
2024	0	0	0	0	0	0	0	0	0	16,479	16,479	(58,674)
2025	0	0	0	0	0	0	0	0	0	16,479	16,479	(47,476)
2026	0	0	0	0	0	0	0	0	0	21,642	21,642	(30,107)
2027	0	0	0	0	0	0	0	0	0	10,439	10,439	(22,377)
2028	0	0	0	0	0	0	0	0	0	17,938	17,938	(6,453)
2029	0	0	0	0	0	0	0	0	0	15,913	15,913	8,879
2030	0	0	0	0	0	0	0	0	0	5,897	5,897	15,575
2031	0	0	0	0	0	0	0	0	0	(844)	(844)	16,133
2032	0	0	0	0	0	0	0	0	0	(3,741)	(3,741)	13,844
2033	0	0	0	0	0	0	0	0	0	(2,895)	(2,895)	12,195
2034	0	0	0	0	0	0	0	0	0	(13,292)	(13,292)	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 1994 through 2013. The July 1, 1993 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, 1992 valuation. Subsequent contributions are based on the July 1, 1993 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, 2013. 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, 1993 through June 30, 2013
(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
1994	\$2,113,944	\$235,839	\$41,952	\$315,827	\$177,931	\$139,894	\$2,253,838
1995	2,253,838	236,152	47,352	324,362	190,380	149,522	2,403,360
1996	2,403,360	248,231	49,957	334,410	203,502	167,279	2,570,640
1997	2,570,640	260,974	52,704	345,604	218,177	186,251	2,756,891
1998	2,756,891	273,227	55,603	358,247	234,501	205,084	2,961,975
1999	2,961,975	287,409	58,661	372,532	252,454	225,991	3,187,967
2000	3,187,967	302,372	61,887	387,577	272,261	248,943	3,436,909
2001	3,436,909	310,861	65,291	403,142	294,119	267,128	3,704,038
2002	3,704,038	327,515	68,882	421,094	317,514	292,818	3,996,855
2003	3,996,855	360,202	72,671	441,265	343,130	334,738	4,331,593
2004	4,331,593	376,038	76,668	462,822	372,466	362,350	4,693,944
2005	4,693,944	382,150	80,884	485,415	404,251	381,870	5,075,814
2006	5,075,814	398,767	85,333	508,602	437,776	413,275	5,489,089
2007	5,489,089	416,666	90,026	531,973	474,130	448,849	5,937,938
2008	5,937,938	440,213	94,978	555,521	513,690	493,360	6,431,299
2009	6,431,299	450,710	100,202	578,079	557,312	530,145	6,961,443
2010	6,961,443	485,228	105,713	600,633	604,258	594,566	7,556,010
2011	7,556,010	512,925	111,527	623,023	657,024	658,452	8,214,461
2012	8,214,461	541,373	117,661	644,942	715,574	729,666	8,944,127
2013	8,944,127	571,385	124,132	666,330	780,573	809,760	9,753,887

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, 1993 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, 1993. 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, 1992 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, 1993.

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	- 863	- 2.8%
Retired	+ 215	+ 1.3
Surviving spouses	+ 102	+ 1.5
Other beneficiaries	+ 23	+ 2.3
Disabled	+ 50	+ 1.0
Terminated vested	- 79	- 11.9

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, in *Net Other Terminations* consisting of:

- Active
 - ▶ Terminated and left member contributions on deposit
 - ▶ Died without a spouse or beneficiary
 - ▶ 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.

PLAN MEMBERSHIP

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, 1992	20,344	4,867	1,918	1,739	0	22	1,491	306	30,687
New entrants and rehires	+ 372	+ 11	+ 4	+ 181	+ 333	+ 1	+ 117	+ 68	+ 1,087
Separations from active service									
Refunded contributions	- 294	- 11	- 1	- 135	0	0	- 13	- 3	- 457
Terminated vested	0	0	0	0	0	0	0	0	0
Became disabled	- 67	- 42	- 8	0	0	0	- 2	0	- 119
Died	- 9	- 3	0	- 1	0	0	0	0	- 13
Retired	- 401	- 142	- 31	- 1	0	0	0	0	- 575
Net other terminations ^a	- 564	- 97	- 5	- 103	0	0	- 14	- 3	- 786
Active, July 1, 1993	19,381	4,583	1,877	1,680	333	23	1,579	368	29,824
Retired members									
Retired, July 1, 1992	10,818	4,285	1,678	0	0	0	0	0	16,781
New retirees	+ 402	+ 142	+ 31	0	0	0	0	0	+ 575
Net other terminations	- 240	- 78	- 42	0	0	0	0	0	- 360
Retired, July 1, 1993	10,980	4,349	1,667	0	0	0	0	0	16,996
Surviving spouses									
Receiving benefit, July 1, 1992	4,009	1,794	942	0	0	0	0	0	6,745
New spouses	+ 226	+ 100	+ 49	0	0	0	0	0	+ 375
Net other terminations	- 159	- 76	- 38	0	0	0	0	0	- 273
Receiving benefit, July 1, 1993	4,076	1,818	953	0	0	0	0	0	6,847

- a. Includes terminated employees who left contributions on deposit, deaths without continuing benefits to beneficiaries, and transfers among plans.

PLAN MEMBERSHIP

21. Reconciliation of included members (continued)

	1967 Plan			Plan 87					Total
	Municipal	Police	Fire	Municipal (M)	Municipal (Y)	Elected	Police	Fire	
Other beneficiaries									
Receiving benefit, July 1, 1992	787	162	37	0	0	0	0	0	986
New beneficiaries	+ 27	+ 3	+ 3	0	0	0	0	0	+ 33
Net other terminations	- 2	- 8	- 0	- 0	- 0	- 0	- 0	- 0	- 10
Receiving benefit, July 1, 1993	812	157	40	0	0	0	0	0	1,009
Disabled members									
Disabled, July 1, 1992	2,141	2,401	634	0	0	0	0	0	5,176
New disabilities	+ 67	+ 44	+ 8	0	0	0	0	0	+ 119
Net other terminations	- 40	- 14	- 15	- 0	- 0	- 0	- 0	- 0	- 69
Disabled, July 1, 1993	2,168	2,431	627	0	0	0	0	0	5,226
Terminated vested members									
Terminated vested, July 1, 1992	564	89	13	0	0	0	0	0	666
New vested terminations	0	0	0	0	0	0	0	0	0
Net other terminations	- 64	- 13	- 2	- 0	- 0	- 0	- 0	- 0	- 79
Terminated vested, July 1, 1993	500	76	11	0	0	0	0	0	587

PLAN MEMBERSHIP

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

	1967 Plan						Plan 87				Total
	Municipal	Police	Fire	Municipal (M)	Municipal (Y)	Elected	Police	Fire	Fire	Total	
Disabled members											
Disabled as of July 1, 1992	\$ 21,285	\$ 33,062	\$ 9,566	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 63,913	
Net new disabilities	973	1,109	61	0	0	0	0	0	0	2,143	
Disabled as of July 1, 1993	\$ 22,258	\$ 34,171	\$ 9,627	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 66,055	
Terminated vested members											
Terminated vested as of July 1, 1992	\$ 5,382	\$ 787	\$ 94	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 6,263	
Net new vested terminations	(495)	(112)	(15)	0	0	0	0	0	0	(623)	
Terminated vested as of July 1, 1993	\$ 4,887	\$ 675	\$ 79	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 5,640	

Foster Higgins

A distribution of the active employees' annual earnings for each division by age and service group as of July 1, 1993 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, 1992. Similarly, Tables 51 through 56 show this information for retired and disabled police and fire members respectively.

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

Age Group	M a l e			F e m a l e			A l l		
	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	1	\$ 20	\$ 20	1	\$ 20	\$ 20
20-24	122	3,124	26	123	2,714	22	245	5,838	24
25-29	548	15,779	29	483	11,764	24	1,031	27,543	27
30-34	1,261	39,483	31	958	25,411	27	2,219	64,894	29
35-39	1,841	61,995	34	1,325	36,609	28	3,166	98,604	31
40-44	2,249	79,729	35	1,504	42,728	28	3,753	122,457	33
45-49	2,066	76,222	37	1,412	41,462	29	3,478	117,684	34
50-54	1,507	53,895	36	1,193	33,120	28	2,700	87,015	32
55-59	908	31,969	35	675	18,103	27	1,583	50,072	32
60-64	466	15,631	34	364	9,649	27	830	25,280	30
65-69	141	4,544	32	116	2,777	24	257	7,321	28
70-74	43	1,509	35	40	783	20	83	2,291	28
75-79	11	339	31	10	223	22	21	562	27
80-84	8	220	28	3	33	11	11	253	23
85+	1	11	11	2	45	22	3	56	19
TOTAL	11,172	\$ 384,448	\$ 34	8,209	\$ 225,441	\$ 27	19,381	\$ 609,889	\$ 31

Note: Age represents attained age

PLAN MEMBERSHIP

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

Service Group	M a l e			F e m a l e			A l l		
	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	16	\$ 424	\$ 26	15	\$ 329	\$ 22	31	\$ 753	\$ 24
1	402	10,920	27	427	8,717	20	829	19,637	24
2	393	10,502	27	226	5,328	24	619	15,830	26
3	604	18,101	30	678	15,540	23	1,282	33,641	26
4	527	15,460	29	678	14,743	22	1,205	30,203	25
5	664	20,183	30	544	13,473	25	1,208	33,656	28
6-10	2,348	75,084	32	1,981	55,219	28	4,329	130,303	30
11-15	1,842	66,702	36	1,178	35,222	30	3,020	101,924	34
16-20	1,874	69,647	37	929	28,134	30	2,803	97,781	35
21-25	1,580	60,491	38	811	25,144	31	2,391	85,635	36
26-30	637	25,008	39	418	13,434	32	1,055	38,442	36
31+	285	11,929	42	324	10,158	31	609	22,088	36
TOTAL	11,172	\$ 384,448	\$ 34	8,209	\$ 225,441	\$ 27	19,381	\$ 609,889	\$ 31

Note: Age represents attained age

PLAN MEMBERSHIP

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

Age Group	Service Group						6-10	11-15	Over	Total
	0	1	2	3	4	5				
Male										
0-19	0	0	0	0	0	0	0	0	0	0
20-24	2	42	31	30	8	4	5	0	0	122
25-29	2	71	66	134	87	74	107	7	0	548
30-34	4	80	81	129	136	164	507	156	4	1,261
35-39	3	65	84	120	101	143	564	523	238	1,841
40-44	1	60	53	86	59	107	402	451	1,030	2,249
45-49	1	32	31	43	57	68	294	299	1,241	2,066
50-54	3	25	28	26	35	53	162	169	1,006	1,507
55-59	0	21	12	23	23	23	153	118	535	908
60-64	0	5	4	10	15	17	98	73	244	466
65-69	0	1	3	2	5	9	41	28	52	141
70-74	0	0	0	0	1	0	13	15	14	43
75-79	0	0	0	0	0	0	2	2	7	11
80-84	0	0	0	1	0	1	0	1	5	8
85+	0	0	0	0	0	1	0	0	0	1
TOTAL	16	402	393	604	527	664	2,348	1,842	4,376	11,172
Female										
0-19	1	0	0	0	0	0	0	0	0	1
20-24	1	39	12	33	25	8	5	0	0	123
25-29	4	64	26	103	91	52	132	11	0	483
30-34	1	90	47	139	102	99	336	139	5	958
35-39	1	90	52	133	119	119	409	227	175	1,325
40-44	4	65	41	104	121	92	372	252	453	1,504
45-49	0	30	17	77	102	66	299	211	610	1,412
50-54	1	23	18	43	54	60	179	142	673	1,193
55-59	1	12	12	31	35	29	119	106	330	675
60-64	1	13	0	11	17	14	84	59	165	364
65-69	0	1	0	2	7	4	36	21	45	116
70-74	0	0	1	2	3	0	7	6	21	40
75-79	0	0	0	0	1	1	2	2	4	10
80-84	0	0	0	0	0	0	0	2	1	3
85+	0	0	0	0	1	0	1	0	0	2
TOTAL	15	427	226	678	678	544	1,981	1,178	2,482	8,209

Note: Age represents attained age

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

Age Group	M a l e			F e m a l e			A l l		
	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	2	67	33	0	0	0	2	67	33
25-29	66	2,301	35	28	954	34	94	3,254	35
30-34	449	16,172	36	131	4,630	35	580	20,802	36
35-39	766	28,358	37	211	7,568	36	977	35,926	37
40-44	1,119	42,494	38	177	6,344	36	1,296	48,838	38
45-49	987	37,804	38	64	2,335	36	1,051	40,139	38
50-54	406	16,014	39	13	484	37	419	16,498	39
55-59	124	5,194	42	0	0	0	124	5,194	42
60-64	32	1,359	42	0	0	0	32	1,359	42
65-69	7	362	52	0	0	0	7	362	52
70-74	1	41	41	0	0	0	1	41	41
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	3,959	\$ 150,166	\$ 38	624	\$ 22,315	\$ 36	4,583	\$ 172,481	\$ 38

Note: Age represents attained age

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

Service Group	M a l e			F e m a l e			A l l		
	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	2	65	32	2	65	32	4	130	32
2	1	32	32	1	32	32	2	65	32
3	9	300	33	3	102	34	12	401	33
4	13	448	34	11	375	34	24	823	34
5	107	3,756	35	44	1,514	34	151	5,270	35
6-10	555	19,536	35	275	9,669	35	830	29,206	35
11-15	812	30,127	37	183	6,586	36	995	36,713	37
16-20	912	34,416	38	85	3,208	38	997	37,623	38
21-25	1,050	40,700	39	17	643	38	1,067	41,344	39
26-30	415	16,694	40	3	120	40	418	16,814	40
31+	83	4,092	49	0	0	0	83	4,092	49
TOTAL	3,959	\$ 150,166	\$ 38	624	\$ 22,315	\$ 36	4,583	\$ 172,481	\$ 38

Note: Age represents attained age

PLAN MEMBERSHIP**28. Police (1967 Plan) service groups by age groups**

Age Group	Service Group						6-10	11-15	Over	Total
	0	1	2	3	4	5				
Male										
0-19	0	0	0	0	0	0	0	0	0	0
20-24	0	0	0	0	1	0	1	0	0	2
25-29	0	2	1	5	5	13	40	0	0	66
30-34	0	0	0	3	2	47	236	161	0	449
35-39	0	0	0	1	5	30	166	416	148	766
40-44	0	0	0	0	0	14	91	177	837	1,119
45-49	0	0	0	0	0	1	21	54	911	987
50-54	0	0	0	0	0	0	0	4	402	406
55-59	0	0	0	0	0	1	0	0	123	124
60-64	0	0	0	0	0	0	0	0	31	32
65-69	0	0	0	0	0	0	0	0	7	7
70-74	0	0	0	0	0	0	0	0	1	1
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	2	1	9	13	107	555	812	2,460	3,959
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	1	1	2	2	6	15	1	0	28
30-34	0	0	0	1	6	9	82	33	0	131
35-39	0	0	0	0	1	13	101	66	30	211
40-44	0	0	0	0	2	13	64	57	41	177
45-49	0	1	0	0	0	3	13	22	25	64
50-54	0	0	0	0	0	0	0	4	9	13
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	2	1	3	11	44	275	183	105	624

Note: Age represents attained age

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

Age Group	M a l e			F e m a l e			A l l		
	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	6	203	34	1	31	31	7	234	33
30-34	127	4,452	35	0	0	0	127	4,452	35
35-39	284	10,297	36	1	35	35	285	10,332	36
40-44	610	22,789	37	1	35	35	611	22,823	37
45-49	559	21,295	38	0	0	0	559	21,295	38
50-54	235	9,113	39	0	0	0	235	9,113	39
55-59	46	1,769	38	0	0	0	46	1,769	38
60-64	6	225	37	0	0	0	6	225	37
65-69	1	46	46	0	0	0	1	46	46
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	1,874	\$ 70,189	\$ 37	3	\$ 100	\$ 33	1,877	\$ 70,289	\$ 37

Note: Age represents attained age

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

Service Group	M a l e			F e m a l e			A l l		
	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	1	30	30	0	0	0	1	30	30
3	0	0	0	0	0	0	0	0	0
4	3	104	35	0	0	0	3	104	35
5	29	1,007	35	0	0	0	29	1,007	35
6-10	316	11,065	35	3	100	33	319	11,165	35
11-15	185	6,735	36	0	0	0	185	6,735	36
16-20	669	25,114	38	0	0	0	669	25,114	38
21-25	363	13,825	38	0	0	0	363	13,825	38
26-30	258	10,204	40	0	0	0	258	10,204	40
31+	50	2,105	42	0	0	0	50	2,105	42
TOTAL	1,874	\$ 70,189	\$ 37	3	\$ 100	\$ 33	1,877	\$ 70,289	\$ 37

Note: Age represents attained age

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

Age Group	0	1	2	3	Service Group		6-10	11-15	Over	Total
					4	5				
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	1	0	0	1	4	0	0	6
30-34	0	0	0	0	1	12	109	5	0	127
35-39	0	0	0	0	0	12	145	39	88	284
40-44	0	0	0	0	2	4	57	106	441	610
45-49	0	0	0	0	0	0	1	35	523	559
50-54	0	0	0	0	0	0	0	0	235	235
55-59	0	0	0	0	0	0	0	0	46	46
60-64	0	0	0	0	0	0	0	0	6	6
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	1	0	3	29	316	185	1,340	1,874
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	0	0	0
35-39	0	0	0	0	0	0	1	0	0	1
40-44	0	0	0	0	0	0	1	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	0	0	0	0	0	0	3	0	0	3

Note: Age represents attained age

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

Age Group	M a l e			F e m a l e			A l l		
	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	27	517	19	42	848	20	69	1,365	20
25-29	147	4,065	28	194	5,314	27	341	9,379	28
30-34	145	4,727	33	167	4,809	29	312	9,536	31
35-39	123	3,990	32	117	3,332	28	240	7,322	31
40-44	86	2,993	35	117	3,606	31	203	6,600	33
45-49	56	2,104	38	105	3,100	30	161	5,204	32
50-54	47	1,931	41	48	1,245	26	95	3,176	33
55-59	39	1,202	31	48	1,048	22	87	2,250	26
60-64	33	882	27	46	756	16	79	1,639	21
65-69	16	322	20	27	183	7	43	505	12
70-74	11	171	16	28	120	4	39	291	7
75-79	4	93	23	4	17	4	8	110	14
80-84	1	3	3	2	8	4	3	11	4
85+	0	0	0	0	0	0	0	0	0
TOTAL	735	\$ 23,000	\$ 31	945	\$ 24,387	\$ 26	1,680	\$ 47,387	\$ 28

Note: Age represents attained age

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

Service Group	M a l e			F e m a l e			A l l		
	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	28	\$ 803	\$ 29	39	\$ 982	\$ 25	67	\$ 1,785	\$ 27
1	169	6,045	36	204	5,631	28	373	11,677	31
2	83	2,083	25	91	2,059	23	174	4,142	24
3	143	4,023	28	205	5,171	25	348	9,194	26
4	120	3,569	30	152	3,637	24	272	7,206	26
5	115	3,500	30	163	4,338	27	278	7,839	28
6-10	64	2,340	37	84	2,328	28	148	4,668	32
11-15	7	350	50	2	73	36	9	423	47
16-20	3	160	53	3	82	27	6	242	40
21-25	1	25	25	2	84	42	3	109	36
26-30	1	40	40	0	0	0	1	40	40
31+	1	62	62	0	0	0	1	62	62
TOTAL	735	\$ 23,000	\$ 31	945	\$ 24,387	\$ 26	1,680	\$ 47,387	\$ 28

Note: Age represents attained age

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

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	9	4	10	3	0	1	0	0	27
25-29	15	38	24	25	16	20	9	0	0	147
30-34	3	35	11	36	31	16	12	1	0	145
35-39	4	24	11	27	17	21	16	3	0	123
40-44	1	21	10	12	17	17	7	0	1	86
45-49	0	10	11	8	6	13	3	3	2	56
50-54	2	11	4	6	8	8	7	0	1	47
55-59	2	12	3	7	6	6	2	0	1	39
60-64	0	5	2	7	7	6	5	0	1	33
65-69	0	2	2	1	4	5	2	0	0	16
70-74	1	2	0	2	3	3	0	0	0	11
75-79	0	0	1	1	2	0	0	0	0	4
80-84	0	0	0	1	0	0	0	0	0	1
85+	0	0	0	0	0	0	0	0	0	0
TOTAL	28	169	83	143	120	115	64	7	6	735
Female										
0-19	0	0	0	0	0	0	0	0	0	0
20-24	4	12	7	11	7	0	1	0	0	42
25-29	21	48	25	49	21	19	11	0	0	194
30-34	1	35	18	40	25	35	13	0	0	167
35-39	3	22	11	24	23	17	16	0	1	117
40-44	1	33	7	21	17	25	12	0	1	117
45-49	2	20	5	20	14	24	18	1	1	105
50-54	1	6	3	9	9	14	5	0	1	48
55-59	2	7	4	12	9	9	5	0	0	48
60-64	2	13	1	6	12	9	1	1	1	46
65-69	2	5	8	5	4	2	1	0	0	27
70-74	0	3	2	5	9	8	1	0	0	28
75-79	0	0	0	1	2	1	0	0	0	4
80-84	0	0	0	2	0	0	0	0	0	2
85+	0	0	0	0	0	0	0	0	0	0
TOTAL	39	204	91	205	152	163	84	2	5	945

Note: Age represents attained age

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

Age Group	M a l e			F e m a l e			A l l		
	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	19	415	22	19	443	23	38	857	23
25-29	36	926	26	37	862	23	73	1,788	24
30-34	30	886	30	29	760	26	59	1,645	28
35-39	31	830	27	24	611	25	55	1,440	26
40-44	21	562	27	16	458	29	37	1,021	28
45-49	20	692	35	11	205	19	31	898	29
50-54	9	292	32	10	220	22	19	511	27
55-59	5	117	23	4	56	14	9	172	19
60-64	4	94	24	4	62	16	8	156	20
65-69	0	0	0	2	1	1	2	1	1
70-74	1	18	18	0	0	0	1	18	18
75-79	1	25	25	0	0	0	1	25	25
80-84	0	0	0	0	0	0	0	0	0
85+	0	0	0	0	0	0	0	0	0
TOTAL	177	\$ 4,855	\$ 27	156	\$ 3,677	\$ 24	333	\$ 8,532	\$ 26

Note: Age represents attained age

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

Service Group	M a l e			F e m a l e			A l l		
	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	177	\$ 4,855	\$ 27	156	\$ 3,677	\$ 24	333	\$ 8,532	\$ 26
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	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0
6-10	0	0	0	0	0	0	0	0	0
11-15	0	0	0	0	0	0	0	0	0
16-20	0	0	0	0	0	0	0	0	0
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	177	\$ 4,855	\$ 27	156	\$ 3,677	\$ 24	333	\$ 8,532	\$ 26

Note: Age represents attained age

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

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	19	0	0	0	0	0	0	0	0	19
25-29	36	0	0	0	0	0	0	0	0	36
30-34	30	0	0	0	0	0	0	0	0	30
35-39	31	0	0	0	0	0	0	0	0	31
40-44	21	0	0	0	0	0	0	0	0	21
45-49	20	0	0	0	0	0	0	0	0	20
50-54	9	0	0	0	0	0	0	0	0	9
55-59	5	0	0	0	0	0	0	0	0	5
60-64	4	0	0	0	0	0	0	0	0	4
65-69	0	0	0	0	0	0	0	0	0	0
70-74	1	0	0	0	0	0	0	0	0	1
75-79	1	0	0	0	0	0	0	0	0	1
80-84	0	0	0	0	0	0	0	0	0	0
85+	0	0	0	0	0	0	0	0	0	0
TOTAL	177	0	0	0	0	0	0	0	0	177
Female										
0-19	0	0	0	0	0	0	0	0	0	0
20-24	19	0	0	0	0	0	0	0	0	19
25-29	37	0	0	0	0	0	0	0	0	37
30-34	29	0	0	0	0	0	0	0	0	29
35-39	24	0	0	0	0	0	0	0	0	24
40-44	16	0	0	0	0	0	0	0	0	16
45-49	11	0	0	0	0	0	0	0	0	11
50-54	10	0	0	0	0	0	0	0	0	10
55-59	4	0	0	0	0	0	0	0	0	4
60-64	4	0	0	0	0	0	0	0	0	4
65-69	2	0	0	0	0	0	0	0	0	2
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	156	0	0	0	0	0	0	0	0	156

Note: Age represents attained age

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

Age Group	M a l e			F e m a l e			A l l		
	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	0	0	0	0	0	0	0	0	0
30-34	2	130	65	0	0	0	2	130	65
35-39	1	65	65	0	0	0	1	65	65
40-44	3	202	67	0	0	0	3	202	67
45-49	3	210	70	1	65	65	4	275	69
50-54	2	170	85	0	0	0	2	170	85
55-59	1	65	65	5	325	65	6	390	65
60-64	0	0	0	3	203	68	3	203	68
65-69	0	0	0	0	0	0	0	0	0
70-74	1	65	65	0	0	0	1	65	65
75-79	1	65	65	0	0	0	1	65	65
80-84	0	0	0	0	0	0	0	0	0
85+	0	0	0	0	0	0	0	0	0
TOTAL	14	\$ 972	\$ 69	9	\$ 593	\$ 66	23	\$ 1,564	\$ 68

Note: Age represents attained age

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

Service Group	M a l e			F e m a l e			A l l		
	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	5	325	65	2	130	65	7	455	65
2	0	0	0	0	0	0	0	0	0
3	1	70	70	0	0	0	1	70	70
4	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0
6-10	2	130	65	1	65	65	3	195	65
11-15	3	210	70	4	262	66	7	472	67
16-20	1	105	105	1	68	68	2	172	86
21-25	2	132	66	0	0	0	2	132	66
26-30	0	0	0	0	0	0	0	0	0
31+	0	0	0	1	68	68	1	68	68
TOTAL	14	\$ 972	\$ 69	9	\$ 593	\$ 66	23	\$ 1,564	\$ 68

Note: Age represents attained age

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

Age Group	Service Group									Total
0	1	2	3	4	5	6-10	11-15	Over		
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	2	0	0	0	0	0	0	0	2
35-39	0	0	0	0	0	0	1	0	0	1
40-44	0	1	0	1	0	0	0	0	0	1
45-49	0	0	0	0	0	0	0	2	1	3
50-54	0	1	0	0	0	0	0	0	1	2
55-59	0	1	0	0	0	0	0	0	0	1
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	1	0	0	1
75-79	0	0	0	0	0	0	0	1	0	1
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	5	0	1	0	0	2	3	3	14
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	1	0	1
50-54	0	0	0	0	0	0	0	0	0	0
55-59	0	2	0	0	0	0	1	2	0	5
60-64	0	0	0	0	0	0	0	1	2	3
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	2	0	0	0	0	1	4	2	9

Note: Age represents attained age

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

Age Group	M a l e			F e m a l e			A l l		
	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	210	6,799	32	49	1,602	33	259	8,402	32
25-29	543	18,082	33	140	4,656	33	683	22,739	33
30-34	280	9,314	33	89	2,999	34	369	12,313	33
35-39	140	4,699	34	89	2,972	33	229	7,671	33
40-44	13	447	34	25	857	34	38	1,304	34
45-49	1	35	35	0	0	0	1	35	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	1,187	\$ 39,377	\$ 33	392	\$ 13,087	\$ 33	1,579	\$ 52,463	\$ 33

Note: Age represents attained age

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

Service Group	M a l e			F e m a l e			A l l		
	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	83	\$ 1,974	\$ 24	21	\$ 499	\$ 24	104	\$ 2,473	\$ 24
1	155	5,024	32	48	1,556	32	203	6,580	32
2	97	3,204	33	38	1,259	33	135	4,462	33
3	599	20,493	34	167	5,712	34	766	26,205	34
4	247	8,505	34	114	3,922	34	361	12,428	34
5	1	4	4	2	69	34	3	73	24
6-10	3	103	34	1	35	35	4	138	35
11-15	1	34	34	1	35	35	2	69	35
16-20	1	35	35	0	0	0	1	35	35
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	1,187	\$ 39,377	\$ 33	392	\$ 13,087	\$ 33	1,579	\$ 52,463	\$ 33

Note: Age represents attained age

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

Age Group	Service Group							6-10	11-15	Over	Total
	0	1	2	3	4	5					
Male											
0-19	0	0	0	0	0	0	0	0	0	0	0
20-24	25	42	29	102	12	0	0	0	0	0	210
25-29	34	74	46	266	123	0	0	0	0	0	543
30-34	17	26	15	153	66	1	2	0	0	0	280
35-39	7	13	7	70	41	0	1	1	0	0	140
40-44	0	0	0	8	5	0	0	0	0	0	13
45-49	0	0	0	0	0	0	0	0	0	1	1
50-54	0	0	0	0	0	0	0	0	0	0	0
55-59	0	0	0	0	0	0	0	0	0	0	0
60-64	0	0	0	0	0	0	0	0	0	0	0
65-69	0	0	0	0	0	0	0	0	0	0	0
70-74	0	0	0	0	0	0	0	0	0	0	0
75-79	0	0	0	0	0	0	0	0	0	0	0
80-84	0	0	0	0	0	0	0	0	0	0	0
85+	0	0	0	0	0	0	0	0	0	0	0
TOTAL	83	155	97	599	247	1	3	1	1		1,187
Female											
0-19	0	0	0	0	0	0	0	0	0	0	0
20-24	4	10	11	21	3	0	0	0	0	0	49
25-29	9	20	12	51	47	1	0	0	0	0	140
30-34	3	10	6	36	32	1	0	1	0	0	89
35-39	5	7	8	48	20	0	1	0	0	0	89
40-44	0	1	1	11	12	0	0	0	0	0	25
45-49	0	0	0	0	0	0	0	0	0	0	0
50-54	0	0	0	0	0	0	0	0	0	0	0
55-59	0	0	0	0	0	0	0	0	0	0	0
60-64	0	0	0	0	0	0	0	0	0	0	0
65-69	0	0	0	0	0	0	0	0	0	0	0
70-74	0	0	0	0	0	0	0	0	0	0	0
75-79	0	0	0	0	0	0	0	0	0	0	0
80-84	0	0	0	0	0	0	0	0	0	0	0
85+	0	0	0	0	0	0	0	0	0	0	0
TOTAL	21	48	38	167	114	2	1	1	0		392

Note: Age represents attained age

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

Age Group	M a l e			F e m a l e			A l l		
	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	15	503	34	0	0	0	15	503	34
25-29	106	3,522	33	5	182	36	111	3,705	33
30-34	135	4,553	34	5	185	37	140	4,738	34
35-39	76	2,583	34	1	36	36	77	2,619	34
40-44	22	761	35	0	0	0	22	761	35
45-49	3	113	38	0	0	0	3	113	38
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	357	\$ 12,035	\$ 34	11	\$ 404	\$ 37	368	\$ 12,439	\$ 34

Note: Age represents attained age

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

Service Group	M a l e			F e m a l e			A l l		
	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	144	4,494	31	1	32	32	145	4,527	31
2	29	1,052	36	2	73	36	31	1,125	36
3	88	3,150	36	5	189	38	93	3,339	36
4	89	3,105	35	3	109	36	92	3,215	35
5	3	94	31	0	0	0	3	94	31
6-10	2	68	34	0	0	0	2	68	34
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	37	37	0	0	0	1	37	37
31+	0	0	0	0	0	0	0	0	0
TOTAL	357	\$ 12,035	\$ 34	11	\$ 404	\$ 37	368	\$ 12,439	\$ 34

Note: Age represents attained age

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

Age Group	Service Group						6-10	11-15	Over	Total
	0	1	2	3	4	5				
Male										
0-19	0	0	0	0	0	0	0	0	0	0
20-24	0	8	5	1	1	0	0	0	0	15
25-29	0	60	12	22	9	3	0	0	0	106
30-34	0	58	7	35	34	0	1	0	0	135
35-39	0	18	5	22	30	0	1	0	0	76
40-44	0	0	0	7	14	0	0	0	1	22
45-49	0	0	0	1	1	0	0	0	1	3
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	144	29	88	89	3	2	0	2	357
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	1	1	3	0	0	0	0	0	5
30-34	0	0	0	2	3	0	0	0	0	5
35-39	0	0	1	0	0	0	0	0	0	1
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	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	1	2	5	3	0	0	0	0	11

Note: Age represents attained age

47. Terminated vested (1967 plan) members, July 1, 1993

Age	Municipal Members		Police Members		Fire Members	
	People	Monthly Pension	People	Monthly Pension	People	Monthly Pension
UNDER 40	47	\$ 32,495	12	\$ 9,282	3	\$1,724
40-44	122	97,427	57	42,470	7	4,317
45-49	153	144,363	4	2,068	0	0
50-54	151	121,047	2	1,339	0	0
55-59	9	5,966	0	0	1	502
60-64	5	2,952	0	0	0	0
OVER 64	13	2,966	1	1,068	0	0
TOTAL	500	\$407,215	76	\$56,227	11	\$6,543

Average Monthly Pension

Municipal	\$814
Police	\$740
Fire	\$595

48. Number of disabled and retired municipal (1967 Plan) members, July 1, 1993

Number of People or Plan Members									
Age	Disabled			Retired			Total		
	Prior	New	Total	Prior	New	Total	Prior	New	Total
UNDER 45	149	29	178	449	24	473	598	53	651
45-49	168	14	182	135	7	142	303	21	324
50-54	269	20	289	218	13	231	487	33	520
55-59	325	6	331	1,223	214	1,437	1,548	220	1,768
60-64	352	4	356	2,433	114	2,547	2,785	118	2,903
65-69	360	0	360	3,096	88	3,184	3,456	88	3,544
70-74	255	0	255	2,843	54	2,897	3,098	54	3,152
75-79	139	0	139	2,229	16	2,245	2,368	16	2,384
80-84	59	0	59	1,469	24	1,493	1,528	24	1,552
OVER 84	18	1	19	1,204	15	1,219	1,222	16	1,238
TOTAL	2,094	74	2,168	15,299	569	15,868	17,393	643	18,036

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, 1993

Total Monthly Pension Amounts									
Age	Disabled			Retired			Total		
	Prior	New	Total	Prior	New	Total	Prior	New	Total
UNDER 45	\$ 174,004.38	\$ 40,673.38	\$ 214,677.76	\$ 131,924.88	\$ 13,873.45	\$ 145,798.33	\$ 305,929.26	\$ 54,546.83	\$ 360,476.09
45-49	186,969.73	20,564.24	207,533.97	54,472.39	4,700.79	59,173.18	241,442.12	25,265.03	266,707.15
50-54	262,211.75	28,889.34	291,101.09	111,944.55	11,012.63	122,957.18	374,156.30	39,901.97	414,058.27
55-59	307,267.57	9,804.97	317,072.54	1,411,398.96	311,237.10	1,722,636.06	1,718,666.53	321,042.07	2,039,708.60
60-64	277,767.24	6,125.64	283,892.88	2,580,989.52	129,721.67	2,710,711.19	2,858,756.76	135,847.31	2,994,604.07
65-69	261,925.82	0.00	261,925.82	2,701,922.49	70,049.12	2,771,971.61	2,963,848.31	70,049.12	3,033,897.43
70-74	157,749.00	0.00	157,749.00	1,818,601.00	27,095.57	1,845,696.57	1,976,350.00	27,095.57	2,003,445.57
75-79	76,831.81	0.00	76,831.81	1,056,270.03	8,515.28	1,064,785.31	1,133,101.84	8,515.28	1,141,617.12
80-84	34,908.83	0.00	34,908.83	535,728.08	7,297.40	543,025.48	570,636.91	7,297.40	577,934.31
OVER 84	7,413.35	1,690.85	9,104.20	349,838.60	3,259.99	353,098.59	357,251.95	4,950.84	362,202.79
TOTAL	\$1,747,049.48	\$107,748.42	\$1,854,797.90	\$10,753,090.50	\$586,763.00	\$11,339,853.50	\$12,500,139.98	\$694,511.42	\$13,194,651.40

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.

50. Average monthly pension of disabled and retired municipal (1967 Plan) members, July 1, 1993

Age	Average Monthly Pension Amounts								
	Disabled			Retired			Total		
	Prior	New	Total	Prior	New	Total	Prior	New	Total
UNDER 45	\$1,167.81	\$1,402.53	\$1,206.05	\$ 293.82	\$ 578.06	\$ 308.24	\$ 511.59	\$1,029.19	\$ 553.73
45-49	1,112.92	1,468.87	1,140.30	403.50	671.54	416.71	796.84	1,203.10	823.17
50-54	974.76	1,444.47	1,007.27	513.51	847.13	532.28	768.29	1,209.15	796.27
55-59	945.44	1,634.16	957.92	1,154.05	1,454.38	1,198.77	1,110.25	1,459.28	1,153.68
60-64	789.11	1,531.41	797.45	1,060.83	1,137.91	1,064.28	1,026.48	1,151.25	1,031.55
65-69	727.57	0.00	727.57	872.71	796.01	870.59	857.59	796.01	856.07
70-74	618.62	0.00	618.62	639.68	501.77	637.11	637.94	501.77	635.61
75-79	552.75	0.00	552.75	473.88	532.21	474.29	478.51	532.21	478.87
80-84	591.68	0.00	591.68	364.69	304.06	363.71	373.45	304.06	372.38
OVER 84	411.85	1,690.85	479.17	290.56	217.33	289.66	292.35	309.43	292.57
TOTAL	\$ 834.31	\$1,456.06	\$ 855.53	\$ 702.86	\$1,031.22	\$ 714.64	\$ 718.69	\$1,080.11	\$ 731.57

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, 1993

Age	Number of People or Plan Members								
	Disabled			Retired			Total		
	Prior	New	Total	Prior	New	Total	Prior	New	Total
UNDER 45	390	27	417	131	6	137	521	33	554
45-49	456	12	468	483	107	590	939	119	1,058
50-54	395	5	400	1,078	38	1,116	1,473	43	1,516
55-59	275	1	276	976	23	999	1,251	24	1,275
60-64	336	1	337	984	17	1,001	1,320	18	1,338
65-69	296	0	296	706	19	725	1,002	19	1,021
70-74	119	0	119	396	11	407	515	11	526
75-79	87	0	87	506	8	514	593	8	601
80-84	21	0	21	373	4	377	394	4	398
OVER 84	10	0	10	447	11	458	457	11	468
TOTAL	2,385	46	2,431	6,080	244	6,324	8,465	290	8,755

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, 1993

Age	Total Monthly Pension Amounts								
	Disabled			Retired			Total		
	Prior	New	Total	Prior	New	Total	Prior	New	Total
UNDER 45	\$ 638,578.46	\$49,674.49	\$ 688,252.95	\$ 70,774.92	\$ 4,569.43	\$ 75,344.35	\$ 709,353.38	\$ 54,243.92	\$ 763,597.30
45-49	659,328.18	23,583.05	682,911.23	664,843.20	183,351.67	848,194.87	1,324,171.38	206,934.72	1,531,106.10
50-54	455,110.22	9,887.60	464,997.82	1,501,043.81	68,945.63	1,569,989.44	1,956,154.03	78,833.23	2,034,987.26
55-59	272,048.79	2,074.10	274,122.89	1,206,433.67	44,427.97	1,250,861.64	1,478,482.46	46,502.07	1,524,984.53
60-64	292,099.58	1,712.38	293,811.96	1,160,122.18	27,708.02	1,187,830.20	1,452,221.76	29,420.40	1,481,642.16
65-69	254,444.26	0.00	254,444.26	789,452.36	13,182.47	802,634.83	1,043,896.62	13,182.47	1,057,079.09
70-74	99,430.81	0.00	99,430.81	280,207.39	3,886.56	284,093.95	379,638.20	3,886.56	383,524.76
75-79	67,982.10	0.00	67,982.10	288,244.37	2,224.57	290,468.94	356,226.47	2,224.57	358,451.04
80-84	14,646.09	0.00	14,646.09	167,033.04	1,126.73	168,159.77	181,679.13	1,126.73	182,805.86
OVER 84	7,000.00	0.00	7,000.00	171,083.47	3,178.83	174,262.30	178,083.47	3,178.83	181,262.30
TOTAL	\$2,760,668.49	\$86,931.62	\$2,847,600.11	\$6,299,238.41	\$352,601.88	\$6,651,840.29	\$9,059,906.90	\$439,533.50	\$9,499,440.40

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.

PLAN MEMBERSHIP**53. Average monthly pension of disabled and retired police (1967 Plan) members, July 1, 1993**

Age	Average Monthly Pension Amounts								
	Disabled			Retired			Total		
	Prior	New	Total	Prior	New	Total	Prior	New	Total
UNDER 45	\$1,637.38	\$1,839.80	\$1,650.49	\$ 540.27	\$ 761.57	\$ 549.96	\$1,361.52	\$1,643.76	\$1,378.33
45-49	1,445.90	1,965.25	1,459.21	1,376.49	1,713.57	1,437.62	1,410.19	1,738.95	1,447.17
50-54	1,152.18	1,977.52	1,162.49	1,392.43	1,814.36	1,406.80	1,328.01	1,833.33	1,342.34
55-59	989.27	2,074.10	993.20	1,236.10	1,931.65	1,252.11	1,181.84	1,937.59	1,196.07
60-64	869.34	1,712.38	871.85	1,178.99	1,629.88	1,186.64	1,100.17	1,634.47	1,107.36
65-69	859.61	0.00	859.61	1,118.20	693.81	1,107.08	1,041.81	693.81	1,035.34
70-74	835.55	0.00	835.55	707.59	353.32	698.02	737.16	353.32	729.13
75-79	781.40	0.00	781.40	569.65	278.07	565.11	600.72	278.07	596.42
80-84	697.43	0.00	697.43	447.81	281.68	446.05	461.11	281.68	459.31
OVER 84	700.00	0.00	700.00	382.74	288.98	380.49	389.68	288.98	387.31
TOTAL	\$1,157.51	\$1,889.82	\$1,171.37	\$1,036.06	\$1,445.09	\$1,051.84	\$1,070.28	\$1,515.63	\$1,085.03

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.

PLAN MEMBERSHIP**67****54. Number of disabled and retired fire (1967 Plan) members, July 1, 1993**

Number of People or Plan Members									
Age	Disabled			Retired			Total		
	Prior	New	Total	Prior	New	Total	Prior	New	Total
UNDER 45	63	6	69	33	1	34	96	7	103
45-49	112	2	114	152	16	168	264	18	282
50-54	133	0	133	269	9	278	402	9	411
55-59	61	0	61	284	6	290	345	6	351
60-64	53	0	53	220	1	221	273	1	274
65-69	58	0	58	308	7	315	366	7	373
70-74	79	0	79	409	7	416	488	7	495
75-79	30	0	30	450	10	460	480	10	490
80-84	25	0	25	313	4	317	338	4	342
OVER 84	5	0	5	158	3	161	163	3	166
TOTAL	619	8	627	2,596	64	2,660	3,215	72	3,287

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, 1993

Age	Total Monthly Pension Amounts								
	Disabled			Retired			Total		
	Prior	New	Total	Prior	New	Total	Prior	New	Total
UNDER 45	\$102,480.31	\$10,104.95	\$112,585.26	\$ 17,684.92	\$ 346.27	\$ 18,031.19	\$ 120,165.23	\$10,451.22	\$ 130,616.45
45-49	160,009.02	4,013.51	164,022.53	233,305.91	25,975.54	259,281.45	393,314.93	29,989.05	423,303.98
50-54	192,194.03	0.00	192,194.03	451,889.47	10,548.32	462,437.79	644,083.50	10,548.32	654,631.82
55-59	86,773.68	0.00	86,773.68	449,793.81	9,154.15	458,947.96	536,567.49	9,154.15	545,721.64
60-64	67,479.97	0.00	67,479.97	288,660.45	2,369.49	291,029.94	356,140.42	2,369.49	358,509.91
65-69	61,355.46	0.00	61,355.46	328,726.40	3,484.63	332,211.03	390,081.86	3,484.63	393,566.49
70-74	70,315.66	0.00	70,315.66	317,465.38	2,546.72	320,012.10	387,781.04	2,546.72	390,327.76
75-79	24,869.62	0.00	24,869.62	283,316.08	2,996.34	286,312.42	308,185.70	2,996.34	311,182.04
80-84	18,426.23	0.00	18,426.23	173,458.65	1,368.19	174,826.84	191,884.88	1,368.19	193,253.07
OVER 84	4,195.29	0.00	4,195.29	69,258.50	1,387.63	70,646.13	73,453.79	1,387.63	74,841.42
TOTAL	\$788,099.27	\$14,118.46	\$802,217.73	\$2,613,559.57	\$60,177.28	\$2,673,736.85	\$3,401,658.84	\$74,295.74	\$3,475,954.58

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.

PLAN MEMBERSHIP

69

56. Average monthly pension of disabled and retired fire (1967 Plan) members, July 1, 1993

Age	Average Monthly Pension Amounts								
	Disabled			Retired			Total		
	Prior	New	Total	Prior	New	Total	Prior	New	Total
UNDER 45	\$1,626.67	\$1,684.16	\$1,631.67	\$ 535.91	\$ 346.27	\$ 530.33	\$1,251.72	\$1,493.03	\$1,268.12
45-49	1,428.65	2,006.75	1,438.79	1,534.91	1,623.47	1,543.34	1,489.83	1,666.06	1,501.08
50-54	1,445.07	0.00	1,445.07	1,679.89	1,172.04	1,663.45	1,602.20	1,172.04	1,592.78
55-59	1,422.52	0.00	1,422.52	1,583.78	1,525.69	1,582.58	1,555.27	1,525.69	1,554.76
60-64	1,273.21	0.00	1,273.21	1,312.09	2,369.49	1,316.88	1,304.54	2,369.49	1,308.43
65-69	1,057.85	0.00	1,057.85	1,067.29	497.80	1,054.64	1,065.80	497.80	1,055.14
70-74	890.07	0.00	890.07	776.20	363.82	769.26	794.63	363.82	788.54
75-79	828.99	0.00	828.99	629.59	299.63	622.42	642.05	299.63	635.07
80-84	737.05	0.00	737.05	554.18	342.05	551.50	567.71	342.05	565.07
OVER 84	839.06	0.00	839.06	438.34	462.54	438.80	450.64	462.54	450.85
TOTAL	\$1,273.18	\$1,764.81	\$1,279.45	\$1,006.76	\$ 940.27	\$1,005.16	\$1,058.06	\$1,031.89	\$1,057.49

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, 1993 Retirement System assets are \$2,150,629,429 on a market value basis and \$1,914,038,768 on a cost value basis. Table 57 contains a summary of assets and liabilities, and Table 58 shows receipts and disbursements. Table 59 itemizes City contributions for the year ending June 30, 1993, and Table 60 summarizes 1993 fiscal year administrative expenses. Table 61 shows July 1, 1993 adjusted market value of assets under the 5-year spread gain asset valuation method. Table 62 shows the July 1, 1993 allocation of the adjusted assets among all divisions.

Table 58, showing the fund's receipts and disbursements during the fiscal year ending June 30, 1993, also notes that employee, City, and State contributions are approximately 67% 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, 1992	June 30, 1993
Cost value	11.9%	6.8%
Market value	10.0%	12.8%
Adjusted market value	7.5%	9.7%

Table 61 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 62). This allocation does not constitute a legal separation of the assets, however.

The table begins with July 1, 1992 valuation assets. The noninvestment transactions (item 2, Table 62), 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.

57. Statement of assets and liabilities (fiscal year ending June 30, 1993)

	Cost Value	Market Value
Assets		
Cash	\$ 87,819,033	\$ 87,819,033
Investment accounts	1,804,381,465	2,040,972,126
Due from other funds	9,853,035	9,853,035
Accounts receivable ^a	6,955,652	6,955,652
Interest and dividends receivable	10,526,232	10,526,232
Due from other governmental units	808,188	808,188
Other assets	<u>11,220</u>	<u>11,220</u>
Total assets	\$ 1,920,354,825	\$ 2,156,945,486
Liabilities		
Vouchers payable	\$ 4,379	\$ 4,379
Accounts payable	143,701	143,701
Salaries and wages payable	49,917	49,917
Accrued expenses	1,477,572	1,477,572
Due to other funds	2,246	2,246
Funds held in escrow	3,066	3,066
Deferred revenue	4,330,709	4,330,709
Other liabilities	<u>304,467</u>	<u>304,467</u>
Total liabilities	\$ 6,316,057	\$ 6,316,057
Fund balance	\$ 1,914,038,768	\$ 2,150,629,429

- a. Includes employee contributions receivable of \$878,091 because of plan amendment changing District Council 47 employees' plan status.

58. Statement of receipts and disbursements

	Cost Value	Market Value
Balance as of July 1, 1992	\$ 1,848,181,829	\$ 1,961,512,646
Receipts		
Contributions:		
Commonwealth of Pennsylvania		
<i>Supplemental State Assistance (Act 205)</i>	\$ 6,517,843	\$ 6,517,843
City of Philadelphia ^a	209,352,269	209,352,269
Employees ^b	44,883,590	44,883,590
Quasi-public agencies	3,583,697	3,583,697
Interest and dividends	79,119,539	79,119,539
Gain from sale of investments ^c	48,232,325	48,232,325
Miscellaneous operating revenues	<u>518,698</u>	<u>518,698</u>
Total receipts	\$ 392,207,961	\$ 392,207,961
Disbursements		
Withdrawals	\$ 4,940,620	\$ 4,940,620
Benefit payments	312,421,239	312,421,239
Administrative expenses	4,229,337	4,229,337
Investment manager fees	4,227,339	4,227,339
Miscellaneous operating expenses	<u>532,487</u>	<u>532,487</u>
Total disbursements	\$ 326,351,022	\$ 326,351,022
Change in unrealized appreciation/depreciation	—	\$ 123,259,844
Balance as of July 1, 1993	\$ 1,914,038,768	\$ 2,150,629,429
Approximate return on investments during year	6.8%	12.8%

a. Includes Commonwealth of Pennsylvania general state assistance and COLA reimbursement.

b. Includes \$878,091 in employee contributions receivable because of plan amendment changing District Council 47 employees' plan status.

c. Includes \$34,193,000 loss on permanent decline in value of investments.

59. Fiscal 1993 city contributions

Date	Amount
October 1, 1992	\$ 1,371,555
November 4, 1992	1,371,555
December 10, 1992	1,371,555
January 5, 1993	1,371,555
February 1, 1993	1,371,555
February 22, 1993	7,622,225
February 24, 1993	30,000,000
March 1, 1993	30,000,000
March 31, 1993	30,000,000
April 30, 1993	30,000,000
June 1, 1993	30,000,000
June 30, 1993	34,208,000
Various	2,775,509 ^a
Accrued	<u>11,472,457^b</u>
Total	\$ 212,935,966

a. Quasi-public agencies.

b. City-accrued contributions are \$10,664,269; quasi-public agencies accrued contributions are \$808,188.

**60. Statement of administrative expenses for
year ending June 30, 1993**

Personal services	\$ 1,953,489
Purchase of services	1,791,020
Materials and supplies	42,106
Employer's share of fringe benefits	289,369
Miscellaneous	<u>153,353</u>
Total	<u>\$ 4,229,337</u>

FINANCIAL EXPERIENCE OF FUND

61. Derivation of assets for valuation purposes as of July 1, 1993 5-year spread gain method

July 1	Total Gain or (Loss)	1989	1990	1991	1992	1993	Unrecognized Amount
1989	\$ 66,836,337	\$ 13,367,268	\$ 13,367,268	\$ 13,367,267	\$ 13,367,267	\$ 13,367,267	\$ 0
1990	1,084,726	—	216,946	216,945	216,945	216,945	216,945
1991	(81,684,057)	—	—	(16,336,811)	(16,336,811)	(16,336,811)	(32,673,624)
1992	18,670,166	—	—	—	3,734,034	3,734,033	11,202,099
1993	72,425,272	—	—	—	—	14,485,055	<u>57,940,217</u>
Total							\$ 36,685,637
1.	July 1, 1993 market value			\$2,150,629,429			
2.	Unrecognized gain/(loss)			<u>36,685,637</u>			
3.	July 1, 1993 adjusted market (1) - (2)			\$2,113,943,792			

FINANCIAL EXPERIENCE OF FUND

62. Allocation of assets for valuation purposes between divisions as of June 30, 1993 (thousands)

	1967 Plan			Plan 87					Total
	Municipal	Police	Fire	Municipal (M)	Municipal (Y)	Elected	Police	Fire	
1. Assets for valuation purposes as of June 30, 1992	\$1,083,212	\$610,660	\$254,787	\$11,205	\$ 0	\$ 683	\$17,579	\$ 3,659	\$1,981,786
2. Transactions during period July 1, 1992 - June 30, 1993:									
a. Contributions									
City and commonwealth	\$ 99,808	\$ 81,204	\$ 27,888	\$ 2,736	\$ 0	\$ 337	\$ 3,034	\$ 864	\$ 215,870
Employees	23,646	11,278	4,504	1,247	0	135	2,544	652	44,005
Quasi-public agencies	3,584	0	0	0	0	0	0	0	3,584
Employee contributions receivable ^a	878	0	0	0	0	0	0	0	878
b. Miscellaneous income and expenses	17	16	(25)	(12)	0	0	(8)	(2)	(14)
c. Pension benefits	157,486	112,604	41,990	79	0	101	147	14	312,421
d. Withdrawals	3,005	1,216	342	290	0	0	58	30	4,941
e. Administrative expenses ^b	2,679	942	362	120	0	2	103	21	4,229
f. Net transactions (a) + (b) - (c) - (d) - (e)	\$ (35,237)	\$ (22,264)	\$ (10,328)	\$ 3,482	\$ 0	\$ 370	\$ 5,262	\$ 1,449	\$ (57,268)
3. Mean fund balance prior to allocation of realized and unrealized income (1) + [1/2 x (2f)]	\$1,065,593	\$599,528	\$249,623	\$12,946	\$ 0	\$ 868	\$20,211	\$ 4,383	\$1,953,152
4. Realized and unrealized income for period July 1, 1992 - June 30, 1993 (allocated in proportion to (3))	\$ 103,346	\$ 58,145	\$ 24,210	\$ 1,256	\$ 0	\$ 84	\$ 1,960	\$ 425	\$ 189,426
5. Asset transfer	\$ 0	\$ 0	\$ 0	\$ (49)	\$ 49	\$ 0	\$ 0	\$ 0	\$ 0
6. Assets for valuation purposes as of June 30, 1993 (1) + (2f) + (4) + (5)	\$1,151,321	\$646,541	\$268,668	\$15,894	\$ 49	\$1,137	\$24,802	\$ 5,533	\$2,113,944

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, 1992.

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, 1993.

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 Minimum Municipal Obligation 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 63.

63. 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 appear on Table 64.

64. Disability probabilities at 5-year intervals

Attained Age	Municipal and Elected Officials		Uniformed
	Males	Females	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 65.

65. 1967 plan service retirement rates

Age	Municipal and Elected Officials		Uniformed
	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 in Table 66.

66. Plan 87 service retirement rates

Age	Municipal and Elected Officials			Uniformed		
	Reduced Benefits	Full Benefits		Reduced Benefits	Full Benefits	
		First Year Eligible ^a	Subsequent Years		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 Table 67 applied at each age for municipal and the adjustment factors in Table 68 for police and fire.

67. Post-disablement mortality adjustment factors (municipal)

Age	Adjustment Factor		Age	Adjustment Factor	
	Male	Female		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			

68. Post-disablement mortality adjustment factors (uniformed)

Age	Adjustment Factor		Age	Adjustment Factor	
	Male	Female		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 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 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 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.