City of Philadelphia Municipal Retirement System

July 1, 2000 Actuarial Valuation Report

April 2001

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Contents

1.	Executive Summary	1
2.	Cost Derivation	9
3.	Plan Membership	26
4.	Financial Experience of Fund	44
5.	Major Features of the Retirement System	51
6.	Actuarial Cost Method, Factors, and Assumptions	66
7.	Minimum Municipal Obligation	74
8.	Governmental Accounting Standards Board (GASB)	85

This report presents the actuarial valuation of the costs and liabilities for the City of Philadelphia Municipal Retirement System as of July 1, 2000 and City contributions for the fiscal year ending June 30, 2002. This section summarizes the valuation results and discusses changes in the System's costs and liability arising from experience for the year ending June 30, 2000.

Findings summary

Table 1 shows actuarial valuation results for all divisions as of July 1, 2000.

1. July 1, 2000 actuarial valuation (dollars in thousands)

11 July 1, 2000 actuariar variation (actual in the actual)	
Participants	
Active	28,796
Retired	18,201
Beneficiaries	8,569
Disabled	4,850
Terminated vested	755
$DROP^{c}$	1,825
Total	62,996
Total annual salaries	\$ 1,142,773
Net actuarial accrued liability	\$ 6,193,407
Unfunded actuarial accrued liability	\$ 1,428,416
Assets for valuation purposes	\$ 4,764,990
Funding percent	76.9%
City normal cost as percent of payroll (beginning-of-year payment)	5.339%
Fiscal 2002 funding requirements (beginning-of-year payments)	
City's funding policy	\$ 173,569 ^{a, b}
Minimum municipal obligation	\$ 135,911 ^a

a. The City may use general state aid and state cost-of-living reimbursements to meet this commitment. For fiscal 2001, these totaled \$36,301 (thousands)

b. Based on July 1, 2000 payroll. Final contribution will be based on actual fiscal 2002 payroll.

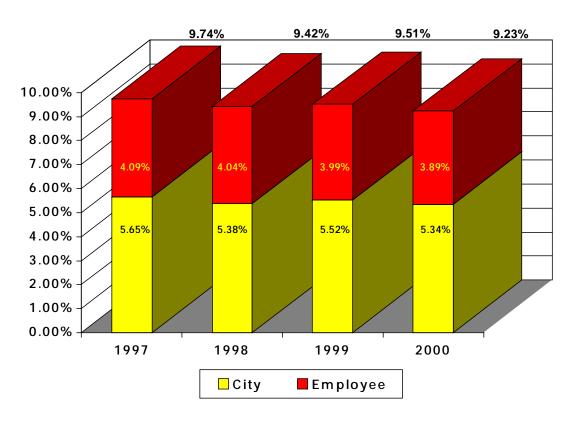
c. While still active employees, the Deferred Retirement Option Plan (DROP) participants are treated as retired for valuation purposes since they no longer accrue benefits.

Normal cost

The total normal cost is the cost of one year's accrual of projected benefits. The City's normal cost equals the total normal cost *less* expected employee contributions. The changing demographics in the System have resulted in a slight decrease in the normal cost rate. The following graph is a four-year history of the total normal cost with employee and City components as a percent of pay.

2. Total normal cost - percent of pay





Unfunded actuarial accrued liability

From July 1, 1999 through June 30, 2000, the unfunded actuarial accrued liability increased \$63,101,000 from \$1,365,315,000 to \$1,428,416,000 because:

• Salary increases were more than anticipated, resulting in a loss.

EXECUTIVE SUMMARY

- The June 30, 1985 unfunded liability, which is amortized with payments increasing 5.0% per year, continues to increase the unfunded liability each year through fiscal year 2003; after then it will decrease.
- Other non-economic plan experience resulted in a net loss. This includes retirees living longer than expected causing a mortality loss. Also, the number of new retirees increased with the implementation of the DROP. Actual retirement benefits can often be higher than the projected benefit as an active employee. This would also cause a loss.

Offsetting the above causes for the unfunded increase is:

• Investment return on an adjusted market value basis was 11.1% (after the reduction for the Pension Adjustment Fund contributions). Because this is more than the assumed 9% rate, the gain reduced the unfunded actuarial accrued liability.

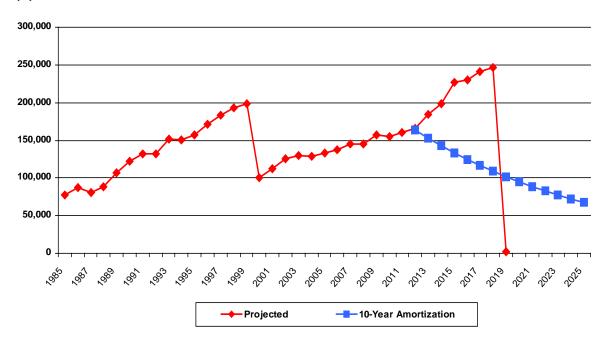
These factors are illustrated in Table 3.

1999 Unfunded liability		\$ 1,365.3
Change due to:		
Plan changes	0.0	
Payment schedule	8.1	
Salary increases	19.7	
Investment return	(84.4)	
Other actuarial experience	119.7	
Total of all changes		<u>\$ 63.1</u>
2000 unfunded liability		\$ 1,428.4

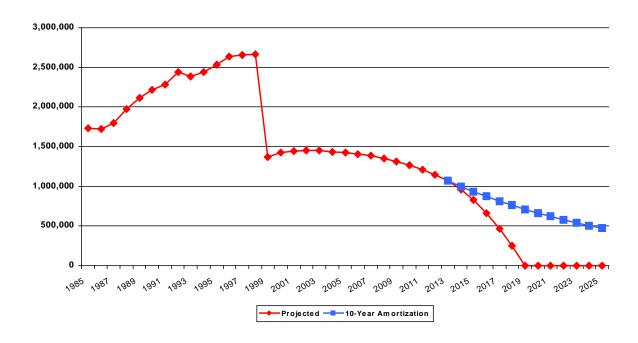
Because the July 30, 1985 unfunded liability is being amortized with payments increasing 5.0% per year, the amortization payment is scheduled to increase until 2019 and then drop to zero. The total unfunded liability is scheduled to increase each year until fiscal year 2003, and then decrease to zero by 2019. With the 1997 change in Act 205, once the funding ratio reaches 70% the City may shift to a 10 year rolling level amortization schedule. The plan is currently 76.9% funded; however, the alternative amortization schedule will not result in lower cost to the City until fiscal year 2013 assuming no future gains or losses.

Graph 3(A) illustrates changes in the amortization payment through 2019. Graph 3(B) tracks the unfunded liability through 2019. The red lines indicate actual changes in the amortization payment or unfunded liability and includes scheduled increases and changes because of previous plan amendments, assumption changes, gains and losses and the impact of the Pension Obligation Bond (POB) of 1999. The blue lines reflect projected changes under the 10 year amortization schedule. In both cases, we assume no future gains or losses.

3(A). Amortization schedule



3(B). Unfunded actuarial accrued liability



City funding policy

The report shows the recommended City contributions, assuming they're paid at the beginning of the fiscal year (July 1, 2001). If paid after July 1 the City's funding policy has been to pay interest at 9% from July 1, 2001 to the date paid.

The resulting estimated City contributions for fiscal years 2001 and 2002 are shown in Table 4(A).

4(A). Estimated City contributions (thousands) — beginning-of-year payment

	Fiscal 2001	Fiscal 2002
Normal cost	\$ 65,055	\$ 61,015 ^a
Amortization payment	100,629	112,554
Total City cost	\$ 165,684	\$ 173,569 ^b

a. Based on July 1, 2000 payroll. Actual normal cost will be based on actual fiscal 2002 payroll. This payroll does not include DROP participants.

Table 4(B) shows July 1, 2001 employee contribution rates.

4(B). Employee contribution rates effective July 1, 2000

	Municipal	Elected	Police	Fire
1967 Plan	3.75% ^a	N/A	6.00%	6.00%
Plan 87	2.17%	7.89%	5.00%	5.00%

a. 6.00% on wages over the Social Security maximum taxable wage base — \$80,400 in 2001.

Quasi agency funding

Table 4(C) shows the quasi agencies funding rate for fiscal years 2001 and 2002 and the Parking Authority's additional contribution for their early retirement window. This special amortization charge must be made through fiscal 2004.

b. The City may use general state aid and state cost-of-living reimbursements to meet this commitment. For fiscal year 2001, they totaled \$36,301 (thousands).

4(C). Quasi agency funding rate

	Fiscal 20	001	Fisc	al 2002
Valuation date	July 1, 19	999	July	1, 2000
Normal cost	5.4	443% ^a	-	5.029% ^a
Amortization rate	<u>11.9</u>	9 <u>39</u> %		13.664% ^b
Total, year-end rate	17.3	382%		18.693%
Total, adjusted for quarterly payments	16.9	995%		18.234% ^c
Parking authority special amortization payment				
Annual year-end payment	\$ 78	3,000	\$	78,000
Quarterly payment	\$ 19	$0,021^{d}$	\$	19,021 ^d

a. Normal cost rate, page 11, Municipal 1967 Plan.

Minimum municipal obligation

The minimum municipal obligation (MMO) is the minimum required City contribution under state law (Acts 205 and 189).

The City's funding policy differs from the MMO. The most significant differences are:

- The City uses a 34-year increasing amortization of its July 1, 1985 unfunded actuarial accrued liability, while Act 205 allows a 40-year increasing amortization schedule.
- The City applies the normal cost rates to the fiscal year's actual payroll. The MMO is based on the prior year's estimated payroll.
- No interest accumulates on the MMO if the payment is made by year-end.
- The City's funding policy uses a one-year delay in applying actuarial valuation results to fiscal years. The MMO also reflects a one-year delay, however, no interest is applied to the MMO for the one-year delay. As a result, this July 1, 2000 valuation report determines the City's fiscal 2002 MMO and funding contribution.
- The MMO reflects amortization of prior years' City contributions above past MMOs as actuarial gains.

Table 46 of this report summarizes the City's unfunded liability payment for its fiscal 2002 MMO. These payments reflect the 40-year funding from July 1, 1985 with increasing payments at 5.0%.

The resulting fiscal 2002 MMO is summarized in Table 4(D).

b. $(\$66,392 - \$78) \div \$485,323$, see pages 15 and 11.

c. .97546 (quarterly adjustment factor) x 18.693%.

d. $$78,000 \div 4 \times .97546$.

4(D). Fiscal 2002 minimum municipal obligation (thousands)

Valuation report	July	1, 2000
Normal cost	\$	107,807
Amortization payment		71,092
Expected administrative expense		5,000
Subtotal	\$	183,899
Expected member contributions		(47,988)
Minimum municipal obligation	\$	135,911
Interest		0^a
Total	\$	135,911 ^b

a. Assumes the MMO will be paid before December 31, 2001.

Funding status

The plan's funding status is measured by the ratio of actuarial value of assets to the actuarial accrued liability. A comparison of this ratio as of July 1, 1999 and July 1, 2000 is shown in Table 4(E).

4(E). Funding status comparison (dollars in thousands)

	1999	2000
Actuarial value of assets	\$ 4,496,768	\$ 4,764,990
Actuarial accrued liability	\$ 5,862,083	\$ 6,193,407
Funding ratio	76.7%	76.9%

b. The City may use general state aid and state COLA reimbursement, estimated at \$36 million, to meet this commitment.

Certification

William M. Mercer, Incorporated has prepared the actuarial valuation of the City of Philadelphia Municipal Retirement System as of July 1, 2000 for fiscal year contributions ending June 30, 2002. The valuation is based on employee and financial data which were provided by the City and trustee, respectively, and which are summarized in this report.

All costs, liabilities and other factors under the Plan were determined in accordance with generally accepted actuarial principles and procedures, in accordance with the provisions of current state statutes and regulations issued thereunder. In our opinion, the actuarial assumptions are reasonable and represent our best estimate of the anticipated experience under the Plan. This report fully and fairly discloses the actuarial present position of the Plan on an ongoing basis.

There have been no changes in valuation procedures, actuarial assumptions or actuarial cost methods since the last valuation of the Plan as of July 1, 1999.

We are available to answer any questions on the material contained in the report, or to provide explanations or further details as may be appropriate.

Thomas Skiavo	Date
	ng Actuaries and the Society of Actuaries, I le the statements of actuarial opinion contained
Kenneth A. Kent, FSA, FCA	Date
William M. Mercer, Incorporated 1255 23rd Street, NW, Suite 500 Washington, DC 20037 202 331 5200	

This section explains the Retirement System's costs. Costs are determined using the entry age actuarial cost method. The cost estimates derived in this actuarial valuation will be the basis for determining pension costs for the fiscal year ending June 30, 2002. Pension costs consist of the normal cost and the unfunded liability amortization payment.

Derivation of normal cost

The normal cost is the total of the individual normal costs for all members assuming the plan always existed and the underlying actuarial assumptions are exactly realized. Benefits payable under every circumstance (retirement, death, disability, and termination) are included in the calculations. Employee contributions expected to be made during the year are subtracted from the total normal cost to determine the City's normal cost. The City's normal cost is divided by total payroll to determine the normal cost as a percent of pay for each division and the entire Retirement System.

Derivation of the unfunded actuarial accrued liability

The actuarial accrued liability is the total of the actuarial present value of all accumulated past normal costs assuming the normal cost had always been contributed and actuarial assumptions had been exactly realized.

The valuation assets are determined as of July 1, 2000, using an actuarial asset method that spreads investment experience over a five-year period to minimize the impact of investment volatility on the Retirement System's costs. The method measures gains or losses against the assumed 9% investment yield, recognizing one-fifth of the gain or loss over the current and each of the next four years. This result is then further offset by the funds transferred to the Pension Adjustment Fund (PAF).

The unfunded actuarial accrued liability is the accrued liability less the fund's assets on the valuation date.

Experience gains and losses are the difference between the expected and actual unfunded actuarial accrued liability (see the preceding paragraphs) on the valuation date.

The portion of the unfunded actuarial accrued liability attributable to the Dombrowski class action suit is amortized in level dollar payments over 40 years ending June 30, 2009. The remaining July 1, 1985 unfunded actuarial accrued liability is amortized over 34 years ending June 30, 2019 in annual payments increasing 5.0% per year. Changes in the actuarial accrued liability realized after July 1, 1985 are amortized in level dollar payments over the following years according to Act 205:

Changes in actuarial assumptions — 20 years

COST DERIVATION

- Experience gains and losses 15 years
- Active members' benefit modifications 20 years
- Nonactive members' benefit modifications 10 years.

For a detailed analysis of the derivation of plan costs, see Tables 5 through 15.

The resulting contribution reflects the City's funding policy which calls for a larger contribution than the MMO determined under Act 205.

Table 45 shows the annual unfunded liability payments needed to satisfy the City's MMO for fiscal year ending June 30, 2002.

Table 16 shows the annual payments needed to fund plan liabilities through fiscal year ending June 30, 2019.

5. July 1, 2000 derivation of normal cost (dollars in thousands)

				19	67 Plan						Plai	n 87					
		M	unicipal		Police		Fire	N	Iunicipal	E	lected		Police		Fire	_	Total
1.	Number of active members																
	a. Vested		9,388		2,430		1,147		623		14		160		61		13,823
	b. Non-vested		2,400		13	_	2		7,963	_	10		3,742		843		14,973
	c. Total		11,788		2,443		1,149		8,586		24		3,902		904		28,796
2.	Total normal costs																
	a. Service retirement	\$	22,404	\$	11,375	\$	5,194	\$	13,076	\$	189	\$	11,530	\$	2,671	\$	66,440
	b. Preretirement death		3,000		831		414		1,855		19		820		219		7,159
	c. Disability retirement		3,776		1,462		694		1,943		15		1,873		474		10,236
	d. Vested termination		6,295		691		328		2,692		19		1,807		420		12,252
	e. Refund of nonvested members'																
	contributions		2,472		227		104		817		17		532		118		4,285
	f. Health care benefit		0		47		23		0		0		61		17		148
	g. Administrative expenses	_	2,567	_	980	_	369	_	691	_	3	_	316	_	73	_	5,000
	h. Total	\$	40,514	\$	15,612	\$	7,127	\$	21,074	\$	262	\$	16,940	\$	3,992	\$	105,520
3.	Expected employee contributions	\$	18,122	\$	6,901	\$	3,189	\$	6,322	\$	157	\$	8,002	\$	1,812	\$	44,506
4.	City normal cost (2h) - (3)	\$	22,392	\$	8,711	\$	3,938	\$	14,752	\$	104	\$	8,937	\$	2,180	\$	61,015
5.	Current total annual payroll	\$	485,323	\$	115,099	\$	53,250	\$	290,816	\$	1,996	\$	160,047	\$	36,242	\$1	,142,773
6.	City normal cost as a percent of pay assuming beginning-of-year payment $(4) \div (5)$		4.614%		7.569%		7.396%		5.073%	5	5.220%		5.584%		6.016%		5.339%
7.	City normal cost as a percent of pay assuming end-of-year payment (6) x 1.09		5.029%		8.250%		8.062%		5.530%	5	5.690%		6.087%		6.557%		5.820%

6. Derivation of unfunded actuarial accrued liability as of July 1, 2000 (dollars in thousands)

		1967 Plan			Pla	n 87		
	Municipal	Police	Fire	Municipal	Elected	Police	Fire	Total
1. Number of members								
a. Active	11,788	2,443	1,149	8,586	24	3,902	904	28,796
b. Retired	11,439	5,077	1,620	56	8	1	0	18,201
c. Beneficiary	5,356	2,135	1,005	25	1	34	13	8,569
d. Disabled	2,112	2,157	530	6	0	40	5	4,850
e. Terminated vested	694	38	7	12	2	1	1	755
f. DROP	958	503	342	22	0	0	0	1,825
g. Total	32,347	12,353	4,653	8,707	35	3,978	923	62,996
2. Total annual benefits								
a. Retired	\$ 160,629	\$ 100,443	\$ 32,419	\$ 503	\$ 253	\$ 5	\$ 0	\$ 294,251
b. Beneficiary	27,303	13,460	5,865	82	4	172	71	46,958
c. Disabled	26,787	32,386	8,827	102	0	1,001	117	69,220
d. Terminated vested	8,872	497	73	166	51	10	8	9,677
e. DROP	25,681	20,553	12,123	<u> </u>	0	0	0	58,552
f. Total	\$ 249,272	\$ 167,339	\$ 59,307	\$ 1,048	\$ 308	\$ 1,188	\$ 196	\$ 478,658
3. Present value of benefits								
a. Active members								
Service retirement	\$ 1,196,048	\$ 467,285	\$ 239,043	\$ 220,215	\$ 6,005	\$ 228,951	\$ 50,645	\$ 2,408,191
Preretirement death	115,537	25,600	14,618	30,096	411	13,687	3,470	203,419
Disability retirement	79,818	21,818	8,757	26,598	216	28,832	6,720	172,759
Vested termination	188,920	5,314	1,066	47,913	389	36,507	8,096	288,205
Refund of nonvested								
members' contributions	3,537	209	116	9,038	71	6,961	1,493	21,424
Health care benefit	0	408	218	0	0	445	118	1,190
Subtotal	\$ 1,583,860	\$ 520,634	\$ 263,817	\$ 333,860	\$ 7,092	\$ 315,383	\$ 70,543	\$ 3,095,188
b. Nonactive members								
Service retired	\$ 1,244,252	\$ 883,139	\$ 269,555	\$ 3,900	\$ 2,024	\$ 51	\$ 0	\$ 2,402,921
Beneficiary	211,389	108,182	42,667	820	32	1,756	658	365,505
Disabled	222,640	274,185	73,599	953	0	10,408	1,128	582,913
Terminated vested	58,311	4,113	598	842	393	30	45	64,332
Nonvested members'								
contributions	1,924	157	55	258	0	309	11	2,715
Health care benefit	0	4,228	2,620	0	0	309	202	7,358
DROP participant	223,853	189,651	108,662	1,586	0	0	0	523,752
DROP account	14,791	11,316	7,325	24	0	0	0	33,456
Subtotal	\$ 1,977,160	\$ 1,474,972	\$ 505,082	\$ 8,382	\$ 2,449	\$ 12,864	\$ 2,043	\$ 3,982,952
c. Total	\$ 3,561,020	\$ 1,995,605	\$ 768,899	\$ 342,242	\$ 9,540	\$ 328,247	\$ 72,586	\$ 7,078,140
Mata. Numbers may not add become	£ 1:							

6. Derivation of unfunded actuarial accrued liability as of July 1, 2000 (dollars in thousands)

		1967 Plan			Plan	.87			
		Municipal	Police	Fire	Municipal	Elected	Police	Fire	Total
4.	Present value of future normal costs								
	a. Service retirement	\$ 173,582	\$ 83,088	\$ 33,865	\$ 124,211	\$ 1,117	\$ 129,557	\$ 28,040	\$ 573,459
	b. Preretirement death	24,188	6,065	2,704	18,606	129	9,246	2,305	63,244
	c. Disability retirement	30,463	10,674	4,525	20,188	110	20,937	4,980	91,877
	d. Vested termination e. Refund of nonvested	53,889	5,258	2,159	28,876	144	21,053	4,683	116,062
	e. Refund of nonvested members' contribution	21,298	1,691	680	8,349	102	6,070	1,254	39,442
	f. Health care benefit	0	149	65	0,549	0	345	88	649
	g. Total	\$ 303,420	\$ 106,925	\$ 43,997	\$ 200,230	\$ 1,602	\$ 187,209	\$ 41,351	\$ 884,733
5.	Actuarial accrued liability (3) - (4)								
	a. Active members								
	Service retirement	\$ 1,022,466	\$ 384,197	\$ 205,178	\$ 96,004	\$ 4,888	\$ 99,394	\$ 22,605	\$ 1,834,732
	Preretirement death	91,349	19,535	11,914	11,490	282	4,441	1,165	140,175
	Disability retirement Vested termination	49,355 135,031	11,144 56	4,232 (1,093)	6,410 19,037	106 245	7,895 15,454	1,740 3,413	80,882 172,143
	Refund of nonvested	155,051	30	(1,093)	19,037	243	13,434	3,413	172,143
	members' contribution	(17,761)	(1,482)	(564)	689	(31)	891	239	(18,018)
	Health care benefit		259	153	0		100	30	541
	Subtotal	\$ 1,280,440	\$ 413,709	\$ 219,820	\$ 133,630	\$ 5,490	\$ 128,174	\$ 29,192	\$ 2,210,455
	b. Nonactive members								
	Service retirement	\$ 1,244,252	\$ 883,139	\$ 269,555	\$ 3,900	\$ 2,024	\$ 51	\$ 0	\$ 2,402,921
	Beneficiary	211,389	108,182	42,667	820 953	32 0	1,756	658	365,505
	Disabled Terminated vested	222,640 58,311	274,185 4,113	73,599 598	953 842	393	10,408 30	1,128 45	582,913 64,332
	Nonvested members' contribution	1,924	157	55	258	0	309	11	2,715
	Health care benefit	0	4,228	2,620	0	0	309	202	7,358
	DROP participant	223,853	189,651	108,662	1,586	0	0	0	523,752
	DROP account	14,791	11,316	7,325	24	0	0	0	33,456
	Subtotal	\$ 1,977,160	\$ 1,474,972	\$ 505,082	\$ 8,382	\$ 2,449	\$ 12,864	\$ 2,043	\$ 3,982,952
	c. Total	\$ 3,257,600	\$ 1,888,681	\$ 724,902	\$ 142,012	\$ 7,939	\$ 141,038	\$ 31,235	\$ 6,193,407
6.	Assets for valuation purposes	\$ 2,471,218	\$ 1,234,421	\$ 565,600	\$ 215,200	\$ 9,828	\$ 216,272	\$ 52,451	\$ 4,764,990
7.	Unfunded actuarial accrued liability	h =c		h 4#c		.		h (a: -:-	
	(5c) - (6)	\$ 786,383	\$ 654,260	\$ 159,302	\$ (73,188)	\$ (1,889)	\$ (75,235)	\$ (21,217)	\$ 1,428,416

7. Development of the expected unfunded actuarial accrued liability for fiscal year ending June 30, 2002 (thousands)

		1967 Plan			Plan 87											
		M	unicipal		Police		Fire	N	Iunicipal		Elected		Police	Fire	•	Total
1.	Expected July 1, 2000 unfunded actuarial accrued liability based on July 1, 1999 valuation	\$	784,559	\$	606,992	\$	147,372	\$	(71,200)	\$	(1,923)	\$	(73,320)	\$ (20,055)	\$1,	,372,426
2.	Changes in July 1, 2000 unfunded actuarial accrued liability due to actuarial experience	\$	1,824	\$	47,268	\$	11,930	\$	(1,988)	\$	34	\$	(1,915)	\$ (1,162)	\$	55,991
3.	Changes in July 1, 2000 unfunded actuarial accrued liability due to plan changes	\$	0	\$	0	\$	0	\$	0	\$	0	\$	0	\$ 0	\$	0
4.	Actual unfunded actuarial accrued liability, July 1, 2000 $(1) + (2) + (3)$	\$	786,383	\$	654,260	\$	159,302	\$	(73,188)	\$	(1,889)	\$	(75,235)	\$ (21,217)	\$ 1	,428,416
8	Expected changes in unfunded actuarial accrued liability from fuly 1, 2001:															
	a. Interest $(2 + 3) x.09$	\$	164	\$	4,254	\$	1,074	\$	(179)	\$	3	\$	(172)	\$ (105)	\$	5,039
	b. Increase in unfunded actuarial accrued liability from July 1, 2000 to July 1, 2001 according to amortization schedule per 2000															
	valuation report		7,264	_	(3,240)	-	3,664		2,642		(21)	_	2,763	 761		13,835
	c. Subtotal	\$	7,428	\$	1,014	\$	4,738	\$	2,463	\$	(18)	\$	2,591	\$ 656	\$	18,874
6.	Expected July 1, 2001 unfunded actuarial accrued liability $(4) + (5c)$	\$	793,811	\$	655,274	\$	164,040	\$	(70,725)	\$	(1,907)	\$	(72,644)	\$ (20,561)	\$ 1	,447,290

8. Development of municipal division (1967 Plan) annual payment toward the unfunded actuarial accrued liability for fiscal year ending June 30, 2002 (thousands)

		Fiscal Year Ending June 30, 2002										
		Outstanding Balance July 1, 2000	Expected Balance July 1, 2001	Amortization Period Remaining	Annual Beginning- of-Year Payment	Annual End-of- Year Payment ^a						
1.	Expected July 1, 2000 unfunded actuarial accrued liability based on July 1, 1999 valuation											
	a. Dombrowski	\$ 6,406	\$ 5,914	8	\$ 980	\$ 1,069						
	b. Remaining	779,097	786,938	_	59,820 ^b	65,204 ^b						
	c. Subtotal	\$ 785,503	\$ 792,853	_	\$ 60,801	\$ 66,273						
2.	Changes in unfunded actuarial accrued liability, July 1, 2000											
	a. Experience (gains)/losses	\$ 879	\$ 958	15	\$ 109	\$ 119						
	b. Assumption change	0	0	20	0	0						
	c. Plan change	0	0	20	0	0						
	d. Inactive plan change	0	0	10	0	0						
	e. Subtotal	\$ 879	\$ 958	_	\$ 109	\$ 119						
3.	Total (1c) + (2e)	\$ 786,383	\$ 793,811	_	\$ 60,910	\$ 66,392						

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

b. Payments toward unfunded liability as of July 1, 1985, increasing at 5.0% per year. All other payments are level dollar amounts.

9. Development of police division (1967 Plan) annual payment toward the unfunded actuarial accrued liability for fiscal year ending June 30, 2002 (thousands)

			Fiscal Year Endi	ing June 30, 2002		
		Outstanding Balance July 1, 2000	Expected Balance July 1, 2001	Amortization Period Remaining	Annual Beginning- of-Year Payment	Annual End-of- Year Payment ^a
	Expected July 1, 2000 unfunded actuarial accrued liability based on July 1, 1999 valuation					
	a. Dombrowski	\$ 4,098	\$ 3,783	8	\$ 627	\$ 684
	b. Remaining	602,895	599,970	_	54,188 ^b	<u>59,065</u> ^b
	c. Subtotal	\$ 606,992	\$ 603,753	_	\$ 54,815	\$ 59,749
2.	Changes in unfunded actuarial accrued liability, July 1, 2000					
	a. Experience (gains)/losses	\$ 47,268	\$ 51,522	15	\$ 5,864	\$ 6,392
	b. Assumption change	0	0	20	0	0
	c. Plan change	0	0	20	0	0
	d. Inactive plan change	0	0	10	0	0
	e. Subtotal	\$ 47,268	\$ 51,522	_	\$ 5,864	\$ 6,392
3.	Total (Ic) + (2e)	\$ 654,260	\$ 655,274	_	\$ 60,679	\$ 66,140

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

b. Payments toward unfunded liability as of July 1, 1985, increasing at 5.0% per year. All other payments are level dollar amounts.

10. Development of fire division (1967 Plan) annual payment toward the unfunded actuarial accrued liability for fiscal year ending June 30, 2002 (thousands)

			Fiscal Year Endi	ing June 30, 2002		
		Outstanding Balance July 1, 2000	Expected Balance July 1, 2001	Amortization Period Remaining	Annual Beginning- of-Year Payment	Annual End-of- Year Payment ^a
	Expected July 1, 2000 unfunded actuarial accrued liability based on July 1, 1999 valuation					
	a. Dombrowski	\$ 1,632	\$ 1,506	8	\$ 250	\$ 272
	b. Remaining	145,740	149,530	_	9,244 ^b	10,076 ^b
	c. Subtotal	\$ 147,372	\$ 151,036	_	\$ 9,494	\$ 10,348
2	Changes in unfunded actuarial accrued liability, July 1, 2000					
	a. Experience (gains)/losses	\$ 11,930	\$ 13,004	15	\$ 1,480	\$ 1,613
	b. Assumption change	0	0	20	0	0
	c. Plan change	0	0	20	0	0
	d. Inactive plan change	0	0	10	0	0
	e. Subtotal	\$ 11,930	\$ 13,004	_	\$ 1,480	\$ 1,613
3.	Total (Ic) + (2e)	\$ 159,302	\$ 164,040	_	\$ 10,974	\$ 11,962

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

b. Payments toward unfunded liability as of July 1, 1985, increasing at 5.0% per year. All other payments are level dollar amounts.

11. Development of municipal division (Plan 87) annual payment toward the unfunded actuarial accrued liability for fiscal year ending June 30, 2002 (thousands)

		-	Fiscal Year End	ing June 30, 2002	-	
		Outstanding Balance July 1, 2000	Expected Balance July 1, 2001	Amortization Period Remaining	Annual Beginning- of-Year Payment	Annual End-of- Year Payment ^a
1.	Expected July 1, 2000 unfunded actuarial accrued liability based on July 1, 1999 valuation	\$ (71,200)	\$ (68,558)	_	\$ (8,303)	\$ (9,050)
2.	Changes in unfunded actuarial accrued liability, July 1, 2000					
	a. Experience (gains)/losses	\$ (1,988)	\$ (2,167)	15	\$ (246)	\$ (269)
	b. Assumption change	0	0	20	0	0
	c. Plan change	0	0	20	0	0
	d. Inactive plan change	0	0	10	0	0
	e. Subtotal	\$ (1,988)	\$ (2,167)	_	\$ (246)	\$ (269)
3.	Total (1) + (2e)	\$ (73,188)	\$ (70,725)	_	\$ (8,549)	\$ (9,319)

Note: Numbers may not add because of rounding.

12. Development of elected division (Plan 87) annual payment toward the unfunded actuarial accrued liability for fiscal year ending June 30, 2002 (thousands)

		-	Fiscal Year Ending June 30, 2002			•		
		ding Balance y 1, 2000		ed Balance 1, 2001	Amortization Period Remaining		Beginning- r Payment	nl End-of- Payment ^a
1.	Expected July 1, 2000 unfunded actuarial accrued liability based on July 1, 1999 valuation	\$ (1,923)	\$	(1,944)	_	\$	(139)	\$ (152)
2.	Changes in unfunded actuarial accrued liability, July 1, 2000							
	a. Experience (gains)/losses	\$ 34	\$	37	15	\$	4	\$ 5
	b. Assumption change	0		0	20		0	0
	c. Plan change	0		0	20		0	0
	d. Inactive plan change	 0		0	10		0	 0
	e. Subtotal	\$ 34	\$	37	_	\$	4	\$ 5
3.	Total(1) + (2e)	\$ (1,889)	\$	(1,907)	_	\$	(135)	\$ (147)

Note: Numbers may not add because of rounding.

13. Development of police division (Plan 87) annual payment toward the unfunded actuarial accrued liability for fiscal year ending June 30, 2002 (thousands)

		-	Fiscal Year Endi	ing June 30, 2002		
		Outstanding Balance July 1, 2000	Expected Balance July 1, 2001	Amortization Period Remaining	Annual Beginning- of-Year Payment	Annual End-of- Year Payment ^a
1.	Expected July 1, 2000 unfunded actuarial accrued liability based on July 1, 1999 valuation	\$ (73,320)	\$ (70,556)	_	\$ (8,589)	\$ (9,362)
2.	Changes in unfunded actuarial accrued liability, July 1, 2000					
	a. Experience (gains)/losses	\$ (1,915)	\$ (2,087)	15	\$ (238)	\$ (259)
	b. Assumption change	0	0	20	0	0
	c. Plan change	0	0	20	0	0
	d. Inactive plan change	0	0	10	0	0
	e. Subtotal	\$ (1,915)	\$ (2,087)	_	\$ (238)	\$ (259)
3.	Total $(1) + (2e)$	\$ (75,235)	\$ (72,644)	_	\$ (8,827)	\$ (9,621)

Note: Numbers may not add because of rounding.

14. Development of fire division (Plan 87) annual payment toward the unfunded actuarial accrued liability for fiscal year ending June 30, 2002 (thousands)

		-	Fiscal Year Endi	ing June 30, 2002		
		Outstanding Balance July 1, 2000	Expected Balance July 1, 2001	Amortization Period Remaining	Annual Beginning- of-Year Payment	Annual End-of- Year Payment ^a
1.	Expected July 1, 2000 unfunded actuarial accrued liability based on July 1, 1999 valuation	\$ (20,055)	\$ (19,294)	_	\$ (2,354)	\$ (2,566)
2.	Changes in unfunded actuarial accrued liability, July 1, 2000					
	a. Experience (gains)/losses	\$ (1,162)	\$ (1,267)	15	\$ (144)	\$ (157)
	b. Assumption change	0	0	20	0	0
	c. Plan change	0	0	20	0	0
	d. Inactive plan change	0	0	10	0	0
	e. Subtotal	\$ (1,162)	\$ (1,267)	_	\$ (144)	\$ (157)
3.	Total(I) + (2e)	\$ (21,217)	\$ (20,561)	_	\$ (2,498)	\$ (2,723)

Note: Numbers may not add because of rounding.

15. Development of total division annual payment toward the unfunded actuarial accrued liability for fiscal year ending June 30, 2002 (thousands)

			Fiscal Year Endi	ing June 30, 2002		
		Outstanding Balance July 1, 2000	Expected Balance July 1, 2001	Amortization Period Remaining	Annual Beginning- of-Year Payment	Annual End-of- Year Payment ^a
	Expected July 1, 2000 unfunded actuarial accrued liability based on July 1, 1999 valuation					
	a. Dombrowski	\$ 12,136	\$ 11,204	9	\$ 1,857	\$ 2,024
	b. Remaining	1,361,234	1,376,085	_	103,868 ^b	<u>113,216</u> ^b
	c. Subtotal	\$ 1,373,370	\$ 1,387,289	_	\$ 105,725	\$ 115,240
	Changes in unfunded actuarial accrued liability, July 1, 2000					
	a. Experience (gains)/losses	\$ 55,046	\$ 60,001	15	\$ 6,829	\$ 7,444
	b. Assumption change	0	0	20	0	0
	c. Plan change	0	0	20	0	0
	d. Inactive plan change	0	0	10	0	0
	e. Subtotal	\$ 55,046	\$ 60,001	_	\$ 6,829	\$ 7,444
3.	Total $(Ic) + (2e)$	\$ 1,428,416	\$ 1,447,290	_	\$ 112,554	\$ 122,684

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

b. Payment towards unfunded liability as of July 1, 1985, increasing at 5.0% per year. All other payments are level dollar amounts.

16. Schedule of annual payments to fund the anticipated July 1, 2000 unfunded actuarial accrued liability (dollars in thousands)

			Ann	nual Beginning-of		Progress of		Annual			
Plan Year Beginning		1967 Plan			Plan 87				Unfunded Actuarial Accrued	Estimated Annual	Payment as a Percent of
July 1	Municipal	Police	Fire	Municipal	Elected	Police	Fire	Total	Liability	Payroll	Payroll
2000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1,428,416	1,142,773	N/A
2001	60,910	60,679	10,974	(8,549)	(135)	(8,827)	(2,498)	112,554	1,447,290	1,199,912	9.4%
2002	68,097	64,448	12,733	(8,549)	(135)	(8,827)	(2,498)	125,269	1,454,862	1,259,907	9.9%
2003	71,033	65,289	13,273	(8,549)	(135)	(8,831)	(2,507)	129,574	1,449,256	1,322,903	9.8%
2004	70,867	64,347	13,713	(8,501)	(207)	(8,799)	(2,495)	128,925	1,438,454	1,389,048	9.3%
2005	74,457	64,667	13,966	(8,467)	(202)	(8,775)	(2,480)	133,166	1,427,386	1,458,500	9.1%
2006	80,962	62,409	13,962	(8,374)	(201)	(8,525)	(2,445)	137,788	1,410,700	1,531,425	9.0%
2007	83,753	65,472	15,128	(8,313)	(248)	(8,455)	(2,434)	144,903	1,387,475	1,607,996	9.0%
2008	80,927	67,902	16,088	(8,413)	(303)	(8,410)	(2,404)	145,387	1,354,404	1,688,396	8.6%
2009	87,031	71,915	17,705	(8,342)	(293)	(8,337)	(2,397)	157,282	1,317,828	1,772,816	8.9%
2010	84,441	71,322	18,135	(8,132)	(372)	(8,469)	(2,355)	154,568	1,264,995	1,861,457	8.3%
2011	86,508	73,437	19,305	(8,198)	(356)	(8,440)	(2,326)	159,930	1,210,365	1,954,530	8.2%
2012	89,077	75,277	20,372	(8,150)	(314)	(8,337)	(2,264)	165,662	1,144,974	2,052,256	8.1%
2013	99,414	80,108	23,050	(7,873)	(314)	(7,972)	(2,203)	184,211	1,067,450	2,154,869	8.5%
2014	106,402	83,901	25,524	(7,672)	(279)	(7,729)	(2,097)	198,050	962,731	2,262,612	8.8%
2015	118,372	77,965	30,312	200	11	20	(101)	226,780	833,503	2,375,743	9.5%
2016	123,845	75,686	30,262	394	7	258	43	230,495	661,329	2,494,530	9.2%
2017	129,706	79,450	31,764	394	7	258	43	241,622	469,609	2,619,257	9.2%
2018	130,853	83,002	33,106	29	_			246,990	248,506	2,750,219	9.0%
2019	1,618	_	_	_	_	_	_	1,618	1,652	2,887,730	0.1%
2020				_	_				_	3,032,117	0.0%
2021	_	_	_	_	_	_	_	_	_	3,183,723	0.0%
2022	_	_	_	_	_	_	_	_	_	3,342,909	0.0%
2023	_	_	_	_	_	_	_	_	_	3,510,054	0.0%
2024	_	_	_	_		_			_	3,685,557	0.0%
2025	_	_	_	_	_	_	_		_	3,869,835	0.0%
2026	_	_	_	_	_	_	_		_	4,063,327	0.0%
2027	_	_	_	_	_	_			_	4,266,493	0.0%
2028	_				_				_	4,479,818	0.0%

Estimated progress of fund

Table 17 shows the pension fund's estimated progress for fiscal years 2001 through 2020. The July 1, 2000 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, 1999 valuation. Subsequent contributions are based on the July 1, 2000 valuation. The contribution's normal cost component increases 5.0% annually, reflecting anticipated increases in covered payroll. The projected employee contributions also increase annually, reflecting assumed salary increases at 5.0%.

The fund projection is limited to the period with the fiscal year ending June 30, 2020. 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 17, even though the actual numbers vary. While the projection shows that City and employee combined fund contributions do not exceed the benefits paid, when combined with expected investment earnings, the cash flow meets benefit payments and allow for continued fund growth.

17. Estimated progress of City of Philadelphia Municipal Retirement System Fund for July 1, 2000 through June 30, 2020 (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 ^b
2001	4,764,990	178,443	44,698	432,187	411,412	202,365	4,967,356
2002	4,967,356	192,515	46,825	432,336	429,714	236,718	5,204,074
2003	5,204,074	209,867	49,166	432,980	451,095	277,147	5,481,221
2004	5,481,221	218,224	51,624	434,543	476,079	311,384	5,792,605
2005	5,792,605	221,367	54,205	437,778	504,074	341,868	6,134,474
2006	6,134,474	230,031	56,916	442,030	534,772	379,689	6,514,163
2007	6,514,163	239,313	59,761	446,325	568,879	421,629	6,935,792
2008	6,935,792	251,525	62,749	451,440	606,730	469,564	7,405,356
2009	7,405,356	256,732	65,887	457,062	648,879	514,436	7,919,792
2010	7,919,792	274,610	69,181	462,970	695,061	575,882	8,495,674
2011	8,495,674	276,811	72,640	468,493	746,797	627,756	9,123,429
2012	9,123,429	288,072	76,272	474,408	803,193	693,129	9,816,558
2013	9,816,558	300,007	80,086	480,969	865,451	764,575	10,581,134
2014	10,581,134	326,197	84,090	487,430	934,152	857,009	11,438,143
2015	11,438,143	347,552	88,295	494,071	1,011,173	952,948	12,391,091
2016	12,391,091	385,451	92,709	515,564	1,096,170	1,058,767	13,449,858
2017	13,449,858	396,415	97,345	536,168	1,190,740	1,148,332	14,598,190
2018	14,598,190	415,801	102,212	555,915	1,293,421	1,255,519	15,853,710
2019	15,853,710	429,274	107,323	575,002	1,405,788	1,367,383	17,221,093
2020	17,221,093	169,853	112,689	592,977	1,528,285	1,217,850	18,438,943

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

b. We assumed that the city does not switch to the 10-year amortization.

Data for active, retired, disabled, and terminated vested members as of July 1, 2000 was provided by the Philadelphia Board of Pensions and Retirement.

The active member data, supplied on disk and list, contained information for all Retirement System members as of July 1, 2000. 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, 1999 data for continued active member coverage.

The nonactive member data, also supplied on disk and list, contained information for all retired, beneficiary, disabled, and terminated vested members as of July 1, 2000.

Table 18 illustrates a net decrease in total plan membership during the period.

18. Total plan membership net change

	Number of Members	Percentage Increase (Decrease)
Active	- 2,189*	- 7.1%
Retired	- 182	- 1.0%
Surviving spouses	- 15	- 1.2%
Other beneficiaries	+ 16	- 0.2%
Disabled	- 90	- 1.8%
Terminated vested	- 59	- 7.2%
DROP Participants	+ <u>1,825</u>	<u>NA</u>
Total	- 694	- 1.1%

^{*} Includes 1,777 DROP participants.

Table 19 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:

Actives

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

PLAN MEMBERSHIP

- Terminated vested
 - Retired or died during the periodReturned to employment

Table 20 breaks down active members' payroll and nonactive members' benefit payments.

19. Reconciliation of included members

	1967 Plan				Pla	Plan 87					
	Municipal	Police	Fire	Municipal	Elected	Police	Fire	Total			
Active members											
Active, July 1, 1999 New entrants and rehires	13,452 + 151	3,071 + 6	1,534 + 2	8,190 + 1,260	24 + 2	3,823 + 139	891 + 31	30,985 + 1,591			
Separations from active service Refunded contributions	- 95	- 3	- 0	- 410	- 1	- 44	- 14	- 567			
Terminated vested Became disabled Retired DROP participants Net other terminations ^a	- 1 - 51 - 349 - 920 - 399	- 0 - 6 - 108 - 495 - 22	- 0 - 2 - 39 - 341 - 5	- 0 - 0 - 18 - 21 <u>- 415</u>	- 0 - 0 - 1 - 0 <u>- 0</u>	- 0 - 5 - 0 - 0 - 11	- 0 - 0 - 0 - 0 - 4	- 1 - 64 - 515 - 1,777 - 856			
Active, July 1, 2000 Retired members	11,788	2,443	1,149	8,586	24	3,902	904	28,796			
Retired, July 1, 1999 New retirees Net other terminations Retired, July 1, 2000	11,594 + 426 <u>- 581</u> 11,439	5,100 + 119 <u>- 142</u> 5,077	1,640 + 43 - 63 1,620	40 + 19 - 3 56	8 + 1 <u>- 1</u> 8	1 + 0 - 0 1	0 + 0 - 0 0	18,383 + 608 <u>- 790</u> 18,201			
Surviving spouses											
Receiving benefit, July 1, 1999 New spouses Net other terminations Receiving benefit, July 1, 2000	4,372 + 264 <u>- 309</u> 4,327	1,948 + 130 <u>- 104</u> 1,974	955 + 56 <u>- 68</u> 943	10 + 4 <u>- 0</u> 14	1 + 0 - 0 1	8 + 1 - 0 9	4 + 1 - 0 5	7,298 + 456 <u>- 481</u> 7,273			

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

19. Reconciliation of included members (continued)

	1967 Plan							
	Municipal	Police	Fire	Municipal	Elected	Police	Fire	Total
Other beneficiaries								
Receiving benefit, July 1, 1999 Net new beneficiaries Net other terminations Receiving benefit, July 1, 2000	1,000 + 53 <u>- 24</u> 1,029	165 + 5 <u>- 9</u> 161	62 + 2 <u>- 2</u> 62	11 + 0 - 0 11	0 + 0 - 0 0	24 + 1 <u>- 0</u> 25	8 + 0 - 0 8	1,270 + 61 <u>- 35</u> 1,296
Disabled members								
Disabled, July 1, 1999 New disabilities Net other terminations Disabled, July 1, 2000	2,145 + 69 - 102 2,112	2,206 + 8 - 57 2,157	545 + 2 <u>- 17</u> 530	5 + 1 - <u>0</u> 6	0 + 0 - 0 0	34 + 8 <u>- 2</u> 40	5 + 0 - 0 5	4,940 + 88 <u>- 178</u> 4,850
Terminated vested members								
Terminated vested, July 1, 1999 New vested terminations Net other terminations Terminated vested, July 1, 2000	742 + 9 <u>- 57</u> 694	+ 0 - 6 38	10 + 0 <u>- 3</u> 7	14 + 0 - 2 12	2 + 0 <u>- 0</u> 2	+ 0 - 0 1	+ 0 - 0 1	814 + 9 <u>- 68</u> 755
DROP participants								
DROP participants, July 1, 1999 New DROP participants Net other terminations DROP participants, July 1, 2000	0 + 958 - 0 958	0 + 503 - 0 503	0 + 342 - 0 342	0 + 22 - 0 22	0 + 0 - <u>0</u>	+ 0 - <u>0</u>	- 0 - 0 0	0 + 1,825 - 0 1,825

20. Summary of annual active member payroll and nonactive member annual benefits (thousands)

		1967 Plan						
	Municipal	Police	Fire	Municipal	Elected	Police	Fire	Total
Active members								
Active as of July 1, 1999 Net new entrants and pay increases Active as of July 1, 2000	\$ 529,921 (44,598) \$ 485,323	\$ 139,252 (24,153) \$ 115,099	\$ 68,242 (14,992) \$ 53,250	\$ 260,010 30,806 \$ 290,816	\$ 1,692 304 \$ 1,996	\$ 146,077 \$ \\ \frac{13,970}{\$ 160,047} \end{array}	2,834	\$ 1,178,601 (35,828) \$ 1,142,773
Retired members								
Retired as of July 1, 1999 Net new entrants Retired as of July 1, 2000	\$ 157,917 2,712 \$ 160,629	\$ 99,506 <u>937</u> \$ 100,443	\$ 32,174	\$ 332	\$ 233 20 \$ 253	\$ 5 \$ \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	0 0	\$ 290,167 4,084 \$ 294,251
Surviving spouses								
Receiving benefit as of July 1, 1999 Net new spouses Receiving benefit as of July 1, 2000	\$ 21,752	\$ 12,020 <u>533</u> \$ 12,553	\$ 5,322 111 \$ 5,433	\$ 25 24 \$ 49	\$ 4 0 \$ 4	\$ 47 \$	12	\$ 39,195
Other beneficiaries								
Receiving benefits as of July 1, 1999 Net new beneficiaries Receiving benefit as of July 1, 2000	\$ 4,573 247 \$ 4,820	\$ 916 (9) \$ 907	\$ 423	\$ 34 0 \$ 34	\$ 0 0 \$ 0	\$ 115 \$ \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	0	\$ 6,095 250 \$ 6,345

20. Summary of annual active member payroll and nonactive member annual benefits (thousands) - (continued)

	1967 Plan						Plan 87						<u>.</u>			
	M	unicipal		Police		Fire	Mu	nicipal	Ele	ected	I	Police		Fire	7	Fotal
Disabled members																
Disabled as of July 1, 1999 Net new disabilities Disabled as of July 1, 2000	\$ 	26,511 276 26,787	\$ 	32,863 (477) 32,386	\$ 	8,938 (111) 8,827	\$ \$	80 22 102	\$ \$	0 0 0	\$ \$	855 146 1,001	\$ \$	96 21 117	\$ 	69,342 (123) 69,220
Terminated vested members																
Terminated vested as of July 1, 1999 Net new vested terminations Terminated vested as of July 1, 2000	\$ \$	9,682 (810) 8,872	\$ 	570 (73) 497	\$ \$	105 (32) 73	\$ \$	188 (22) 166	\$	51 0 51	\$	10 0 10	\$ \$	8 0 8	\$ \$	10,614 (937) 9,677
Drop Participants																
DROP participants as of July 1, 1999 Net new DROP participants DROP participants as of July 1, 2000	\$ \$	0 25,681 25,681	\$ 	0 20,553 20,553	\$ \$	0 12,123 12,123	\$ \$	0 195 195	\$ \$	0 0 0	\$ \$	0 0 0	\$ \$	0 0 0	\$ \$	0 58,552 58,552

PLAN MEMBERSHIP

A distribution of the active employees' annual earnings for each division by age and service group as of July 1, 2000 appears in Tables 21 through 27.

A distribution of inactive members by age and monthly pension is shown in Tables 28-32.

21. Municipal (1967 Plan) annual average earnings and counts: service groups by age groups

					Service Group					
Age Group	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	Total
0-19	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
25-29	5	26	11	0	0	0	0	0	0	42
	31,128	35,939	32,624	0	0	0	0	0	0	34,498
30-34	6	150	300	9	0	0	0	0	0	465
	29,523	38,223	37,207	41,750	0	0	0	0	0	37,523
35-39	8	197	802	284	14	0	0	0	0	1,305
	32,927	38,171	38,458	42,066	42,007	0	0	0	0	39,204
40-44	7	226	940	780	252	94	0	0	0	2,299
	32,495	36,316	38,554	44,760	46,275	40,889	0	0	0	41,946
45-49	7	181	760	622	497	559	90	0	0	2,716
	27,106	36,489	36,489	43,623	46,967	44,987	41,945	0	0	41,363
50-54	8	130	601	550	439	931	539	28	0	3,226
	44,152	36,043	36,995	42,431	44,369	46,837	44,940	42,342	0	43,119
55-59	4	70	296	241	140	183	137	46	5	1,122
	29,667	38,896	34,957	40,103	39,980	44,170	46,542	45,618	42,162	40,302
60-64	1	54	135	93	48	36	35	9	15	426
	26,071	37,170	34,456	36,174	38,087	43,917	41,579	41,370	36,068	37,152
65-69	1	21	34	14	12	13	3	4	5	107
	32,254	36,055	33,229	33,121	38,139	25,635	38,153	43,215	29,529	33,727
70-74	0	2	18	10	5	6	3	3	6	53
	0	10,892	23,403	33,068	27,927	33,846	21,536	43,219	54,570	30,908
75 +	0	0	5	5	4	6	2	1	4	27
	0	0	14,091	30,038	35,995	27,705	46,432	66,328	40,305	31,528
Total	47	1,057	3,902	2,608	1,411	1,828	809	91	35	11,788
	32,843	37,080	37,209	42,822	44,817	45,385	44,624	44,233	39,660	41,171

22. Police (1967 Plan) annual average earnings and counts: service groups by age groups

-					Service Group					
Age Group	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	Total
0-19	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
25-29	1	0	0	0	0	0	0	0	0	1
	42,282	0	0	0	0	0	0	0	0	42,282
30-34	0	4	26	2	0	0	0	0	0	32
	0	43,325	43,426	49,999	0	0	0	0	0	43,824
35-39	2	5	217	112	3	0	0	0	0	339
	44,641	41,708	45,366	47,759	47,042	0	0	0	0	46,113
40-44	0	0	240	375	162	4	0	0	0	781
	0	0	44,282	47,198	48,580	45,173	0	0	0	46,578
45-49	0	1	126	178	247	186	9	0	0	747
	0	38,414	44,054	46,437	49,389	49,437	48,780	0	0	47,776
50-54	0	0	46	79	126	126	61	0	0	438
	0	0	43,764	45,262	46,805	48,565	49,875	0	0	47,141
55-59	0	0	0	3	22	19	32	15	0	91
	0	0	0	44,139	45,989	48,414	52,106	60,464	0	50,971
60-64	0	0	0	0	0	4	5	2	1	12
	0	0	0	0	0	44,824	45,629	46,865	48,810	45,773
65-69	0	0	0	0	0	0	0	1	0	1
	0	0	0	0	0	0	0	63,813	0	63,813
70-74	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
75+	0	0	0	0	0	0	0	0	1	1
	0	0	0	0	0	0	0	0	56,320	56,320
Total	3	10	655	749	560	339	107	18	2	2,443
	43,855	42,026	44,527	46,892	48,427	48,951	50,251	59,139	52,210	47,114

23. Fire (1967 Plan) annual average earnings and counts: service groups by age groups

_	Service Group												
Age Group	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	Total			
0-19	0 0	0 0	0 0	0 0	0 0	0 0	0	0	0 0	0 0			
20-24	0 0	0 0	0	0 0	0 0	0 0	0 0	0 0	0 0	0 0			
25-29	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0			
30-34	0 0	1 42,032	6 38,027	0 0	0	0 0	0 0	0 0	0 0	7 38,599			
35-39	0 0	1 39,561	40 43,625	30 44,024	0	0 0	0	0	0 0	71 43,736			
40-44	0 0	1 31,737	55 43,362	118 44,394	3 49,016	4 50,396	0	0 0	0 0	181 44,220			
45-49	0 0	0 0	27 42,697	81 44,335	151 45,898	140 49,462	1 43,482	0 0	0 0	400 46,607			
50-54	0 0	1 31,737	8 42,457	16 44,848	100 45,894	209 46,636	79 51,384	0	0 0	413 47,178			
55-59	0 0	0 0	0 0	0 0	0 0	28 47,115	32 46,307	10 53,661	0 0	70 47,681			
60-64	0 0	0 0	0 0	0 0	0 0	0 0	3 45,404	2 89,479	1 43,482	6 59,775			
65-69	0 0	0 0	0 0	0 0	0 0	0 0	0 0	1 47,600	0 0	1 47,600			
70-74	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0			
75+	0 0	0 0	0 0	0 0	0	0 0	0 0	0 0	0 0	0 0			
Total	0	4 36,267	136 43,018	245 44,359	254 45,933	381 47,749	115 49,747	13 58,705	1 43,482	1,149 46,345			

24. Municipal Plans M & Y (Plan 87) annual average earnings and counts: service groups by age groups

					Service Group					
Age Group	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	Total
0-19	19 23,617	0 0	0 0	0 0	0 0	0 0	0	0 0	0 0	19 23,617
20-24	342 27,893	25 31,116	0	0 0	0 0	0 0	0	0	0 0	367 28,113
25-29	993 32,816	231 35,871	20 33,159	0 0	0	0 0	0	0	0 0	1,244 33,389
30-34	976 33,328	481 38,120	85 35,857	2 40,004	0	0 0	0	0	0 0	1,544 34,969
35-39	866 31,826	466 38,248	150 42,023	10 42,631	0 0	0 0	0	0	0	1,492 34,929
40-44	735 31,392	405 36,394	124 41,365	21 41,236	6 41,980	2 33,959	0 0	0	0 0	1,293 34,128
45-49	598 31,176	346 37,646	117 44,338	18 34,701	4 44,979	16 41,022	1 42,379	0	0	1,100 34,872
50-54	431 32,284	206 34,437	94 39,702	10 47,175	7 32,412	4 49,237	3 39,115	0	0 0	755 34,110
55-59	199 29,922	150 37,752	64 45,217	1 45,267	4 36,326	5 32,983	3 52,427	4 32,417	0 0	430 35,241
60-64	97 24,730	60 34,274	29 37,773	1 24,000	1 19,050	1 28,003	1 33,729	0 0	0 0	190 29,765
65-69	22 19,078	38 30,310	11 34,865	1 31,380	1 140,000	2 20,328	1 46,738	0 0	0 0	76 29,129
70-74	21 10,075	23 14,573	4 41,914	0 0	0 0	0 0	0 0	0 0	0 0	48 14,883
75+	11 26,238	14 9,013	3 5,064	0 0	0 0	0 0	0 0	0 0	0 0	28 15,357
Total	5,310 31,557	2,445 36,571	701 40,826	64 40,145	23 41,871	30 38,493	9 44,164	4 32,417	0 0	8,586 33,871

25. Elected (Plan 87) annual average earnings and counts: service groups by age groups

					Service Group					
Age Group	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	Total
0-19	0	0 0	0	0 0	0	0 0	0	0	0	0
20-24	0 0	0	0 0	0 0	0	0 0	0	0	0 0	0 0
25-29	0	0	0	0 0	0	0 0	0	0	0	0
30-34	1 80,000	0 0	0 0	0 0	0	0 0	0	0	0	1 80,000
35-39	0 0	0	0 0	0 0	0	0 0	0	0	0 0	0 0
40-44	0 0	1 80,000	1 80,000	1 80,000	0	0 0	0	0	0 0	3 80,000
45-49	1 80,000	1 80,000	1 85,969	1 80,000	0	0 0	0	0	0 0	4 81,492
50-54	1 80,000	1 80,000	0	0 0	1 80,000	1 83,500	1 80,000	0	0	5 80,700
55-59	1 80,000	1 112,789	0	0 0	1 85,000	0 0	0 0	0	0	3 92,596
60-64	1 80,000	1 80,000	0 0	1 83,500	0	0 0	0 0	0	0 0	3 81,167
65-69	0 0	0	0 0	0 0	2 82,500	0 0	0 0	0	1 100,000	3 88,333
70-74	0 0	0	0	0	0	0 0	0	0 0	0 0	0 0
75+	0 0	0	0 0	1 80,000	1 80,000	0 0	0	0	0 0	2 80,000
Total	5 80,000	5 86,558	2 82,985	4 80,875	5 82,000	1 83,500	1 80,000	0	1 100,000	24 83,157

26. Police (Plan 87) annual average earnings and counts: service groups by age groups

					Service Group					
Age Group	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	Total
0-19	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
20-24	300 36,314	3 42 027	0	0	0	0	0	0 0	0 0	303 36,380
		43,027	U	U	U	U	U	U	U	30,380
25-29	684	234	33	0	0	0	0	0	0	951
	38,438	42,502	43,595	0	0	0	0	0	0	39,617
30-34	407	477	354	2	0	0	0	0	0	1,240
	38,799	42,889	44,028	41,584	0	0	0	0	0	41,870
35-39	203	271	370	3	1	0	0	0	0	848
	38,728	42,792	43,961	37,549	40,885	0	0	0	0	42,308
40-44	82	102	192	3	0	0	0	0	0	379
	38,791	42,545	43,560	44,920	0	0	0	0	0	42,266
45-49	41	32	81	2	1	0	0	0	0	157
	38,572	42,159	43,374	39,763	42,882	0	0	0	0	41,823
50-54	10	5	1	0	0	1	0	0	0	17
	39,396	39,746	41,235	0	0	43,732	0	0	0	39,862
55-59	4	0	1	0	0	1	0	0	0	6
	40,098	0	42,882	0	0	43,732	0	0	0	41,168
60-64	1	0	0	0	0	0	0	0	0	1
	42,282	0	0	0	0	0	0	0	0	42,282
65-69	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
70-74	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
75+	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
Total	1,732	1,124	1,032	10	2	2	0	0	0	3,902
	38,220	42,720	43,848	41,010	41,884	43,732	0	0	0	41,017

27. Fire (Plan 87) annual average earnings and counts: service groups by age groups

					Service Group					i
Age Group	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	Total
0-19	0	0 0	0	0 0	0 0	0 0	0	0 0	0 0	0
20-24	18 33,811	0 0	0 0	0 0	0	0 0	0	0	0 0	18 33,811
25-29	128 35,288	29 42,813	0 0	0 0	0	0 0	0	0	0 0	157 36,678
30-34	116 36,433	130 42,428	16 44,854	0 0	0	0 0	0	0	0	262 39,922
35-39	64 36,022	136 42,847	58 44,579	1 42,382	0	0 0	0	0	0	259 41,546
40-44	31 36,339	61 42,706	59 43,203	0 0	0	0 0	0	0	0 0	151 41,593
45-49	9 36,846	10 42,856	26 42,857	0 0	0	1 42,382	0	0	0	46 41,670
50-54	1 43,183	1 42,032	6 43,069	0 0	0	0 0	1 47,101	0	0 0	9 43,414
55-59	2 33,246	0 0	0 0	0 0	0	0 0	0	0	0 0	2 33,246
60-64	0 0	0 0	0 0	0 0	0	0 0	0	0	0 0	0 0
65-69	0 0	0	0	0	0	0 0	0	0	0 0	0 0
70-74	0 0	0 0	0 0	0 0	0 0	0 0	0	0	0 0	0 0
75+	0 0	0 0	0 0	0 0	0	0 0	0 0	0 0	0 0	0 0
Total	369 35,840	367 42,670	165 43,787	1 42,382	0	1 42,382	1 47,101	0 0	0	904 40,091

28. Terminated vested (1967 Plan and Plan 87) members, July 1, 2000

	Munic	ipal Members	Police	e Memb	oers	Fire Members		
Age	People	Monthly Pension	People		onthly ension	People	Monthly Pension	
UNDER 40	23	\$ 20,933.25	8	\$	7,786.08	1	\$ 665.17	
40-44	73	71,340.42	26	29	9,796.92	3	2,815.50	
45-49	198	200,846.58	3		3,009.83	3	2,723.83	
50-54	343	399,441.83	0		0.00	0	0.00	
55-59	38	40,784.75	1		594.00	0	0.00	
60-64	12	6,866.25	0		0.00	0	0.00	
OVER 64	<u>21</u>	17,226.83	<u>1</u>		1,067.75		502.33	
TOTAL	708	\$ 757,439.92	39	\$ 42	2,254.67	8	\$ 6,706.92	
			Average M	Ionthly	Pension			
			Municipal	\$	1,070			
			Police	\$	1,083			
			Fire	\$	838			

29. Disabled (1967 Plan and Plan 87) members, July 1, 2000

	Munici	pal Members	Police	e Memb	oers	Fire	Members
Age	People	Monthly Pension	People		onthly ension	People	Monthly Pension
UNDER 40	27	\$ 34,953.58	49	\$ 9	98,281.17	4	\$ 6,852.75
40-44	88	121,010.25	103		87,409.33	8	14,721.50
45-49	182	230,376.58	223		76,273.33	47	80,902.08
50-54	310	419,876.75	410		51,554.08	96	150,996.83
55-59	355	460,892.00	443	50	69,916.08	125	177,517.75
60-64	296	326,692.83	258	28	82,297.17	81	119,924.67
65-69	280	245,858.67	274		50,410.58	48	69,986.08
70-74	234	182,613.33	240	20	06,545.42	36	41,929.50
75-79	201	131,907.50	105	8	85,536.33	49	48,825.58
80-84	97	57,836.92	69	-	56,816.50	24	20,064.50
OVER 84	48	28,780.00	<u>23</u>		17,229.42	<u>17</u>	13,571.92
TOTAL	2,118	\$2,240,798.33	2,197	\$2,78	82,269.33	535	\$745,293.08
			Average N	Ionthly	Pension		
			Municipal	\$	1,058		
			Police	\$	1,266		
			Fire	\$	1,393		

30. Retired (1967 Plan and Plan 87) members, July 1, 2000

	Munic	ripal Members	Polic	ers	Fire Members			
Age	People	Monthly Pension	People		onthly ension	People		lonthly ension
UNDER 40	0	\$ 0.00	0	\$	0.00	0	\$	0.00
40-44	0	0.00	1		389.58	0	•	0.00
45-49	5	2,795.75	319	61	6,432.50	50		90,673.67
50-54	26	45,204.92	883		36,524.92	215		35,475.83
55-59	1,069	1,910,029.25	1,146		18,606.83	316		32,502.33
60-64	1,869	3,021,991.58	967		35,371.17	293		83,113.25
65-69	2,308	3,076,814.17	771		35,238.33	180		05,578.25
70-74	2,306	2,578,854.75	554	77	8,126.17	133	15	92,794.42
75-79	1,871	1,627,088.50	204	27	2,061.92	177	2	18,654.50
80-84	1,204	774,727.00	126	11	5,100.92	153	1:	55,613.67
OVER 84	845	411,254.33	<u>107</u>	8	32,783.50	103		87,142.75
TOTAL	11,503	\$13,448,760.25	5,078	\$8,37	70,635.83	1,620	\$2,7	01,548.75
			Average N	Monthly 1	Pension			
			Municipal	\$	1,169			
			Police	\$	1,648			
			Fire	\$	1,668			

31. Beneficiaries (1967 Plan and Plan 87) of members, July 1, 2000

	Munic	ripal Members	Police	ers	Fire Members			
Age	People	Monthly Pension	People		onthly nsion	People		Monthly Pension
UNDER 40	419	\$ 169,763.50	130	\$ 6	3,979.83	45	\$	24,631.42
40-44	152	62,827.17	40		1,995.67	19		15,951.08
45-49	181	88,590.33	67		3,952.50	21		19,651.75
50-54	233	143,152.25	146		8,998.92	38		33,091.58
55-59	295	180,070.08	187	14	3,324.75	51		41,545.17
60-64	430	260,177.33	234	14	6,996.50	51		37,574.33
65-69	615	322,919.75	283	16	8,057.50	55		32,847.58
70-74	790	356,916.58	300	15	5,218.42	121		63,843.83
75-79	817	298,963.42	235	9	6,873.17	179		78,031.08
80-84	731	229,588.25	249	8	3,496.92	220		79,737.50
OVER 84	<u>719</u>	<u>169,459.75</u>	<u>298</u>	8	3,101.33	218		67,823.42
TOTAL	5,382	\$ 2,282,428.42	2,169	\$1,13	5,995.67	1,018	\$	494,728.67
			Average N	Ionthly 1	Pension			
			Municipal	\$	424			
			Police	\$	524			
			Fire	\$	486			

32. DROP (1967 Plan and Plan 87) members, July 1, 2000

	Munic	ipal Members	Police	e Membe	ers	Fire Members			
Age	People	Monthly Pension	People		onthly nsion	People		nthly sion	
UNDER 40	0	\$ 0	0	\$	0	0	\$	0	
40-44	0	0	0		0	0		0	
45-49	1	3,242	97	2	218,571	19	4	46,312	
50-54	5	13,737	180	7	768,932	135		65,479	
55-59	542	1,286,434	169	4	523,888	135	4	15,363	
60-64	310	631,564	46	1	151,864	48	10	65,581	
65-69	82	140,411	8		35,781	4		13,004	
70-74	30	59,683	2		10,639	1		4,498	
75-79	5	11,068	1		3,107	0		0	
80-84	2	4,239	0		0	0		0	
OVER 84	3	5,963	0		0	0		0	
TOTAL	980	\$ 2,156,341	503	\$ 1,7	712,783	342	\$ 1,0	10,236	
			Average N	Ionthly 1	Pension				
			Municipal	\$	2,200				
			Police	\$	3,405				
			Fire	\$	2,954				

FINANCIAL EXPERIENCE OF FUND

The July 1, 2000 Retirement System net assets are \$4,976,494,428 on a market value basis and \$4,501,553,631 on a cost value basis. Financial experience is reported through the following tables:

- Table 33 contains a summary of assets and liabilities
- Table 34 shows receipts and disbursements
- Table 35 itemizes City contributions for the year ending June 30, 2000
- Table 36 summarizes 2000 fiscal year administrative expenses
- Table 37 shows July 1, 2000 adjusted market value of assets under the five-year spread gain asset valuation method
- Table 38 shows the July 1, 2000 allocation of adjusted assets among all divisions.

Table 34, showing the fund's receipts and disbursements during the fiscal year ending June 30, 2000, also notes that employee, City, and state contributions are approximately 44% of the yearly receipts on a market value basis. On the disbursement side, benefits payments were approximately 95% of all disbursements.

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

	Fiscal Ye	ear Ending
	June 30, 1999	June 30, 2000
Cost value	13.9%	6.6%
Market value	10.0%	9.6%
Adjusted market value	13.1%	11.07%

Table 37 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 four years. The value of the Pension Adjustment Fund (PAF) is then subtracted from the initial adjusted market value of assets.

As required under Act 205, amortization payments, such as experience gains/losses, must be reported separately for each participating division. For the valuation, assets must be allocated among divisions (Table 38). This allocation does not constitute a legal separation of the assets, however.

Table 38 begins with July 1, 1999 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 fund balance of each division before investment income.

33. Statement of assets and liabilities (fiscal year ending June 30, 2000)

	Cost Value	Market Value
Assets		
Cash Investment accounts Accounts receivable Interest and dividends receivable Due from other funds Due from other governmental units Other assets	\$ 33,574,354 4,566,582,892 7,746,974 23,932,205 0 704,390 11,220	\$ 33,574,354 5,041,523,689 7,746,974 23,932,205 0 704,390 11,220
Total assets	\$ 4,632,552,035	\$5,107,492,832
Liabilities		
Vouchers payable Accounts payable Salaries and wages payable Accrued expenses Funds held in escrow Deferred revenue Other liabilities (including amounts due to brokers) Total liabilities	\$ 210,965 2,982,707 45,126 696,516 0 6,366,078 120,697,012 \$ 130,998,404	\$ 210,965 2,982,707 45,126 696,516 0 6,366,078 120,697,012 \$ 130,998,404
Fund balance	\$4,501,553,631	\$4,976,494,428

34. Statement of receipts and disbursements

	Cost Value	Market Value
	Cost value	Market value
Balance as of July 1, 1999	\$4,434,021,139	\$4,750,436,982
Receipts		
Contributions:		
Commonwealth of Pennsylvania		
Supplemental State Assistance (Act 205)	\$ 0	\$ 0
City of Philadelphia ^a	179,478,697	179,478,697
Employees	50,227,322	50,227,322
Quasi-public agencies	4,449,239	4,449,239
Interest and dividends	124,879,185	124,879,185
Gain from sale of investments	175,024,949	175,024,949
Miscellaneous operating revenues	1,192,617	1,192,617
Total receipts	\$ 535,252,009	\$ 535,252,009
Disbursements		
Withdrawals	\$ 4,197,810	\$ 4,197,810
Benefit payments	444,272,795	444,272,795
Administrative expenses	4,605,234	4,605,234
Investment manager fees	14,643,678	14,643,678
Total disbursements	\$ 467,719,517	\$ 467,719,517
Change in unrealized appreciation/(depreciation)	\$ —	\$ 158,524,954
Balance as of July 1, 2000	\$4,501,553,631	\$4,976,494,428
Approximate return on investments during year	6.6%	9.6%

Includes Commonwealth of Pennsylvania general state assistance (\$33,312,722) and COLA reimbursement (\$2,988,249).

35. Fiscal 1999 City contributions

Date	Amount
July 1, 1999	\$ 164,140,000
June 30, 2000	15,338,697
Various (Quasi-public agencies)	3,744,848
Accrued	 704,391 ^a
Total	\$ 183,927,936

a. City-accrued contributions are \$0; quasi-public agencies accrued contributions are \$704,391.

36. Statement of administrative expenses for year ending June 30, 2000

Personal services	\$	2,329,523	
Purchase of services	1,125,046		
Materials and supplies		59,758	
Employer's share of fringe benefits		940,187	
Miscellaneous		150,720	
Total	\$	4,605,234	

37. Derivation of assets for valuation purposes as of July 1, 2000 — 5 year spread gain method

	-		Y	Year of Recognition			
July 1	Total Gain or (Loss)	2000	2001	2002	2003	2004	Unrecognized Amount
1996	138,209,192	27,641,839	_	_	_	_	0
1997	233,367,648	46,673,529	46,673,529	_	_	_	46,673,529
1998	151,386,333	30,277,267	30,277,267	30,277,266	_	_	60,554,532
1999	52,310,273	10,462,055	10,462,055	10,462,054	10,462,054	_	31,386,163
2000	19,379,479	3,875,896	3,875,896	3,875,896	3,875,896	3,875,895	15,503,583
Recognized Total		118,930,586					
Unrecognized Tota	l		91,288,746	44,615,216	14,337,950	3,875,895	154,117,807
1 July 1, 2000 man	rket value			\$4,976,494,428			
2. Unrecognized ga	ain/(loss)			154,117,807			
3. Initial July 1, 20	000 adjusted market (1)	- (2)		\$4,822,376,621			
4. PAF transfer				\$ 57,386,282			
5. Final July 1, 200	00 adjusted market (3)	- (4)		\$ 4,764,990,339			
6. Approximate act	tuarial value return on	investments during year		11.1%			

38. Allocation of assets for valuation purposes between divisions as of June 30, 2000 (thousands)

	-	1967 Plan		Plan 87				-	
		Municipal	Police	Fire	Municipal	Elected	Police	Fire	Total
1.	Assets for valuation purposes as of June 30, 1999	\$ 2,350,618	\$ 1,201,585	\$ 538,468	\$ 174,137	\$ 8,647	\$ 179,689	\$ 43,625	\$ 4,496,768
2.	Transactions during period July 1, 1999 - June 30, 2000:								
	 a. Contributions City and commonwealth Employees Quasi-public agencies Employee contributions receivable^a b. Miscellaneous income and (expenses) c. Pension benefits d. Withdrawals e. Administrative expenses^b f. Net transactions (a) + (b) - (c) - (d) - (e) 	\$ 81,110 20,316 4,449 18 624 233,840 1,692 2,408 \$ (131,423)	\$ 56,951 8,073 0 0 235 156,999 407 906 \$ (93,055)	\$ 17,369 4,130 0 0 89 51,711 84 343 \$ (30,550)	\$ 13,748 7,295 0 64 155 242 1,306 598 \$ 19,116	\$ 253 209 0 0 1 247 35 3 178	\$ 8,115 8,171 0 0 73 1,052 497 281 \$ 14,528	\$ 1,933 1,953 0 0 17 182 177 66 \$ 3,478	\$ 179,479 50,146 4,449 82 1,193 444,273 4,198 4,605 \$ (217,728)
3.	Total fund balance prior to allocation of realized and unrealized income $(1) + (2)$	\$ 2,219,194	\$ 1,108,530	\$ 507,919	\$ 193,253	\$ 8,825	\$ 194,216	\$ 47,102	\$ 4,279,040
4.	Realized and unrealized income for period July 1, 1999 - June 30, 2000 (allocated in proportion to (3))	252,023	125,891	57,682	21,947	1,002	22,056	5,349	485,950
5.	Assets for valuation purposes as of June 30, $2000(3) + (4)$	\$ 2,471,218	\$ 1,234,421	\$ 565,600	\$ 215,200	\$ 9,828	\$ 216,272	\$ 52,451	\$ 4,764,990

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

b. Allocated in proportion to the number of active and nonactive members in each division as of July 1, 1999.

	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: The base rate of pay, longevity payments, and overtime received during a 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.
Average final compensation	Average final compensation means: 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 3 3/4% of total compensation up to the taxable wage base (\$72,600 in 1999 and \$80,400 in 2000) 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.

1967 Plan MUNICIPAL (PLAN J) UNIFORMED (PLANS D AND X) Service retirement Eligibility Each municipal employee is eligible to retire Each uniformed employee is eligible to and receive a service pension at age 55 with one retire and receive a service pension at age year of service. The service pension equals 2 1/2% of the The service pension equals 2 1/2% of the Benefit amount employee's average final compensation employee's average final compensation multiplied by years credited service to a multiplied by years credited service, maximum of 20 years plus 2% of the subject to a maximum of 100% of average employee's average final compensation final compensation. multiplied by years credited service above 20, to a maximum of 80% of the employee's average final compensation. Early retirement Eligibility Each municipal employee is eligible to retire Each uniformed employee is eligible to and receive a reduced service pension at age 52 retire and receive a reduced service if he has 10 or more years credited service. pension at age 40 if he or she has 10 or more years of credited service. Benefit amount The annual amount is calculated the same as Same as municipal. service retirement, reduced by 1/2 of 1% for each month the employee is younger than minimum retirement age. **Deferred vested retirement** Eligibility A terminating employee who has completed 10 Same as municipal. or more years credited service is eligible for a deferred vested retirement benefit. Benefit amount The annual deferred vested benefit is determined the same as service pensions, using average final compensation and credited service

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

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

deferred vested benefit.

Withdrawal benefit Each employee terminating who has completed

below).

less than 10 years credited service will receive a withdrawal benefit equal to his or her employee

contributions (without interest).

Same as municipal.

MUNICIPAL (PLAN J)

UNIFORMED (PLANS D AND X)

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.

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 Worker's

Compensation Act.

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 15% of final compensation for life.

Eligibility

Ordinary death

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 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.

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 died and had elected option 2, joint and 100% contingent annuitant (see Survivor Benefits below).

Same as municipal.

Same as municipal.

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 may be any relative by blood or marriage.

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 Survivor Benefits below).

1967 Plan MUNICIPAL (PLAN J) UNIFORMED (PLANS D AND X) The lump sum payment is equal to 10% of the Same as municipal. Lump sum payment 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. Service-connected disability Eligibility An active employee found by the Board of Same as municipal. 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. Benefit amount The service-connected disability benefit is equal Same as municipal. 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 Worker's 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 Survivor Benefit below) and the beneficiary will continue receiving benefit payments after his or her death. Benefit offset If the employee collects his or her disability If the employee collects his or her benefit and subsequently becomes employed, disability benefit and subsequently the disability benefit will be reduced \$1 for becomes employed, the disability benefit will be reduced \$1 for every \$2 earned in every \$3 earned in outside wages until age 65. outside wages until age 45. The earned income offset does not apply to fire employees. Ordinary disability Eligibility An active employee found by the board to be Same as municipal. 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. Benefit amount The annual ordinary disability benefit is equal Same as municipal, except each eligible to the benefit determined under the service employee is automatically credited with a minimum of 10 years service for purposes pension formula using average final

of calculating the annual benefit.

compensation and credited service as of the date

of disablement.

MUNICIPAL (PLAN J)

UNIFORMED (PLANS D AND X)

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 serviceconnected 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 thereafter until the employee's 60th 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.

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 and at death. 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.

MAJOR FEATURES OF THE RETIREMENT SYSTEM

	Plan 1967	
	MUNICIPAL (PLAN J)	UNIFORMED (PLANS D AND X)
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.
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).
Deferred Retirement Option Plan (DROP)	A DROP plan is being tested for four years beginning June 24, 1999 for cost neutrality. Employees that have ten years of service and reached the minimum retirement age may elect to participate in the DROP. During this time, their accrued benefit will go in a DROP account and will earn interest at a specified rate (4.5% as of July 1, 2000). The benefit is calculated as of the date they entered the DROP. At the end of the DROP, the employees' accrued monthly benefit will commence, plus they will receive the accumulated amount of the accrued benefit paid to the DROP, as well as the interest earned on such benefit.	Same as municipal.

	Plan 87	
	MUNICIPAL	UNIFORMED (PLANS A AND B)
Participation	Full-time employees participate on their date of employment. Temporary employees participate after completing six months of employment. Participation is limited to employees hired on or after January 8, 1987. 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. Total compensation shall include overtime or holiday overtime.	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.	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 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. Exempt and non-represented employees hired after January 13, 1999 (and current employees as of January 13, 1999 that elect to do so) will contribute an additional amount to become vested in five years.	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. Exempt and non-represented employees hired after January 13, 1999 (and current employees as of January 13, 1999 that elect to do so) will contribute an additional amount to become vested in five years.
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 or, if the employee made additional contributions to become vested in five years, five 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, or, if the employee made additional contributions to become vested in five years, five years of credited service.
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.

MUNICIPAL

UNIFORMED (PLANS A AND B)

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 if he or she has 10 or more years of credited service.

Alternatively, a member is eligible if he has 25 years credited service, regardless of

Benefit amount

The annual amount is calculated the same as service retirement, reduced by 1/2 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 1/2 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

An employee terminating employment and who completed 10 or more years credited service or, if the employee made additional contributions to become vested in five years, five years of credited service, is eligible for a deferred vested retirement 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.

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

Same as municipal.

Workers' Compensation Act.

MUNICIPAL

UNIFORMED (PLANS A AND B)

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 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.

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 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 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.

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.

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).

Same as municipal.

Lump sum payment

Annual pension

Plan 87 MUNICIPAL UNIFORMED (PLANS A AND B) Service-connected disability An active employee found by the Board of Same as municipal. 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. Benefit amount The service-connected disability benefit is equal Same as municipal. 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 Worker's Compensation Act. If the employee collects his or her disability If the employee collects his or her Benefit offset benefit and subsequently becomes employed, disability benefits and subsequently the disability benefit will be reduced \$1 for becomes employed, the disability benefit every \$3 earned in outside wages until age 65. will be reduced \$1 for every \$2 earned in outside wages until age 50. The earned income offset does not apply to fire employees. Ordinary disability Eligibility An active employee found by the Board to be An active employee found by the Board to mentally or physically permanently be mentally or physically permanently incapacitated from the further performance of incapacitated from the further duties due to an accident or illness not caused performance of duties due to an accident by the performance of duties is eligible for an or illness not caused by the performance immediate ordinary disability benefit provided of duties is eligible for an immediate he or she has at least 10 year credited service. ordinary disability benefit provided he has completed at least five years of credited The application for benefits must be made service and is a fireman. If the disability within one year after termination. is permanent and partial and the employee is a policeman, he or se 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 Same as municipal, except each eligible employee is automatically credited with a to the benefit determined under the service pension formula using average final minimum of 10 years service to calculate the annual benefit. compensation and credited service as of the date of disablement. Benefit offset If the employee collects his or her disability If the employee collects his or her benefit and subsequently becomes employed, disability benefit and subsequently the disability benefit will be reduced \$1 for becomes employed, the disability benefit will be reduced \$1 for every \$2 earned in every \$2 earned in outside wages until age 60. outside wages until age 50. The earned income offset does not apply to fire

employees.

MUNICIPAL

UNIFORMED (PLANS A AND B)

Not applicable

Not applicable.

Same as municipal.

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.

Survivor benefits Service pension, 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.

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).

61

MAJOR FEATURES OF THE RETIREMENT SYSTEM

Plan 87

MUNICIPAL

UNIFORMED (PLANS A AND B)

Deferred Retirement Option Plan (DROP)

A DROP plan is being tested for four years beginning June 24, 1999, for cost neutrality. Employees that have ten years of service and reached the minimum retirement age may elect to participate in the DROP. During this time, their accrued benefit will go in a DROP account and will earn interest at a specified rate (4.5% as of July 1, 2000). The benefit is calculated as of the date they entered the DROP. At the end of the DROP, the employees' accrued monthly benefit will commence, plus they will receive the accumulated amount of the accrued benefit paid to the DROP, as well as the interest earned on such benefit.

Same as municipal.

Elected Plan

Participation Any City employee 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 compensationTotal 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 contributionsTotal 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. Employees hired after January 13, 1999 (and current employees as of January 13, 1994 that elect to do so) will contribute an additional amount to become vested in the lesser of two full

terms or eight years.

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, or, if the employee made additional contributions to become vested in the lesser of two full terms or eight

years, the lesser of two full terms or eight years of 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, or, if the employee made additional contributions to become vested in the lesser of two full terms or eight years, two full terms or eight years of 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 a member dies before beginning his or her deferred vested benefit, an ordinary death benefit is

payable (see Ordinary Death below).

As an alternative, the person terminating employment may request at any time

beginning benefits to receive a return of employee contributions (without interest)

in lieu of the deferred vested benefit.

Elected Plan

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 Worker's 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 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).

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 contribution 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.

Elected Plan

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 benefits 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

in his of her job class. The adjustment win continue each year until the

employee's 65th birthday.

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 lump 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.

Deferred Retirement Option Plan (DROP) A DROP plan is being tested for four years beginning June 24, 1999, for cost

neutrality. Employees that have ten years of service and reached the minimum retirement age may elect to participate in the DROP. During this time, their accrued benefit will go in a DROP account and will earn interest at a specified rate (4.5% as of July 1, 2000). The benefit is calculated as of the date they entered the DROP. At the end of the DROP, the employees' accrued monthly benefit will commence, plus they will receive the accumulated amount of the accrued benefit paid to the DROP, as well as the interest earned on such benefit.

ACTUARIAL COST METHOD, FACTORS, AND ASSUMPTIONS

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. Data that was missing or inconsistent was replaced with each plan's average.

Valuation date

The plans were valued as of July 1, 2000.

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, 2000, the remaining July 1, 1985 unfunded actuarial accrued liability is amortized over 34 years ending June 30, 2019, with payments increasing 5.0% 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 5.0% per year.

Annual rate of withdrawal prior to retirement

The assumed annual rates of withdrawal are shown in Table 39.

39. Withdrawal probabilities at 5-year intervals

<u>-</u>	Municipal and l	Uniformed	
Attained Age	Males	Females	Males and Female
20	.100818	.105319	.022050
25	.085911	.096000	.021148
30	.045189	.071562	.017159
35	.038436	.056170	.014063
40	.034679	.043754	.010593
45	.031105	.035597	.000000
50	.028145	.032000	.000000
55	.000000	.000000	.000000

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

Annual rate of disability prior to retirement

The assumed annual disability rates appear in Table 40.

40. Disability probabilities at 5-year intervals

	Municipal and	Uniformed	
Attained Age	Males	Females	Males and Females
20	.000025	.000043	.000795
25	.000070	.000061	.000870
30	.000557	.000263	.001418
35	.001514	.000620	.002250
40	.003274	.001314	.003321
45	.005485	.002359	.004895
50	.009550	.003571	.006918
55	.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).

ACTUARIAL COST METHOD, FACTORS, AND ASSUMPTIONS

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 41.

ACTUARIAL COST METHOD, FACTORS, AND ASSUMPTIONS

41. 1967 plan service retirement rates

-	Municipal and	Elected Officials	Uniformed
Attained Age	Males	Females	Males and Females
45	_	_	.150
46	_	_	.077
47	_	_	.077
48	_	_	.084
49	_	_	.084
50	_	_	.084
51	_	_	.088
52	_	_	.102
53	_	_	.112
54	_	_	.112
55	.270	.226	.119
56	.092	.076	.140
57	.092	.077	.140
58	.077	.077	.140
59	.085	.070	.168
60	.085	.081	.168
61	.100	.081	.168
62	.231	.175	.196
63	.139	.126	.196
64	.162	.126	.224
65	.246	.196	.245
66	.154	.161	.245
67	.193	.161	.245
69	.154	.161	.245
69	.154	.175	.245
70+	1.000	1.000	1.000

The corresponding rates for members under Plan 87 are in Table 42.

42. Plan 87 service retirement rates

_	Municij	oal and Elected	Officials		Uniformed	
		Full B	Benefits		Full B	Senefits
Age	Reduced Benefits ^b	First Year Eligible ^a	Subsequent Years	Reduced Benefits ^b	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.

b. We assume the participant defers receipt of the benefit until their service retirement age.

Annual rate of mortality after retirement

We assumed that postretirement mortality will be 95% of the UP-84 Mortality Table with ages set forward one year for males and 95% of the UP-84 Mortality Table with ages set back four years for females. We assumed that post-disablement mortality will follow 100% of the UP-84 Mortality Table (set forward one year for males, set back four years for females) with the adjustment factors as multipliers in Table 43 applied at each age for municipal and the adjustment factors in Table 44 for police and fire.

43. Post-disablement mortality adjustment factors (municipal)

_	Adjustm	ent Factor	-	Adjustment Factor		
Age	Male	Female	Age	Male	Female	
47 and earlier	4.86	6.52	62	1.47	1.89	
48	4.38	5.85	63	1.41	1.80	
49	3.93	5.30	64	1.35	1.75	
50	3.60	4.82	65	1.29	1.70	
51	3.28	4.30	66	1.24	1.65	
52	3.01	3.84	67	1.21	1.58	
53	2.75	3.49	68	1.16	1.51	
54	2.51	3.20	69	1.11	1.47	
55	2.30	2.90	70	1.08	1.42	
56	2.10	2.61	71	1.04	1.37	
57	1.94	2.34	72	1.00	1.31	
58	1.81	2.23	73	1.00	1.28	
59	1.71	2.13	74	1.00	1.24	
60	1.61	2.05	75	1.00	1.21	
61	1.52	1.96	76	1.00	1.17	
			77	1.00	1.14	
			78	1.00	1.11	
			79	1.00	1.08	
			80 and later	1.00	1.05	

44. Post-disablement mortality adjustment factors (uniformed)

Age	Adjustment Factor Unisex	Age	Adjustment Factor Unisex
42 and earlier	3.68	62	1.37
43	3.44	63	1.34
44	3.23	64	1.31
45	3.03	65	1.27
46	2.83	66	1.24
47	2.63	67	1.21
48	2.45	68	1.19
49	2.29	69	1.17
50	2.15	70	1.14
51	2.02	71	1.12
52	1.89	72	1.09
53	1.80	73	1.06
54	1.72	74	1.03
55	1.66	75	1.02
56	1.62	76 and later	1.00
57	1.57		
58	1.53		
59	1.49		
60	1.44		
61	1.41		

Salary scale

We assumed that salaries, including longevity and overtime, will increase at a compound annual rate of 5.0% per year (3.5% due to inflation and 1.5% based on seniority/merit).

Rate of investment return

We assumed that assets of the fund will accumulate at a compound annual rate of 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, 1993 and June 30, 1997.

Expenses

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

Value of investments

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

Family composition

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

Form of annuity

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

Rate of covered payroll growth

We assume that the annual rate of growth of total covered payroll is 5.0% per year. This is supported by the actuarial experience studies for the five-year periods ending June 30, 1993 and June 30, 1997, which showed that the adjusted growth rate of covered payroll averaged 4.7% and 3.2%, respectively.

MINIMUM MUNICIPAL OBLIGATION

The minimum municipal obligation (MMO) is the minimum required City contribution under state law (Acts 205 and 189). The City's MMO for the year ending June 30, 2002 is \$135,911,000. This amount is summarized by division in Table 45 and is based on the July 1, 2000 actuarial valuation report.

The City receives general pension state aid and cost-of-living adjustment reimbursement from the state. The MMO includes these amounts. For fiscal 2001, the total state payments are \$36,301,000. Amounts received during fiscal 2002 may be used to meet the \$135,911,000 obligation. Supplemental State Assistance (SSA), if any, may not be used to offset this commitment.

The City's funding policy differs from the MMO. The most significant differences are:

- The City uses a 34-year increasing amortization of its July 1, 1985 unfunded actuarial accrued liability, while Act 205 allows a 40-year increasing amortization schedule. The City chose to amortize the July 1, 1985 unfunded actuarial accrued liability over the 34 years remaining in their then-existing schedule, rather than adopting the 40-year phased-in schedule permitted under Act 205. The City's more aggressive funding policy has resulted in larger contributions than Act 205 requires.
- The City applies the normal cost rates to the fiscal year's actual payroll. The MMO uses the prior year's estimated payroll.
- The City's actual contribution includes interest at 9% from July 1 to the payment date. However, no interest accumulates on the MMO if the payment is made by year-end (December 31).
- The MMO reflects amortization of prior years' City contributions above past MMOs as actuarial gains.

The City's unfunded liability payments towards the MMO are summarized in Table 46. These payments reflect the 40-year funding of the July 1, 1985 unfunded actuarial accrued liability with increasing payments at 5.0% — pre-1999 balances were adjusted to reflect the Pension Obligation Bond.

45. MMO calculation for fiscal 2002 (July 1, 2000 valuation report)

	Fiscal 2002 (dollars in thousands)					
	Non-Uniformed	Police	Fire	Total		
Estimated FY 2001 payroll	\$ 810,139	\$ 299,680	\$ 104,077	\$1,213,896		
Normal cost percent	7.529%	11.360%	11.930%	8.796%		
Normal cost	\$ 61,106	\$ 34,234	\$ 12,467	\$ 107,807		
Amortization payment ^a	29,260	39,180	2,652	71,092		
Administrative expense	3,261	1,296	443	5,000		
Subtotal	\$ 93,627	\$ 74,711	\$ 15,561	\$ 183,899		
Expected member contributions	(25,832)	(16,314)	(5,842)	(47,988)		
MMO^b	\$ 67,795	\$ 58,397	\$ 9,719	\$ 135,911		

a. The portion of the unfunded actuarial accrued liability attributable to the Dombrowski class action suit is included in the initial unfunded liability that was established July 1, 1985. For MMO calculations, it is amortized over 40 years ending June 30, 2025 in annual payments increasing 5.0% per year. The City's funding policy, however, amortizes the original Dombrowski liability in level dollar payments over 40 years ending June 30, 2009.

b. Includes general pension state aid and state cost-of-living adjustment reimbursement. For fiscal 2001, the total is \$36,301 (thousands). Also includes quasi agencies.

46. Unfunded liability payments toward MMO for fiscal 2002 (thousands) — July 1, 2000 valuation report

		Municipal					Police					Fire	
	July 1, 2 Remain Balane	ing Years		nortization Payment	Re	ly 1, 2000 emaining Balance	Years Remaining		ortization ayment	Re	y 1, 2000 maining alance	Years Remaining	nortization Payment
Original July 1, 1985 unfunded actuarial accrued liability	\$ 852	,572 25	\$	51,519 ^a	\$	547,303	25	\$	33,072 ^a	\$	218,254	25	\$ 13,189 ^a
July 1, 1986 additional amounts Active (Gain)/loss Subtotal ^b	(9	,293 7 ,441) 2 ,148)	\$ \$	236 (4,924) (4,688)	\$ \$	112 (4,424) (4,312)	7 2	\$ \$	20 (2,308) (2,287)	\$ \$	56 (2,253) (2,197)	7 2	\$ 10 (1,175) (1,165)
July 1, 1987 additional amounts (Gain)/loss	\$ (1	,125) 3	\$	(408)	\$	2,192	3	\$	794	\$	338	3	\$ 121
July 1, 1998 additional amounts	\$ 9	,542 4	\$	2,702	\$	9,002	4	\$	2,549	\$	710	4	\$ 201
July 1, 1989 additional amounts Active (Gain)/loss Assumption change Subtotal ^b	(13	,431 10 ,648) 5 ,568) 10 ,785)	\$	2,816 (993) (3,073) (1,251)	\$	3,476 2,242 (3,946) 1,771	10 5 10	\$	787 1,351 (894) 1,244	\$	1,616 680 (1,582) 714	10 5 10	\$ 366 410 (358) 417
July 1, 1990 additional amount (Gain)/loss	\$ (10	,227) 6	\$	(4,055)	\$	10,754	6	\$	4,264	\$	2,167	6	\$ 859
July 1, 1991 additional amount (Gain)/loss	\$ (2	,654) 7	\$	(801)	\$	(2,601)	7	\$	(785)	\$	(1,179)	7	\$ (356)
July 1, 1992 additional amounts Active (Gain)/loss Subtotal ^b		388 13 ,060 8 ,449	\$ 	63 5,707 5,770	\$ \$	0 (2,721) (2,721)	8	\$ \$	0 (674) (674)	\$ 	0 (1,125) (1,125)	8	\$ 0 (278) (278)

		Municipal			Police			Fire	
	July 1, 2000 Remaining Balance	Years Remaining	Amortization Payment	July 1, 2000 Remaining Balance	Years Remaining	Amortization Payment	July 1, 2000 Remaining Balance	Years Remaining	Amortization Payment
July 1, 1993 additional amounts Nonactive	\$ 65	4	\$ 38	\$ 0		\$ 0	\$ 0		\$ 0
Active	(1,086)	14	(163)	(722)	14	(108)	0		0
(Gain)/loss	(15,916)	9	(3,381)	(12,543)	9	(2,665)	(5,056)	9	(1,074)
Assumption change	(10,690)	14	(1,605)	86	14	13	(1,992)	14	(299)
Subtotal ^b	\$ (27,628)		\$ (5,112)	\$ (13,180)		\$ (2,760)	\$ (7,047)		\$ (1,373)
July 1, 1994 additional amounts (Gain)/loss	\$ (7,824)	10	\$ (1,471)	\$ (1,197)	10	\$ (225)	\$ (4,639)	10	\$ (872)
(Guili) 1033	ψ (7,024)	10	ψ (1,4/1)	ψ (1,177)	10	Ψ (223)	Ψ (4,037)	10	ψ (072)
July 1, 1995 additional amounts									
Active	\$ 418	15	\$ 48	\$ 0		\$ 0	\$ 0		\$ 0
(Gain)/loss	6,530	10	934	439	10	63	(2,834)	10	(405)
Subtotal ^b	\$ 6,949		\$ 981	\$ 439		\$ 63	\$ (2,834)		\$ (405)
July 1, 1996 additional amount									
(Gain)/loss	\$ 4,800	11	\$ 647	\$ 2,356	11	\$ 318	\$ (2,048)	11	\$ (276)
July 1, 1997 additional amount									
Assumption change	\$ 45,966	17	\$ 4,936	\$ 5,625	17	\$ 604	\$ 2,369	17	\$ 254
(Gain)/loss	(52,528)	12	(6,730)	(20,160)	12	(2,583)	(13,477)	12	(1,727)
Subtotal ^b	\$ (6,561)		\$ (1,794)	\$ (14,535)		\$ (1,979)	\$ (11,108)		\$ (1,472)
July 1, 1998 additional amounts									
(Gain)/loss	\$ (15,553)	13	\$ (1,906)	\$ (12,696)	13	\$ (1,556)	\$ (11,412)	13	\$ (1,398)
July 1, 1999 additional amounts									
(Gain)/loss	\$ (132,293)	14	\$ (15,588)	\$ 973	14	\$ 115	\$ (48,023)	14	\$ (5,658)
Active	14,741	19	1,511	0		0	0		0
Nonactive	40,863	9	6,253	18,188	9	2,783	6,751	9	1,033
Subtotal ^b	\$ (76,688)		\$ (7,824)	\$ 19,161		\$ 2,898	\$ 41,271		\$ (4,625)
July 1, 2000 additional amounts									
(Gain)/loss	\$ (26,811)	15	\$ (3,052)	\$ 37,291	15	\$ 4,244	\$ 764	15	\$ 87
Total unfunded actuarial accrued liability ^b	\$ 711,306	_	\$ 29,260	\$ 579,025	_	\$ 39,180	\$ 138,085	_	\$ 2,652

a. Level dollar amortization payment (25 years remaining).
 Municipal — \$43,851

Police — \$28,150

[•] Fire — \$11,226.

b. Numbers may not add because of rounding.

MINIMUM MUNICIPAL OBLIGATION

The following tables are maintained to support Exhibit 1 of the Act 205 filings. Exhibit I of Act 205 develops the City's MMO based on the assumption that the Pension Obligation Bond was never contributed.

- Table 47 Corresponds to Section A of Exhibit I and presents a Summary of Modified Actuarial Data.
- Table 48 Presents various Modified Unfunded Actuarial Accrued Liabilities and Amortization Contributions.
- Table 49 Is used to identify and allocate total debt service requirements for debt issued to finance pension plan contributions.
- Table 50 This is similar to Table 34 —statement of receipts and disbursements, but excluding asset, due to the issuance of a bond.

47. Summary of modified actuarial data

	Municipal	Police	Fire	Total
Actuarial accrued liability	\$3,407,552,000	\$2,029,719,000	\$ 756,137,000	\$6,193,407,000
Market value of assets ^a	\$2,085,054,000	\$1,132,183,000	\$ 477,235,000	\$3,694,472,000
Actuarial value of assets ^a	\$1,912,275,000	\$1,035,652,000	\$ 436,954,000	\$3,384,881,000
Unfunded actuarial accrued liability	\$1,495,277,000	\$ 994,067,000	\$ 319,183,000	\$2,808,526,000
Amortization Contributions				
1/1/85 initial liability				
Remaining amortization period	25	25	25	25
Level dollar contribution	\$ 82,595,000	\$ 53,022,000	\$ 21,144,000	\$ 156,761,000
Payroll-based contribution	\$ 97,038,000	\$ 62,293,000	\$ 24,841,000	\$ 184,172,000
Post-1/1/85 liability				
Remaining amortization period	6	N/A	11	9
Amortization contribution	\$ (24,807,000)	\$ (280,000)	\$ (13,099,000)	\$ (38,186,000)
Total amortization contribution	\$ 72,231,000	\$ 62,013,000	\$ 11,742,000	\$ 145,986,000

a. Must equal the total fund assets that would have existed had the bond issue proceeds not been contributed to the pension fund including adjustments for investment income on the P.O.B. and contributions.

48. Modified unfunded actuarial accrued liability and amortization contributions (thousands)

		Municipal			Police			Fire	
	July 1, 2000 Remaining Balance	Years Remaining	Amortization Payment	July 1, 2000 Remaining Balance	Years Remaining	Amortization Payment	July 1, 2000 Remaining Balance	Years Remaining	Amortization Payment
Original July 1, 1985 unfunded actuarial accrued liability	\$ 1,605,848	25	\$ 97,038	\$ 1,030,863	25	\$ 62,293	\$ 411,088	25	\$ 24,841
All changes prior to July 1, 2000	\$ (93,113)	5	\$ (22,820)	\$ (67,920)	N/A	\$ (3,822)	\$ (94,936)	11	\$ (13,444)
July 1, 2000 additional amounts (Gain)/loss	(17,459)	15	(1,987)	31,124	15	3,542	3,030	15	345
All changes including July 1, 2000 addition	\$ (110,572)	6	\$ (24,807)	\$ (36,796)	N/A	\$ (280)	\$ (91,905)	11	\$ (13,099)

49. Total debt service requirements (municipal)

Plan Year	Required Principal Payment	Required Interest Payment	Premium or Discount Amortized	Principal Balanco at Valuation Date
1999	\$ —	\$ 7,041,525.30	_	\$ 727,185,593.15
2000	9,917,857.50	29,825,175.27	_	717,267,735.65
2001	4,567,730.63	29,324,323.46	_	712,700,005.02
2002	_	29,087,715.02	_	712,700,005.02
2003	6,422,403.75	29,087,715.02	_	706,277,601.27
2004	8,884,981.88	28,728,336.25	_	697,392,619.39
2005	15,161,038.13	28,250,550.75	_	682,231,581.26
2006	18,743,737.50	27,403,048.72	_	663,487,843.76
2007	22,526,257.50	26,345,901.92	_	640,961,586.26
2008	26,486,083.13	25,064,157.87	_	614,475,503.13
2009	30,870,879.38	23,543,856.70	_	583,604,623.75
2010	40,000,711.88	21,756,432.78	_	543,603,911.87
2011	45,151,018.13	19,420,391.21	_	498,452,893.74
2012	22,154,721.72	45,234,066.39	_	476,298,172.02
2013	21,786,233.75	48,416,929.37	_	454,511,938.27
2014	20,545,516.84	50,378,126.28	_	433,966,421.43
2015	20,088,811.07	53,652,021.42	_	413,877,610.36
2016	19,364,886.72	56,464,212.02	_	394,512,723.64
2017	18,085,471.62	57,743,627.12	_	376,427,252.02
2018	16,915,332.51	58,913,766.23	_	359,511,919.51
2019	15,787,131.76	60,041,966.99	_	343,724,787.75
2020	14,758,165.41	61,070,933.33	_	328,966,622.34
2021	13,823,708.03	62,005,390.71	_	315,142,914.31
2022	12,919.375.38	62,909,723.36	_	302,223,538.93
2023	12,071,748.11	63,757,350.63	_	290,151,790.82
2024	11,250,110.80	64,578,987.94	_	278,901,680.02
2025	10,560,195.36	65,268,903.38	_	268,341,484.66
2026	17,271,090.90	58,558,007.84	_	251,070,393.76
2027	60,297,984.38	16,196,263.75	_	190,772,409.38
2028	64,125,534.38	12,367,341.75	_	126,646,875.00
2029	126,646,875.00	4,147,685.16	_	_

49. Total debt service requirements (police)

Plan Year	Required Principal Payment	Required Interest Payment	Premium or Discount Amortized	Principal Balance at Valuation Date
1999	\$ —	\$ 3,848,228.76	_	\$ 397,410,560.15
2000	5,420,158.68	16,299,607.13	_	391,990,401.47
2001	2,496,287.61	16,025,889.30	_	389,494,113.86
2002	_	15,896,581.60	_	389,494,113.86
2003	3,509,875.74	15,896,581.60	_	385,984,238.12
2004	4,855,686.99	15,705,644.36	_	381,128,551.13
2005	8,285,583.09	15,439,067.14	_	372,842,968.04
2006	10,243,546.20	14,975,903.05	_	362,599,421.84
2007	12,310,712.28	14,398,167.04	_	350,288,709.56
2008	14,474,776.77	13,697,687.51	_	335,813,923.79
2009	16,871,089.83	12,866,835.33	_	318,942,842.96
2010	21,860,588.91	11,889,999.22	_	297,082,254.05
2011	24,675,257.01	10,613,340.83	_	272,406,997.04
2012	12,107,666.12	24,720,643.30	_	260,299,330.92
2013	11,906,285.60	26,460,093.82	_	248,393,045.32
2014	11,228,227.61	27,531,897.73	_	237,164,817.71
2015	10,978,635.63	29,321,097.79	_	226,186,182.08
2016	10,583.077.35	30,857,974.00	_	215,603,174.73
2017	9,883,800.61	31,557,180.75	_	205,719,374.12
2018	9,244,313.74	32,196,667.62	_	196,475,060.38
2019	8,627,746.39	32,813,234.97	_	187,847,313.99
2020	8,065,411.14	33,375,570.22	_	179,781,902.85
2021	7,554,725.51	33,886,255.84	_	172,227,177.34
2022	7,060,503.20	34,380,478.16	_	165,166,674.14
2023	6,597,270.66	34,843,710.70	_	158,569,403.48
2024	6,148,241.77	35,292,739.59	_	152,421,161.71
2025	5,771,199.53	35,669,781.82	_	146,649,962.18
2026	9,438,737.48	32,002,243.88	_	137,211,224.70
2027	32,953,149.75	8,851,339.07	_	104,258,074.95
2028	35,044,924.95	6,758,814.06	_	69,213,150.00
2029	69,213,150.00	2,266,730.66	_	_

49. Total debt service requirements (fire)

Plan Year	Required Principal Payment	Required Interest Payment	Premium or Discount Amortized	Principal Balanc at Valuation Dat
1999	\$ —	\$1,620,185.70	_	\$167,318,251.01
2000	2,282,001.44	6,862,479.41	_	165,036,249.57
2001	1,050,989.88	6,747,238.34	_	163,985,259.69
2002	<u> </u>	6,692,797.06	_	163,985,259.69
2003	1,477,731.92	6,692,797.06	_	162,507,527.77
2004	2,044,346.92	6,612,408.45	_	160,463,180.85
2005	3,488,405.72	6,500,173.80	_	156,974,775.13
2006	4,312,749.60	6,305,171.92	_	152,662,025.53
2007	5,183,070.24	6,061,932.84	_	147,478,955.29
2008	6,094,187.16	5,767,016.15	_	141,384,768.13
2009	7,103,085.64	5,417,209.80	_	134,281,682.49
2010	9,203,770.28	5,005,941.15	_	125,077,912.21
2011	10,388,805.08	4,468,440.96		114,689,107.13
2012	5,097,583.51	10,407,913.67		109,591,523.62
2013	5,012,798.05	11,140,259.13		104,578,725.57
2014	4,727,321.30	11,591,511.24	_	99,851,404.27
2015	4,622,237.80	12,344,802.31	_	95,229,166.47
2016	4,455,669.93	12,991.859.70		90,773,496.54
2017	4,161,289.10	13,286,240.52	<u> </u>	86,612,207.44
2018	3,892,051.60	13,555,478.02	_	82,720,155.84
2019	3,632,463.70	13,815,065.92	_	79,087,692.14
2020	3,395,708.67	14,051,820.95	_	75,691,983.47
2021	3,180,699.22	14,266,830.40	_	72,511,284.25
2022	2,972,621.18	14,474,908.45	_	69,538,663.07
2023	2,777,590.48	14,669,939.14	_	66,761,072.59
2024	2,588,539.82	14,858,989.80	_	64,172,532.77
2025	2,429,797.06	15,017,732.56	_	61,742,735.71
2026	3,973,908.11	13,473,621.52	_	57,768,827.60
2027	13,873,973.00	3,726,600.95	_	43,894,854.60
2028	14,754,654.60	2,845,603.67		29,140,200.00
2029	29,140,200.00	954,341.55	_	_

50. Statement of receipts and disbursements excluding bond issue assets

	Municipal	Police	Fire	
Assets at July 1, 1999	\$ 1,883,254,678	\$ 1,029,630,402	\$ 433,372,937	
Receipts				
Employer contributions	127,566,268	87,915,223	25,218,695	
Employee contributions	27,901,051	16,243,675	6,082,597	
State aid	19,237,063	13,159,944	3,903,964	
Supplemental state assistance	0	0	0	
Investment income (includes investment expenses)	177,209,502	94,496,738	40,637,455	
Net change in market value	89,476,167	48,572,749	20,476,038	
Other receipts	779,162	307,564	105,891	
Total receipts	\$ 442,169,213	\$ 262,695,893	\$ 96,424,640	
Disbursements				
Benefit payments	\$ 234,328,294	\$ 158,051,569	\$ 51,892,932	
Refund of contribution	3,033,175	904,071	260,564	
Administrative expenses	3,008,695	1,187,643	408,896	
Other disbursements	0	0	0	
Total disbursements	\$ 240,370,164	\$ 160,143,283	\$ 52,562,392	
Assets at July 1, 2000	\$ 2,085,053,727	\$ 1,132,183,012	\$ 477,235,185	

Statement Number 25 of the Governmental Accounting Standards Board (GASB 25) is effective for plan years beginning after June 15, 1996 and supersedes Statement Number 5 (GASB 5).

The objective of GASB 25 is to provide a standard for disclosing pension information for the financial reports of governmental pension plans. The financial report should include two financial statements and two required schedules of historical information. The financial statements and required schedules are:

- A *statement of plan net assets* including information about plan assets and liabilities at the reporting date. This information is shown in the Financial Experience of the Fund section of the report.
- A statement of changes in plan net assets including receipts and disbursements. This
 information is also contained in the Financial Experience of the Fund section of the
 report.
- A schedule of funding progress including historical information about the actuarially determined funded status of the plan and the progress made in accumulating sufficient assets. This information should be provided for each of the past six plan years. For the transition year and the following five years the schedules should show information for the current year and as many prior years as available. This schedule is shown in Table 51 below.
- A *schedule of employer contributions* including historical trend information about the Annual Required Contributions (ARC) and the contributions made by the employer in relation to the ARC. This information is shown in Table 52.

51. Schedule of funding progress (dollars in millions)

Actuarial Valuation Date	Actuarial Value Of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b-a)/c)
7/1/92	\$1,981.8	\$4,425.5	\$2,443.7	44.78%	\$ 993.3	246.02%
7/1/93	2,113.9	4,502.1	2,388.2	46.95%	975.0	244.94%
7/1/94	2,225.2	4,662.6	2,437.4	47.72%	974.3	250.17%
7/1/95	2,312.1	4,850.8	2,538.7	47.66%	1,006.4	252.26%
7/1/96	2,457.2	5,098.1	2,640.9	48.20%	1,068.3	247.21%
7/1/97	2,660.9	5,318.1	2,657.2	50.03%	1,067.7	248.87%
7/1/98	2,921.3	5,586.1	2,664.8	52.30%	1,128.2	236.19%
7/1/99	4,496.8	5,862.1	1,365.3	76.71%	1,178.6	115.84%
7/1/00	4,765.0	6,193.4	1,428.4	76.94%	1,142.8	124.99%

52. Schedule of contributions from the employer and other contributing entities

Fiscal Year	Annual Required Contributions ^a	Percentage Contributed		
1993	\$ 209,352	100.0%		
1994	\$ 223,750	104.5%		
1995	\$ 212,838	100.0%		
1996	\$ 222,482	100.0%		
1997	\$ 237,016	100.0%		
1998	\$ 252,080	100.0%		
1999	\$ 256,704	586.9% ^b		
2000	\$ 168,928	108.9%		

- a. Dollars in thousands. For each year, the actuarial valuation provides the City of Philadelphia with the unfunded actuarial accrued liability amortization payment as a dollar amount and the normal cost as a percentage of payroll. The City of Philadelphia then multiplies their actual fiscal year payroll with that percentage to get the normal cost payment. We determined the annual required contribution as the greater of (i) the resulting amount or (ii) the normal cost plus a 40-year amortization of the unfunded actuarial accrued liability with amortization payments increasing 5% per year.
- b. On February 2, 1999, the City deposited a Pension Obligation Bond worth \$1,250,000,000.

Statement No. 27 disclosure

Under Government Accounting Standards Board (GASB) Statement No. 27 for the period beginning after June 15, 1997 financial statements must include new standard reporting for pension expenditures/expenses. This section summarizes our valuation as we understand Statement No. 27. Because these are financial statement disclosures, our interpretation of the statements are subject to your auditor's review.

The reporting elements are:

• Annual required contributions or ARC — this is the anticipated required contribution based on statement specific valuation methods, valuation assumptions and unfunded liability amortization over a period, not to exceed forty years as a level payment or level percent of pay, and amortization of contribution deficiencies or excesses.

Your valuation method conforms to the entry age cost method as defined in Section B of Statement 27. Unfunded actuarial accrued liabilities are funded on average over 18 years from July 1, 2000. Assets are valued as a five-year smoothing of gains and losses on the market value. All assumptions used in the calculation of the valuation reflect our long term expectations.

GOVERNMENTAL ACCOUNTING STANDARDS BOARD (GASB)

• **Net Pension Obligation or NPO** — is made up of a transition liability or asset equal to the accumulated value of contribution deficiencies or excesses over required contributions from July 1, 1987 to Statement effective date (July 1, 1997) between the annual pension cost (discussed below) and the employer's contribution.

During the 1994 fiscal year, the City contributed \$10,000,000 more than the ARC. Therefore, the initial NPO value at the effective date is \$(9,012,000) as shown in Table 54 below.

Annual pension cost — is equal to the ARC plus one year's interest on NPO and ARC adjustment to avoid double counting of NPO and interest on NPO.

The following table summarizes the GASB Statement disclosure for fiscal years 1994 through 2000.

53. Calculation of annual pension cost (dollars in thousands)

	1994	1995	1996	1997	1998	1999	2000
ARC Interest on NPO Adjustment to ARC	\$ 223,750 	\$212,838 (900) 1,241	\$ 222,482 (869) 1,198	\$ 237,016 (840) 	\$ 252,080 (811) 	\$ 256,704 (783) 1,080	\$ 168,928 (113,257) 156,130
Annual pension cost Contributions made	\$ 223,750 233,750	\$213,179 212,838	\$ 222,811 	\$ 237,334 	\$ 252,387 252,080	\$ 257,001 	\$ 211,801 183,928
Increase in NPO NPO at beginning of year	(10,000)	341 (10,000)	329 (9,659)	318 (9,330)	307 (9,012)	(1,249,703) (8,705)	27,873 (1,258,408)
NPO at end of year	(10,000)	(9,659)	(9,330)	(9,012) ^a	(8,705)	(1,258,408)	(1,230,535)
Interest rate 15-year amortization	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%
factor (EOY)	8.06	8.06	8.06	8.06	8.06	8.06	8.06

a. \$(9,012,000) is the NPO at transition date.