

✓ 1/18/89

February 16, 1989

Foster Higgins

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

Ladies and Gentlemen:

We respectfully present the results of our actuarial valuation as of July 1, 1988 of the City of Philadelphia Municipal Retirement System.

The employee data and the financial information used in this report were provided by the City and the Board of Pensions and Retirement. The actuarial valuation report may be used to support contributions to the Retirement System for the fiscal year ending June 30, 1990.

A summary of the determinations made in this actuarial valuation is as follows (\$000 omitted in numbers shown):

Net Actuarial Accrued Liability as of July 1, 1988	\$3,519,251
---	-------------

Assets as of July 1, 1988 for Valuation Purposes	\$1,555,808
---	-------------

Unfunded Actuarial Accrued Liability as of July 1, 1988	\$1,963,442
--	-------------

City Normal Cost as a Percent of Payroll
for the Year, Assuming Payment is Made
at Beginning of Year (Before Deduction
of Contributions from Commonwealth of
Pennsylvania):

1967 Plan

Municipal Division	6.694%
Police Division	9.167
Fire Division	9.081

Plan 87

Municipal Division	5.402%
Elected Division	5.944
Police Division	7.260
Fire Division	6.802

<u>Combined Plans</u>	7.405%
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February 16, 1989
Board of Pensions and Retirement
Page 2

The actuarial assumptions underlying these calculations represent, in the aggregate, the actuary's best estimate of anticipated future experience of the Retirement System. There have been no changes in actuarial assumptions from those used in the July 1, 1987 valuation except for those new assumptions required for the Elected Officials group.

The City's funding policy provides for (i) payment of the normal cost in accordance with the calculations made by the actuary plus (ii) level dollar payments toward amortization of the Bogen and Dombrowski unfunded actuarial accrued liabilities plus (iii) payments increasing 6.0% per annum toward the amortization of the unfunded actuarial accrued liability established on July 1, 1985 plus (iv) level dollar payments toward amortization of any plan changes or actuarial gains and losses which occur after July 1, 1985.

For the year beginning July 1, 1989 and ending June 30, 1990, these requirements provide for the following payments:

Annual Payment Toward
Unfunded Actuarial Accrued Liability
(\$000 Omitted)

	Payments	
	Beginning of Year	End of Year
Dombrowski Liability	\$ 3,498	\$ 3,813
Bogen Liability	4,618	5,034
Initial July 1, 1985 Unfunded Liability	95,935	104,569
Changes Effective July 1, 1986	(12,275)	(13,380)
Changes Effective July 1, 1987	2,479	2,702
Changes Effective July 1, 1988	<u>11,362</u>	<u>12,384</u>
Total Payment	\$105,617	\$115,122

February 16, 1989
Board of Pensions and Retirement
Page 3

This report contains supporting data and background material pertinent to the determination of the normal cost and accrued liabilities of the Retirement System.

Respectfully submitted by:

A. FOSTER HIGGINS & CO., INC.



Albert Pike, 3rd, F.C.A.
Principal

AP/ELY/sdt
PCYA/VAL/89/1A

CITY OF PHILADELPHIA
MUNICIPAL RETIREMENT SYSTEM

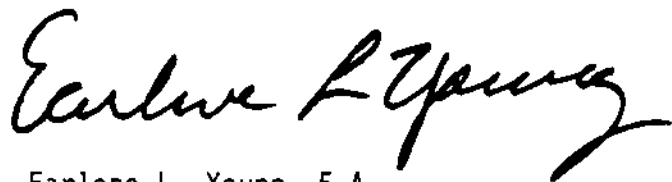
ACTUARIAL VALUATION REPORT

AS OF

JULY 1, 1988

Prepared by:

A. FOSTER HIGGINS & CO., INC.



Earlene L. Young, E.A.
Consultant



Albert Pike, 3rd, F.C.A.
Principal

February 16, 1989
[Revised February 28, 1989]
Washington, D.C.

Foster Higgins

Foster Higgins

February 16, 1989
[Revised February 28, 1989]

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City of Philadelphia
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Net Actuarial Accrued Liability as of July 1, 1988	\$3,519,251
---	-------------

Assets as of July 1, 1988 for Valuation Purposes	\$1,548,541
---	-------------

Unfunded Actuarial Accrued Liability as of July 1, 1988	\$1,970,709
--	-------------

City Normal Cost as a Percent of Payroll
for the Year, Assuming Payment is Made
at Beginning of Year (Before Deduction
of Contributions from Commonwealth of
Pennsylvania):

1967 Plan

Municipal Division	6.694%
Police Division	9.167
Fire Division	9.081

Plan 87

Municipal Division	5.402%
Elected Division	5.944
Police Division	7.260
Fire Division	6.802

<u>Combined Plans</u>	7.405%
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February 16, 1989
 [Revised February 28, 1989]
 Board of Pensions and Retirement
 Page 2

The actuarial assumptions underlying these calculations represent, in the aggregate, the actuary's best estimate of anticipated future experience of the Retirement System. There have been no changes in actuarial assumptions from those used in the July 1, 1987 valuation except for those new assumptions required for the Elected Officials group.

The City's funding policy provides for (i) payment of the normal cost in accordance with the calculations made by the actuary plus (ii) level dollar payments toward amortization of the Bogen and Dombrowski unfunded actuarial accrued liabilities plus (iii) payments increasing 6.0% per annum toward the amortization of the unfunded actuarial accrued liability established on July 1, 1985 plus (iv) level dollar payments toward amortization of any plan changes or actuarial gains and losses which occur after July 1, 1985.

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Unfunded Actuarial Accrued Liability
 (\$000 Omitted)

	Payments	
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Changes Effective July 1, 1986	(12,275)	(13,380)
Changes Effective July 1, 1987	2,479	2,702
Changes Effective July 1, 1988	<u>12,263</u>	<u>13,367</u>
Total Payment	\$106,518	\$116,105

February 16, 1989
[Revised February 28, 1989]
Board of Pensions and Retirement
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This report contains supporting data and background material pertinent to the determination of the normal cost and accrued liabilities of the Retirement System.

Respectfully submitted by:

A. FOSTER HIGGINS & CO., INC.

A handwritten signature in black ink, reading "Albert Pike, 3rd". The signature is fluid and cursive, with the last name "Pike" being the most prominent part.

Albert Pike, 3rd, F.C.A.
Principal

AP/ELY/lrh
PCYA/VAL/89/1A

February 16, 1989
[Revised February 28, 1989]

Foster Higgins

Board of Pensions and Retirement
City of Philadelphia
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Net Actuarial Accrued Liability as of July 1, 1988	\$3,519,251
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Assets as of July 1, 1988 for Valuation Purposes	\$1,548,541
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Unfunded Actuarial Accrued Liability as of July 1, 1988	\$1,970,709
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City Normal Cost as a Percent of Payroll
for the Year, Assuming Payment is Made
at Beginning of Year (Before Deduction
of Contributions from Commonwealth of
Pennsylvania):

1967 Plan

Municipal Division	6.694%
Police Division	9.167
Fire Division	9.081

Plan 87

Municipal Division	5.402%
Elected Division	5.944
Police Division	7.260
Fire Division	6.802

<u>Combined Plans</u>	7.405%
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February 16, 1989
 [Revised February 28, 1989]
 Board of Pensions and Retirement
 Page 2

The actuarial assumptions underlying these calculations represent, in the aggregate, the actuary's best estimate of anticipated future experience of the Retirement System. There have been no changes in actuarial assumptions from those used in the July 1, 1987 valuation except for those new assumptions required for the Elected Officials group.

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For the year beginning July 1, 1989 and ending June 30, 1990, these requirements provide for the following payments:

Annual Payment Toward
Unfunded Actuarial Accrued Liability
 (\$000 Omitted)

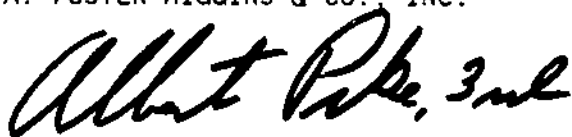
	Payments	
	Beginning of Year	End of Year
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Bogen Liability	4,618	5,034
Initial July 1, 1985 Unfunded Liability	95,935	104,569
Changes Effective July 1, 1986	(12,275)	(13,380)
Changes Effective July 1, 1987	2,479	2,702
Changes Effective July 1, 1988	<u>12,263</u>	<u>13,367</u>
Total Payment	\$106,518	\$116,105

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This report contains supporting data and background material pertinent to the determination of the normal cost and accrued liabilities of the Retirement System.

Respectfully submitted by:

A. FOSTER HIGGINS & CO., INC.

A handwritten signature in cursive script that reads "Albert Pike, 3rd".

Albert Pike, 3rd, F.C.A.
Principal

AP/ELY/lrh
PCYA/VAL/89/1A

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PART I
SUMMARY AND ANALYSIS OF FINDINGS

This part presents a summary and analysis of the findings of the actuarial valuation as of July 1, 1988 of the City of Philadelphia Municipal Retirement System.

A. Summary of Findings

A summary of the findings of the actuarial valuation for all divisions combined is presented in the following table. The results, determined as of July 1, 1988, are the basis upon which the City contributions for the fiscal year beginning July 1, 1989 and ending June 30, 1990 will be calculated. The valuation reflects the funding requirements of the Municipal Pension Plan Funding Standard and Recovery Act (Act 205) enacted December 18, 1984.

July 1, 1988 Actuarial Valuation
(\$000 Omitted)

1. Participants	
a. Active	33,063
b. Retired and Beneficiaries	21,502
c. Disabled	4,420
d. Terminated Vested	495
e. Total	<u>59,480</u>
2. Total Annual Salaries	\$ 896,788
3. Net Actuarial Accrued Liability	\$3,519,251
4. Assets for Valuation Purposes	\$1,548,541
5. Unfunded Actuarial Accrued Liability	\$1,970,709
6. City Normal Cost as of Percent of Payroll (Before Deduction of Contributions from Commonwealth)	
a. Assuming Beginning of Year Payment	7.405%
b. Assuming End of Year Payment	8.071%

Part II presents further detail with respect to these determinations. In addition, it includes a comparison between official funding policies with funding standards specified under generally accepted accounting principles (GAAP) and the estimated progress of the fund for the 20-year period of July 1, 1988 through June 30, 2008.

B. Analysis of Findings

A comparison of the current, July 1, 1988, valuation with the prior, July 1, 1987, valuation is as follows:

	Valuation (\$000 Omitted)		
	July 1, 1987	July 1, 1988	Change
City Normal Cost Rate Assuming Payment at Beginning of Year			
<u>1967 Plan:</u>			
Municipal Division	6.586%	6.694%	+.108%
Police Division	9.175	9.167	-.008
Fire Division	9.066	9.081	+.015
<u>Plan 87:</u>			
Municipal Division	5.102%	5.402%	+.300%
Elected	N/A	5.944	N/A
Police Division	7.694	7.260	-.434
Fire Division	<u>7.067</u>	<u>6.802</u>	<u>-.265</u>
Total	7.406	7.405	-.001
July 1, 1988 Unfunded Actuarial Accrued Liability			
	\$1,871,858	\$1,970,709	\$98,851

The above changes are the result of actuarial experience during the year and benefit modifications adopted during the year.

Actuarial experience during the year was unfavorable in the aggregate. The primary sources of loss were investment performance and non-economic actuarial experience. A major factor was attributable to investment experience of 6.3% on an adjusted market-value basis compared to an assumed rate of 9%.

The increased cost also reflects the addition of elected officials with prior service.

This investment loss would have been much greater were it not for the fact that the Board, in 1986, adopted a method for valuing assets for valuation purposes which averages unrealized gains and losses over three years. The actual yield on a market-value basis was 1.0% reflecting the stock market "crash" in October 1987.

Additional losses due to non-economic sources were due to a combination of the rates of retirements, deaths, disabilities, and non-vested terminations being different than those anticipated by the actuarial assumptions. The loss from non-economic sources was much larger than normal and is not expected to be recurring.

RESULTS OF JULY 1, 1988 ACTUARIAL VALUATION

	<u>NORMAL COST RATE (END OF YEAR)</u>	<u>UNFUNDED ACTUARIAL ACCRUED LIABILITY (\$000 OMITTED)</u>
1. Expected July 1, 1988 Results Based on July 1, 1987 Valuation Report	7.406%	\$1,871,858
2. Impact of Actuarial Experience:		
a. Investment Return	--%	\$ +41,286
b. Salary Increases	--	- 6,988
c. Bond Immunization Adjustment	--	+ 3,943
d. Other Actuarial Experience	-.004	+59,513
e. Addition of Elected Officials	<u>+.003</u>	<u>+ 1,097</u>
f. Subtotal	-.001%	\$ 98,851
3. July 1, 1988 Valuation Results: (1) + (2)	7.405%	\$1,970,709

C. Employee Contributions

The following table shows employee contributions as of July 1, 1988:

	<u>Municipal</u>	<u>Elected</u>	<u>Police</u>	<u>Fire</u>
1967 Plan	3.74%	--	6.00%	6.00%
Plan 87	2.32%	9.38%	5.00%	5.00%

For Plan 87, municipal employees are to contribute 30% of the gross normal cost. Police and firefighters are to contribute 5% of pay, but not less than 30% or more than 50% of gross normal cost. Elected officials contribute 30% of the gross normal cost calculated under the municipal plan plus 100% of the gross normal cost due to additional benefits payable under the elected officials plan.

D. Funding Method

Act 205 generally requires that the unfunded actuarial accrued liability be funded in annual level dollar payments. Because the City of Philadelphia has been classified as a Distress Level III municipality, it is exempted from this requirement with respect to unfunded liabilities as of July 1, 1985 and may amortize the unfunded actuarial accrued liability as follows:

1. The remaining July 1, 1985 unfunded actuarial accrued liability (net of the Bogen and Dombrowski class action obligations) is amortized over 40 years ending June 30, 2019 in annual payments increasing 6% per annum.
2. Changes in the actuarial accrued liability realized after July 1, 1985 are amortized in level dollar payments over the period of years shown as follows:

a. Changes in actuarial assumptions	20 years
b. Experience gains and losses	15 years
c. Benefit modifications for active members	20 years
d. Benefit modifications for non-active members	10 years

As mentioned previously, the results of this valuation determine the City's contribution requirements for the fiscal year ending June 30, 1990. Because of the one-year delay in the recognition of the report's findings, the unfunded actuarial accrued liability is adjusted from July 1, 1988 to July 1, 1989 to recognize the one-year delay. The following table summarizes the derivation of the unfunded actuarial accrued liability payment for the fiscal year ending June 30, 1990:

Total Annual Payment for
Fiscal Year Ending June 30, 1990
Toward the Unfunded Actuarial Accrued Liability
(\$000 Omitted)

	<u>End-of-Year Payments</u>
1. Expected July 1, 1988 Payment Based on July 1, 1987 Actuarial Valuation:	
a. Dombrowski	\$ 3,813
b. Bogen	5,034
c. Remaining	93,891
d. Subtotal	<u>\$102,738</u>
2. Changes in Payment Based on July 1, 1987 Actuarial Valuation:	
(Gains)/Losses (15-Year Amortization)	\$ 13,367
3. Total Annual Payment Based on July 1, 1988 Valuation: (1d) + (2)	 \$116,105

E. Other Report Sections

Part III presents various supporting tables including an employee age/service "scatter" along with salaries by age groupings and by service groupings. In addition, tables showing current pension amounts by age are presented.

Part IV summarizes certain financial information, including a statement of assets and a statement of receipts and disbursements for the fiscal year ending June 30, 1988.

Part V presents the salient features of the Retirement System on which valuation determinations are based, and Part VI presents the actuarial cost method, factors and assumptions used in determining costs.

Part VII of the report presents the actuarial present value of projected benefit obligation determined in accordance with Statement No. 5 of the Government Accounting Standards Board. This Part reflects a measurement of the accrued benefits for the Retirement System as of July 1, 1988 and relates the value of these accrued benefits to the cost value of funds on hand.

Reference to the first section of Part VII will show the actuarial present value of projected benefit obligations to be \$3,423,465,000. The vested accrued liability as of July 1, 1988 is \$2,785,989,000. This compares with the cost value of fund assets of \$1,463,942,000.

PART II
DERIVATION OF COSTS

The purpose of this part is to present the costs of the Retirement System. Cost estimates have been determined on the basis of the entry age actuarial cost method. The cost estimates derived in this July 1, 1988 actuarial valuation will be used as the basis for pension costs for the fiscal year ending June 30, 1989. Pension costs are made up of two components, the normal cost and the payment towards the unfunded actuarial accrued liability.

Derivation of Normal Cost

The normal cost is determined as the sum of the individual normal costs determined for each member based on the assumption that the plan had always been in existence and the actuarial assumptions underlying the cost determinations had been exactly realized. Benefits payable under all circumstances (i.e., retirement, death, disability and termination) are included in the calculations. From this result is subtracted the anticipated employee contributions to be made during the year to determine the City normal cost (before deducting contributions from the Commonwealth of Pennsylvania). The City normal cost is divided by total payroll to determine the normal cost as a percent of pay for each division and the entire System.

Derivation of the Unfunded Actuarial Accrued Liability

The actuarial accrued liability is determined as the sum of the actuarial present value of all normal costs which would have accumulated if the assumed normal cost had always been contributed in the past and the actuarial assumptions had been exactly realized.

The valuation assets which are compared to liabilities are determined at adjusted market value as of July 1, 1988. As such, the fixed income portion of the assets reflects current market value rates of return. The liabilities, on the other hand, have been determined assuming the valuation interest rate assumption of 9%. In order that both assets and liabilities be valued on the same basis, the portion of the fixed income portfolio which can be matched with expected future payments is determined based upon the valuation interest rate, 9%, and the difference between this value of assets and the market value of assets is subtracted from the accrued liability.

From the accrued liability is further subtracted the assets of the fund to determine the unfunded actuarial accrued liability as of the valuation date.

Experience gains and losses are determined as the difference between the expected unfunded actuarial accrued liability and the actual unfunded actuarial accrued liability (as determined in the preceding paragraphs) both calculated as of 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 portion of the unfunded actuarial accrued liability attributable to the Bogen class action suit is amortized in level dollar payments over 20 years ending June 30, 1992. The remaining July 1, 1985 unfunded actuarial accrued liability is amortized over 40 years ending June 30, 2019 in annual payments increasing 6.0% per annum. Changes in the actuarial accrued liability realized after July 1, 1985 are amortized in level dollar payments over the period of years shown on the following page.

- a. Changes in actuarial assumptions: 20 years
- b. Experience gains and losses: 15 years
- c. Benefit modifications applicable to active members: 20 years
- d. Benefit modifications applicable to non-active members: 10 years

A detailed analysis of the derivation of plan costs is presented in the following Tables 1 through 6.

TABLE 1
DERIVATION OF NORMAL COST AS OF JULY 1, 1988 1/
(\$000 OMITTED)

	1967 PLAN			PLAN 87				TOTAL
	MUNICIPAL	POLICE	FIRE	MUNICIPAL	ELECTED	POLICE	FIRE	
1. Number of Active Members	22,723	6,320	2,492	1,147	11	288	82	33,063
2. Total Normal Cost								
a. Service Retirement	\$ 39,782	\$ 21,332	\$ 8,167	\$ 1,127	\$ 58	\$ 506	\$ 134	\$ 71,106
b. Pre-Retirement Death	3,371	956	372	107	4	31	9	4,848
c. Disability Retirement	7,793	5,489	2,106	209	5	189	51	15,841
d. Vested Termination	6,088	576	234	262	1	125	37	7,323
e. Refund of Non-Vested Members' Contributions	2,366	461	194	68	2	32	8	3,130
f. Health Care Benefit	0	40	16	0	0	2	1	58
g. Administrative Expenses	2,343	836	329	69	1	17	5	3,600
h. Total	\$ 61,741	\$ 29,638	\$ 11,418	\$ 1,842	\$ 71	\$ 902	\$ 244	\$ 105,907
3. Expected Employee Contributions	\$ 22,142	\$ 11,745	\$ 4,543	\$ 553	\$ 43	\$ 368	\$ 103	\$ 39,496
4. City Normal Cost: (2h) - (3)	\$ 39,600	\$ 17,944	\$ 6,876	\$ 1,289	\$ 27	\$ 534	\$ 141	\$ 66,411
5. Current Total Annual Payroll	\$591,579	\$195,743	\$75,710	\$23,868	\$461	\$7,359	\$2,069	\$896,788
6. City Normal Cost as a Percent of Pay Assuming Payment at Beginning of Year: (4) / (5)	6.694%	9.167%	9.081%	5.402%	5.944%	7.260%	6.802%	7.405%
7. City Normal Cost as a Percent of Pay Assuming Payment at End of Year: (6) x 1.09	7.296%	9.992%	9.899%	5.888%	6.479%	7.913%	7.414%	8.071%

1/ Numbers may not add due to rounding.

TABLE 2
DERIVATION OF UNFUNDED ACTUARIAL
ACCRUED LIABILITY AS OF JULY 1, 1988 1/
(\$000 OMITTED)

	1967 PLAN			PLAN 87				TOTAL
	MUNICIPAL	POLICE	FIRE	MUNICIPAL	ELECTED	POLICE	FIRE	
1. Number of Members								
a. Active	22,723	6,320	2,492	1,147	11	288	82	33,063
b. Retired	13,629	5,430	2,443	0	0	0	0	21,502
c. Disabled	1,972	1,965	483	0	0	0	0	4,420
d. Terminated Vested	386	92	17	0	0	0	0	495
e. Total	38,709	13,807	5,435	1,147	11	288	82	59,480
2. Total Annual Benefits								
a. Retired	\$ 90,277	\$ 53,956	\$ 21,830	\$ 0	\$ 0	\$ 0	\$ 0	\$ 166,063
b. Disabled	15,500	19,475	5,411	0	0	0	0	40,385
c. Terminated Vested	2,500	496	90	0	0	0	0	3,076
d. Total	\$ 108,277	\$ 73,926	\$ 27,321	\$ 0	\$ 0	\$ 0	\$ 0	\$ 209,524
3. Present Value of Benefits								
a. Active Members								
(i) Service Retirement	\$1,180,753	\$ 663,396	\$273,020	\$13,676	\$1,428	\$ 6,801	\$1,919	\$2,140,993
(ii) Pre-Retirement Death	82,906	20,869	8,444	1,338	73	410	123	114,163
(iii) Disability Retirement	182,953	113,536	44,855	2,708	111	2,507	721	347,391
(iv) Vested Termination	130,314	8,033	2,802	3,378	24	1,739	542	146,832
(v) Refund of Non-Vested Members' Contributions	7,693	788	145	780	5	413	109	9,933
(vi) Health Care Benefit	0	663	265	0	0	32	9	969
(vii) Subtotal	\$1,584,619	\$ 807,285	\$329,530	\$21,880	\$1,642	\$11,903	\$3,424	\$2,760,281
b. Non-Active Members								
(i) Service Retired	\$ 714,654	\$ 476,811	\$176,501	\$ 0	\$ 0	\$ 0	\$ 0	\$1,367,966
(ii) Disabled	127,513	168,730	46,082	0	0	0	0	342,325
(iii) Terminated Vested	15,372	5,316	856	0	0	0	0	21,544
(iv) Non-Vested Members' Contributions	849	65	11	0	0	0	0	925
(v) Health Care Benefit	0	3,225	1,433	0	0	0	0	4,658
(vi) Subtotal	\$ 858,390	\$ 654,146	\$224,882	\$ 0	\$ 0	\$ 0	\$ 0	\$1,737,418
c. Total	\$2,443,009	\$1,461,431	\$554,413	\$21,880	\$1,642	\$11,903	\$3,424	\$4,497,702
4. Present Value of Future Normal Costs								
a. Service Retirement	\$ 377,870	\$ 189,444	\$ 68,287	\$13,208	\$ 422	\$ 6,548	\$1,785	\$ 657,564
b. Pre-Retirement Death	34,275	8,468	3,101	1,301	27	403	117	47,692
c. Disability Retirement	79,940	48,765	17,605	2,640	38	2,456	677	152,121
d. Vested Termination	67,537	5,202	1,888	3,299	11	1,713	505	80,155
e. Refund of Non-Vested Members' Contributions	23,716	3,905	1,515	770	15	405	102	30,428
f. Health Care Benefit	0	351	131	0	0	32	9	523
g. Total	\$ 583,338	\$ 256,136	\$ 92,526	\$21,219	\$ 514	\$11,557	\$3,196	\$ 968,484

1/ Numbers may not add due to rounding.

TABLE 2 (CONTINUED)
DERIVATION OF UNFUNDED ACTUARIAL
ACCURED LIABILITY AS OF JULY 1, 1988 1/
(\$000 OMITTED)

	1967 PLAN			PLAN 87				TOTAL
	MUNICIPAL	POLICE	FIRE	MUNICIPAL	ELECTED	POLICE	FIRE	
5. Actuarial Accrued Liability: (3) - (4)								
a. Active Members								
(i) Service Retirement	\$ 802,883	\$ 473,952	\$ 204,733	\$ 468	\$1,006	\$ 253	\$134	\$1,483,429
(ii) Pre-Retirement Death	48,631	12,401	5,343	37	46	7	6	66,471
(iii) Disability Retirement	103,013	64,771	27,250	68	73	51	44	195,270
(iv) Vested Termination	62,777	2,831	914	79	13	26	37	66,677
(v) Refund of Non-Vested Members' Contributions	(16,023)	(3,117)	(1,370)	10	(10)	8	7	(20,495)
(vi) Health Care Benefit	0	312	134	0	0	0	0	446
(vii) Subtotal	\$1,001,281	\$ 551,149	\$ 237,004	\$ 661	\$1,128	\$ 346	\$228	\$1,791,797
b. Non-Active Members								
(i) Service Retired	\$ 714,654	\$ 476,811	\$ 176,501	\$ 0	\$ 0	\$ 0	\$ 0	\$1,367,966
(ii) Disabled	127,513	168,730	46,082	0	0	0	0	342,325
(iii) Terminated Vested	15,372	5,316	856	0	0	0	0	21,544
(iv) Non-Vested Members' Contributions	849	65	11	0	0	0	0	925
(v) Health Care Benefit	0	3,225	1,433	0	0	0	0	4,658
(vi) Subtotal	\$ 858,390	\$ 654,146	\$ 224,882	\$ 0	\$ 0	\$ 0	\$ 0	\$1,737,418
c. Total	\$1,859,671	\$1,205,295	\$ 461,886	\$ 661	\$1,128	\$ 346	\$228	\$3,529,215
6. Rationalization of Retiree Li- ability to Market Return Basis	\$ (4,923)	\$ (3,752)	\$ (1,290)	\$ 0	\$ 0	\$ 0	\$ 0	\$ (9,964)
7. Net Actuarial Accrued Liability: (5) + (6)	\$1,854,748	\$1,201,544	\$ 460,596	\$ 661	\$1,128	\$ 346	\$228	\$3,519,251
8. Assets for Valuation Purposes	\$ 837,814	\$ 505,435	\$ 202,831	\$1,394	\$ 31	\$ 769	\$269	\$1,548,541
9. Unfunded Actuarial Accrued Liability: (7) - (8)	\$1,016,935	\$ 696,109	\$ 257,766	\$ (732)	\$1,097	\$ (423)	\$ (41)	\$1,970,709

1/ Numbers may not add due to rounding.

TABLE 3
DEVELOPMENT OF THE EXPECTED UNFUNDED ACTUARIAL
ACCRUED LIABILITY FOR FISCAL YEAR ENDING JUNE 30, 1990 1/
(\$000 OMITTED)

	1967 PLAN			PLAN 87				TOTAL
	MUNICIPAL	POLICE	FIRE	MUNICIPAL	ELECTED	POLICE	FIRE	
1. Expected July 1, 1988 Unfunded Actuarial Accrued Liability Based on July 1, 1987 Valuation	\$ 967,798	\$651,490	\$252,358	\$ 1	\$ 0	\$ 63	\$ 148	\$1,871,858
2. Change in July 1, 1988 Unfunded Actuarial Accrued Liability Due to Actuarial Experience	\$ 49,136	\$ 44,618	\$ 5,408	\$ (733)	\$1,097	\$ (486)	\$ (189)	\$ 98,851
3. Changes in July 1, 1988 Unfunded Actuarial Accrued Liability Due to Plan Amendments; Benefit Increases to Certain Non-Active Participants	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
4. Actual Unfunded Actuarial Accrued Liability July 1, 1988: (1) + (2) + (3)	\$1,016,935	\$696,109	\$257,766	\$ (732)	\$1,097	\$ (423)	\$ (41)	\$1,970,709
5. Expected Changes in Unfunded Actuarial Accrued Liability from July 1, 1988 to July 1, 1989:								
a. Interest: .09 x [(2) + (3)]	\$ 4,422	\$ 4,016	\$ 487	\$ (66)	\$ 99	\$ (44)	\$ (17)	\$ 8,897
b. Increase in Unfunded Actuarial Accrued Liability from July 1, 1988 to July 1, 1989 in Accordance with Amortization Schedule Per 1987 Valuation Report	<u>38,462</u>	<u>23,531</u>	<u>9,662</u>	<u>0</u>	<u>0</u>	<u>(2)</u>	<u>(5)</u>	<u>71,648</u>
c. Subtotal	\$ 42,884	\$ 27,547	\$ 10,149	\$ (66)	\$ 99	\$ (46)	\$ (22)	\$ 80,545
6. Expected July 1, 1989 Unfunded Actuarial Accrued Liability: (4) + (5c)	\$1,059,819	\$723,656	\$267,914	\$ (798)	\$1,195	\$ (469)	\$ (63)	\$2,051,254

1/ Numbers may not add due to rounding.

TABLE 4A
DEVELOPMENT OF MUNICIPAL DIVISION (1967 PLAN) ANNUAL PAYMENT TOWARD THE
UNFUNDED ACTUARIAL ACCRUED LIABILITY FOR FISCAL YEAR ENDING JUNE 30, 1990 1/
(\$000 OMITTED)

	OUTSTANDING BALANCE JULY 1, 1988	FISCAL YEAR ENDING JUNE 30, 1990		
		EXPECTED BALANCE JULY 1, 1989	AMORTIZATION PERIOD REMAINING	ANNUAL PAYMENT
1. Expected July 1, 1988 Unfunded Actuarial Accrued Liability Based on July 1, 1987 Valuation:				
a. Dombrowski	\$ 18,702	\$ 18,372	20	\$ 2,013
b. Bogen	8,609	6,726	3	2,657
c. Remaining	<u>940,488</u>	<u>981,162</u>	--	<u>47,088 2/</u>
d. Subtotal	\$ 967,798	\$1,006,260	--	\$51,758
2. Changes in Unfunded Actuarial Accrued Liability as of July 1, 1988:				
a. Non-Active Benefit Changes	\$ 0	\$ 0	10	\$ 0
b. (Gains)/Losses	<u>49,136</u>	<u>53,559</u>	15	<u>6,644</u>
c. Subtotal	\$ 49,136	\$ 53,559	--	\$ 6,644
3. Total: (1d) + (2c)	\$1,016,935	\$1,059,819	--	\$58,402

1/ Numbers may not add due to rounding.

2/ Payment increasing 6% per annum, all other payments are level dollar.

TABLE 4B
DEVELOPMENT OF POLICE DIVISION (1967 PLAN) ANNUAL PAYMENT TOWARD THE
UNFUNDED ACTUARIAL ACCRUED LIABILITY FOR FISCAL YEAR ENDING JUNE 30, 1990 1/
(5000 OMITTED)

	OUTSTANDING BALANCE JULY 1, 1988	EXPECTED BALANCE JULY 1, 1989	FISCAL YEAR ENDING JUNE 30, 1990 AMORTIZATION PERIOD REMAINING	ANNUAL PAYMENT
1. Expected July 1, 1988 Unfunded Actuarial Accrued Liability Based on July 1, 1987 Valuation:				
a. Dombrowski	\$ 11,963	\$ 11,753	20	\$ 1,287
b. Bogen	5,507	4,303	3	1,700
c. Remaining	<u>634,020</u>	<u>658,967</u>	--	<u>34,118 2/</u>
d. Subtotal	\$651,490	\$675,022	--	\$37,105
2. Changes in Unfunded Actuarial Accrued Liability as of July 1, 1988:				
a. Non-Active Benefit Changes	\$ 0	\$ 0	10	\$ 0
b. (Gains)/Losses	<u>44,618</u>	<u>48,634</u>	15	<u>6,033</u>
c. Subtotal	\$ 44,618	\$ 48,634	--	\$ 6,033
3. Total: (1d) + (2c)	\$696,109	\$723,656	--	\$43,139

1/ Numbers may not add due to rounding.

2/ Payment increasing 6% per annum, all other payments are level dollar.

TABLE 4C
DEVELOPMENT OF FIRE DIVISION (1967 PLAN) ANNUAL PAYMENT TOWARD THE
UNFUNDED ACTUARIAL ACCRUED LIABILITY FOR FISCAL YEAR ENDING JUNE 30, 1990 1/
(\$000 OMITTED)

	OUTSTANDING BALANCE JULY 1, 1988	FISCAL YEAR ENDING JUNE 30, 1990		
		EXPECTED BALANCE JULY 1, 1989	AMORTIZATION PERIOD REMAINING	ANNUAL PAYMENT
1. Expected July 1, 1988 Unfunded Actuarial Accrued Liability Based on July 1, 1987 Valuation:				
a. Dombrowski	\$ 4,764	\$ 4,680	20	\$ 513
b. Bogen	2,193	1,713	3	677
c. Remaining	<u>245,401</u>	<u>255,626</u>	--	<u>12,660 2/</u>
d. Subtotal	\$252,358	\$262,019	--	\$13,849
2. Changes in Unfunded Actuarial Accrued Liability as of July 1, 1988:				
a. Non-Active Benefit Changes	\$ 0	\$ 0	10	\$ 0
b. (Gains)/Losses	<u>5,408</u>	<u>5,895</u>	15	<u>731</u>
c. Subtotal	\$ 5,408	\$ 5,895	--	\$ 731
3. Total: (1d) + (2c)	\$257,766	\$267,914	--	\$14,580

1/ Numbers may not add due to rounding.

2/ Payment increasing 6% per annum, all other payments are level dollar.

TABLE 4D

DEVELOPMENT OF MUNICIPAL DIVISION (PLAN 87) ANNUAL PAYMENT TOWARD THE
UNFUNDED ACTUARIAL ACCRUED LIABILITY FOR FISCAL YEAR ENDING JUNE 30, 1990 1/
(\$000 OMITTED)

	OUTSTANDING BALANCE JULY 1, 1988	FISCAL YEAR ENDING JUNE 30, 1990		
		EXPECTED BALANCE JULY 1, 1989	AMORTIZATION PERIOD REMAINING	ANNUAL PAYMENT
1. Expected July 1, 1988 Unfunded Actuarial Accrued Liability Based on July 1, 1987 Valuation	\$ 1	\$ 1	--	\$ 0
2. Changes in Unfunded Actuarial Accrued Liability as of July 1, 1988:				
a. Non-Active Benefit Changes	\$ 0	\$ 0	10	\$ 0
b. (Gains)/Losses	<u>(733)</u>	<u>(799)</u>	15	<u>(99)</u>
c. Subtotal	\$ (733)	\$ (799)	--	\$ (99)
3. Total: (1) + (2c)	\$ (732)	\$ (798)	--	\$ (99)

1/ Numbers may not add due to rounding.

TABLE 4E
DEVELOPMENT OF ELECTED DIVISION (PLAN 87) ANNUAL PAYMENT TOWARD THE
UNFUNDED ACTUARIAL ACCRUED LIABILITY FOR FISCAL YEAR ENDING JUNE 30, 1990 1/
(\$000 OMITTED)

	OUTSTANDING BALANCE JULY 1, 1988	FISCAL YEAR ENDING JUNE 30, 1990		
		EXPECTED BALANCE JULY 1, 1989	AMORTIZATION PERIOD REMAINING	ANNUAL PAYMENT
1. Expected July 1, 1988 Unfunded Actuarial Accrued Liability Based on July 1, 1987 Valuation	\$ 0	\$ 0	--	\$ 0
2. Changes in Unfunded Actuarial Accrued Liability as of July 1, 1988:				
a. Non-Active Benefit Changes	\$ 0	\$ 0	10	\$ 0
b. (Gains)/Losses	<u>1,097</u>	<u>1,195</u>	15	<u>148</u>
c. Subtotal	\$1,097	\$1,195	--	\$148
3. Total: (1) + (2c)	\$1,097	\$1,195	--	\$148

1/ Numbers may not add due to rounding.

TABLE 4F

DEVELOPMENT OF POLICE DIVISION (PLAN 87) ANNUAL PAYMENT TOWARD THE
UNFUNDED ACTUARIAL ACCRUED LIABILITY FOR FISCAL YEAR ENDING JUNE 30, 1990 1/
(5000 OMITTED)

	OUTSTANDING BALANCE JULY 1, 1988	FISCAL YEAR ENDING JUNE 30, 1990		
		EXPECTED BALANCE JULY 1, 1989	AMORTIZATION PERIOD REMAINING	ANNUAL PAYMENT
1. Expected July 1, 1988 Unfunded Actuarial Accrued Liability Based on July 1, 1987 Valuation	\$ 63	\$ 61	--	\$ 8
2. Changes in Unfunded Actuarial Accrued Liability as of July 1, 1988:				
a. Non-Active Benefit Changes	\$ 0	\$ 0	10	\$ 0
b. (Gains)/Losses	(486)	(530)	15	(66)
c. Subtotal	\$(486)	\$(530)	--	\$(66)
3. Total: (1) + (2c)	\$(423)	\$(469)	--	\$(58)

1/ Numbers may not add due to rounding.

TABLE 4C

DEVELOPMENT OF FIRE DIVISION (PLAN 87) ANNUAL PAYMENT TOWARD THE
UNFUNDED ACTUARIAL ACCRUED LIABILITY FOR FISCAL YEAR ENDING JUNE 30, 1990 1/
(\$000 OMITTED)

	OUTSTANDING BALANCE JULY 1, 1988	FISCAL YEAR ENDING JUNE 30, 1990		
		EXPECTED BALANCE JULY 1, 1989	AMORTIZATION PERIOD REMAINING	ANNUAL PAYMENT
1. Expected July 1, 1988 Unfunded Actuarial Accrued Liability Based on July 1, 1987 Valuation	\$ 148	\$ 143	--	\$ 18
2. Changes in Unfunded Actuarial Accrued Liability as of July 1, 1988:				
a. Non-Active Benefit Changes	\$ 0	\$ 0	10	\$ 0
b. (Gains)/Losses	<u>(189)</u>	<u>(206)</u>	15	<u>(26)</u>
c. Subtotal	\$ (189)	\$ (206)	--	\$ (26)
3. Total: (1) + (2c)	\$ (41)	\$ (63)	--	\$ (7)

1/ Numbers may not add due to rounding.

TABLE 4H
DEVELOPMENT OF TOTAL ANNUAL PAYMENT TOWARD THE
UNFUNDED ACTUARIAL ACCRUED LIABILITY FOR FISCAL YEAR ENDING JUNE 30, 1990 1/
(\$000 OMITTED)

	OUTSTANDING BALANCE JULY 1, 1988	EXPECTED BALANCE JULY 1, 1989	FISCAL YEAR ENDING JUNE 30, 1989 AMORTIZATION PERIOD REMAINING	ANNUAL PAYMENT
1. Expected July 1, 1988 Unfunded Actuarial Accrued Liability Based on July 1, 1987 Valuation:				
a. Dombrowski	\$ 35,429	\$ 34,805	20	\$ 3,813
b. Bogen	16,308	12,742	3	5,034
c. Remaining	<u>1,820,121</u>	<u>1,895,959</u>	--	<u>93,891 2/</u>
d. Subtotal	\$1,871,858	\$1,943,506	--	\$102,738
2. Changes in Unfunded Actuarial Accrued Liability as of July 1, 1988:				
a. Non-Active Benefit Changes	\$ 0	\$ 0	10	\$ 0
b. (Gains)/Losses	<u>98,851</u>	<u>107,748</u>	15	<u>13,367</u>
c. Subtotal	\$ 98,851	\$ 107,748	--	\$ 13,367
3. Total: (1d) + (2c)	\$1,970,709	\$2,051,254	--	\$116,105

1/ Numbers may not add due to rounding.

2/ Payment increasing 6% per annum, all other payments are level dollar.

TABLE 5

**SCHEDULE OF ANNUAL PAYMENTS TO FUND THE
ANTICIPATED JULY 1, 1988 UNFUNDED ACTUARIAL ACCRUED LIABILITY 1/
(\$000 OMITTED)**

FISCAL YEAR ENDING JUNE 30	ANNUAL PAYMENT (MADE AT END OF YEAR) TOWARD:								TOTAL	PROGRESS OF UNFUNDED ACTU- ARIAL ACCRUED LIABILITY	ESTIMATED ANNUAL PAYROLL	ANNUAL PERCENT AS A PERCENT OF PAYROLL
	1967 PLAN			PLAN 87								
	MUNICIPAL	POLICE	FIRE	MUNICIPAL	ELECTED	POLICE	FIRE					
1989	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	\$2,051,254	\$ 896,788	N/A	
1990	\$ 58,402	\$ 43,139	\$14,580	\$(99)	\$148	\$(58)	\$(7)	\$116,105	2,119,762	950,595	12.2%	
1991	61,707	45,261	15,427	(99)	148	(58)	(7)	122,379	2,188,161	1,007,631	12.1	
1992	65,210	47,511	16,324	(99)	148	(58)	(7)	129,030	2,256,066	1,068,088	12.1	
1993	66,266	48,196	16,599	(99)	148	(58)	(7)	131,046	2,328,066	1,132,174	11.6	
1994	70,203	50,724	17,607	(99)	148	(58)	(7)	138,518	2,399,074	1,200,104	11.5	
1995	74,375	53,404	18,676	(99)	148	(58)	(7)	146,439	2,468,551	1,272,110	11.5	
1996	78,798	56,245	19,809	(99)	148	(58)	(7)	154,835	2,535,885	1,348,437	11.5	
1997	83,486	59,256	21,010	(99)	148	(58)	(7)	163,735	2,600,379	1,429,343	11.5	
1998	88,015	61,906	22,074	(99)	148	(58)	(7)	171,979	2,662,434	1,515,104	11.4	
1999	93,282	65,288	23,423	(99)	148	(58)	(7)	181,977	2,720,076	1,606,010	11.3	
2000	98,866	68,874	24,854	(99)	148	(58)	(7)	192,578	2,772,305	1,702,371	11.3	
2001	104,785	72,675	26,370	(99)	148	(58)	(7)	203,814	2,817,999	1,804,513	11.3	
2002	111,058	76,704	27,977	(99)	148	(58)	(7)	215,724	2,855,895	1,912,784	11.3	
2003	126,676	84,996	31,809	(99)	148	(58)	(7)	243,465	2,869,461	2,027,551	12.0	
2004	133,676	87,346	33,167	(99)	148	(66)	(26)	254,147	2,873,565	2,149,204	11.8	
2005	134,504	86,112	34,350	0	0	0	0	254,965	2,877,221	2,278,156	11.2	
2006	142,424	91,199	36,379	0	0	0	0	270,001	2,866,170	2,414,845	11.2	
2007	150,820	96,591	38,529	0	0	0	0	285,940	2,838,185	2,559,736	11.2	
2008	159,235	102,264	40,788	0	0	0	0	302,288	2,791,334	2,713,320	11.1	
2009	168,668	108,323	43,205	0	0	0	0	320,196	2,722,357	2,876,119	11.1	
2010	176,655	113,458	45,254	0	0	0	0	335,367	2,632,003	3,048,686	11.0	
2011	187,255	120,265	47,969	0	0	0	0	355,489	2,513,394	3,231,608	11.0	
2012	198,490	127,481	50,847	0	0	0	0	376,818	2,362,782	3,425,504	11.0	
2013	210,399	135,130	53,898	0	0	0	0	399,427	2,176,005	3,631,034	11.0	
2014	223,023	143,238	57,132	0	0	0	0	423,393	1,948,453	3,848,896	11.0	
2015	236,405	151,832	60,560	0	0	0	0	448,796	1,675,017	4,079,830	11.0	
2016	250,589	160,942	64,193	0	0	0	0	475,724	1,350,044	4,324,620	11.0	
2017	265,624	170,599	68,045	0	0	0	0	504,268	967,281	4,584,097	11.0	
2018	281,562	180,834	72,128	0	0	0	0	534,524	519,812	4,859,143	11.0	
2019	298,455	191,685	76,455	0	0	0	0	566,595	0	5,150,692	11.0	

1/ Numbers may not add due to rounding.

Comparison of Funding with Requirements of GAAP

The funding policy adopted by the City provides that the Bogen unfunded actuarial accrued liability be amortized in level dollar payments over 20 years ending June 30, 1992 and the Dombrowski unfunded actuarial accrued liability be amortized in level dollar payments over 40 years ending June 30, 2009, as ordered by the Court of Common Pleas of Philadelphia County. The remaining unfunded actuarial accrued liability as of July 1, 1985 is amortized over 40 years ending June 30, 2019 with payments increasing 6.0% per annum. Changes in the actuarial accrued liability realized after July 1, 1985 are amortized in level dollar payments as follows:

- | | |
|--|----------|
| a. Changes in actuarial assumptions: | 20 years |
| b. Experience gains and losses: | 15 years |
| c. Benefit modifications applicable to active members: | 20 years |
| d. Benefit modifications applicable to non-active members: | 10 years |

Table 6 compares this funding policy to amortize the unfunded actuarial accrued liability with the funding standards specified under generally accepted accounting principles (GAAP). The standards specified by GAAP require that the unfunded actuarial accrued liability be funded over 40 years in level dollar payments.

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

The table shows the annual and accumulated "deficit" between the funding policies of the City and those under GAAP (Columns (10) and (11), respectively). It is important to note that because the funding policies of the City result in the complete amortization of the unfunded actuarial accrued liability, the accumulated deficit between the City's funding policy and GAAP decreases to 0 at the end of the last 40-year GAAP amortization period.

TABLE 6

**COMPARISON OF OFFICIAL UNFUNDED ACCRUED LIABILITY FUNDING
WITH FUNDING UNDER THE PROVISIONS OF APB NO. 8 1/
(\$000 OMITTED)**

SCHEDULE OF ANNUAL PAYMENTS TO FUND THE ANTICIPATED JULY 1, 1989 UNFUNDED ACCRUED LIABILITY								REFLECTION OF COMPARISON BETWEEN OFFICIAL SCHEDULE AND 40-YEAR AMORTIZATION UNDER GENERALLY ACCEPTED ACCOUNTING PRINCIPLES (GAAP)		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
ANNUAL PAYMENT (MADE AT END OF YEAR) TOWARD:										
FISCAL YEAR ENDING JUNE 30	1967 PLAN			PLAN 87				GAAP 40-YEAR AMORTI- ZATION (PER APB NO. 8)	GAAP "DEFICIT" (9)-(8)	ACCUMULATED "DEFICIT" (PRIOR YEAR) x 1.09 + (10)
	MUNICIPAL UNFUNDED ACCRUED LIABILITY	POLICE UNFUNDED ACCRUED LIABILITY	FIRE UNFUNDED ACCRUED LIABILITY	MUNICIPAL UNFUNDED ACCRUED LIABILITY	ELECTED UNFUNDED ACCRUED LIABILITY	POLICE UNFUNDED ACCRUED LIABILITY	FIRE UNFUNDED ACCRUED LIABILITY			
								TOTAL (1)+(2)+(3) +(4)+(5)+(6)		
1982	N/A	N/A	N/A	N/A	N/A	N/A	N/A	\$ 68,257	\$136,206	\$ 67,950
1983	N/A	N/A	N/A	N/A	N/A	N/A	N/A	72,118	136,206	64,088
1984	N/A	N/A	N/A	N/A	N/A	N/A	N/A	73,696	130,870	57,173
1985	N/A	N/A	N/A	N/A	N/A	N/A	N/A	77,912	130,870	52,958
1986	N/A	N/A	N/A	N/A	N/A	N/A	N/A	84,717	125,707	40,989
1987	N/A	N/A	N/A	N/A	N/A	N/A	N/A	95,276	136,909	41,633
1988	N/A	N/A	N/A	N/A	N/A	N/A	N/A	88,533	129,411	40,878
1989	N/A	N/A	N/A	N/A	N/A	N/A	N/A	96,819	131,435	34,616
1990	\$ 58,402	\$43,139	\$14,580	\$(99)	\$148	\$(58)	\$ (7)	116,105	141,451	25,346
1991	61,707	45,261	15,427	(99)	148	(58)	(7)	122,379	141,451	19,072
1992	65,210	47,511	16,324	(99)	148	(58)	(7)	129,030	141,451	12,422
1993	66,266	48,196	16,599	(99)	148	(58)	(7)	131,046	141,451	10,406
1994	70,203	50,724	17,607	(99)	148	(58)	(7)	138,518	141,451	2,933
1995	74,375	53,404	18,676	(99)	148	(58)	(7)	146,439	141,451	(4,988)
1996	78,798	56,245	19,809	(99)	148	(58)	(7)	154,835	141,451	(13,384)
1997	83,486	59,256	21,010	(99)	148	(58)	(7)	163,735	141,451	(22,284)
1998	88,015	61,906	22,074	(99)	148	(58)	(7)	171,979	141,451	(30,528)
1999	93,282	65,288	23,423	(99)	148	(58)	(7)	181,977	141,451	(40,526)
2000	98,866	68,874	24,854	(99)	148	(58)	(7)	192,578	141,451	(51,126)
2001	104,785	72,675	26,370	(99)	148	(58)	(7)	203,814	141,451	(62,362)
2002	111,058	76,704	27,977	(99)	148	(58)	(7)	215,724	141,451	(74,272)
2003	126,676	84,996	31,809	(99)	148	(58)	(7)	243,465	141,451	(102,014)
2004	133,676	87,346	33,167	(99)	148	(66)	(26)	254,147	141,451	(112,695)
2005	134,504	86,112	34,350	0	0	0	0	254,965	141,451	(113,514)
2006	142,424	91,199	36,379	0	0	0	0	270,001	141,451	(128,550)

1/ Numbers may not add due to rounding.

TABLE 6 (CONTINUED)

**COMPARISON OF OFFICIAL UNFUNDED ACCRUED LIABILITY FUNDING
WITH FUNDING UNDER THE PROVISIONS OF APB NO. 8 1/
(\$000 OMITTED)**

SCHEDULE OF ANNUAL PAYMENTS TO FUND THE ANTICIPATED JULY 1, 1989 UNFUNDED ACCRUED LIABILITY								REFLECTION OF COMPARISON BETWEEN OFFICIAL SCHEDULE AND 40-YEAR AMORTIZATION UNDER GENERALLY ACCEPTED ACCOUNTING PRINCIPLES (GAAP)		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
ANNUAL PAYMENT (MADE AT END OF YEAR) TOWARD:										
1967 PLAN				PLAN 87						
FISCAL YEAR ENDING JUNE 30	MUNICIPAL UNFUNDED ACCRUED LIABILITY	POLICE UNFUNDED ACCRUED LIABILITY	FIRE UNFUNDED ACCRUED LIABILITY	MUNICIPAL UNFUNDED ACCRUED LIABILITY	ELECTED UNFUNDED ACCRUED LIABILITY	POLICE UNFUNDED ACCRUED LIABILITY	FIRE UNFUNDED ACCRUED LIABILITY	GAAP 40-YEAR AMORTI- ZATION (PER APB NO. 8)	GAAP "DEFICIT" (9)-(8)	ACCUMULATED "DEFICIT" (PRIOR YEAR) x 1.09 + (10)
								TOTAL (1)+(2)+(3) +(4)+(5)+(6)		
2007	\$150,820	\$ 96,591	\$38,529	\$0	\$0	\$0	\$0	\$285,940	\$141,451	\$1,722,026
2008	159,235	102,264	40,788	0	0	0	0	302,288	141,451	1,716,171
2009	168,668	108,323	43,205	0	0	0	0	320,196	141,451	1,691,882
2010	176,655	113,458	45,254	0	0	0	0	335,367	141,451	1,650,236
2011	187,255	120,265	47,969	0	0	0	0	355,489	141,451	1,584,720
2012	198,490	127,481	50,847	0	0	0	0	376,818	141,451	1,491,978
2013	210,399	135,130	53,898	0	0	0	0	399,427	141,451	1,368,280
2014	223,023	143,238	57,132	0	0	0	0	423,393	141,451	1,209,484
2015	236,405	151,832	60,560	0	0	0	0	448,796	141,451	1,010,993
2016	250,589	160,942	64,193	0	0	0	0	475,724	141,451	767,709
2017	265,624	170,599	68,045	0	0	0	0	504,268	141,451	473,987
2018	281,562	180,834	72,128	0	0	0	0	534,524	141,451	123,573
2019	298,455	191,685	76,455	0	0	0	0	566,595	141,451	(290,449)
2020	0	0	0	0	0	0	0	0	141,451	(175,138)
2021	0	0	0	0	0	0	0	0	141,451	(49,449)
2022	0	0	0	0	0	0	0	0	5,245	(48,654)
2023	0	0	0	0	0	0	0	0	5,245	(47,788)
2024	0	0	0	0	0	0	0	0	10,581	(41,507)
2025	0	0	0	0	0	0	0	0	10,581	(34,661)
2026	0	0	0	0	0	0	0	0	15,745	(22,036)
2027	0	0	0	0	0	0	0	0	4,542	(19,477)
2028	0	0	0	0	0	0	0	0	12,041	(9,189)
2029	0	0	0	0	0	0	0	0	10,016	0

1/ Numbers may not add due to rounding.

Estimated Progress of Pension Fund

The estimated progress of the pension fund for the fiscal years 1989 through 2008 is presented in Table 7. The adjusted market value of fund assets as of July 1, 1988 is used as the starting point. This projection is useful in showing the emerging benefit payments of the fund and the concurrent fund growth. The projection is based upon the same assumptions as used to determine the annual cost and related liabilities of the System.

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 based upon the July 1, 1987 valuation. Subsequent contributions are based upon the July 1, 1988 valuation. The normal cost component of the contribution increases annually by 6.0%, reflecting anticipated increases in salary. The employee contributions shown in the projection also increase annually, reflecting assumed salary increases.

The projection of the fund is limited to the period ending with the fiscal year ending June 30, 2008. Fluctuations from the figures shown within this 20-year period are to be expected.

The underlying trend of fund growth will tend to follow that shown in the table even though the actual numbers will vary. The projection shows that the contributions to the fund, City and employee combined will exceed the benefits being paid for at least the next 20 years. However, expected contributions, while exceeding expected benefit payments, are not anticipated to add substantial amounts to existing assets. The majority of the growth in assets over this period will be derived from income on investments.

TABLE 7
ESTIMATED PROGRESS OF CITY OF PHILADELPHIA MUNICIPAL RETIREMENT
SYSTEM FUND FOR THE PERIOD JULY 1, 1988 THROUGH JUNE 30, 2008 1/
(\$000 OMITTED)

<u>FISCAL YEAR</u> <u>ENDING JUNE 30</u>	<u>FUND AT</u> <u>BEGINNING</u> <u>OF YEAR</u>	<u>CITY</u> <u>CONTRIBUTIONS 2/</u>	<u>EMPLOYEE</u> <u>CONTRIBUTIONS 2/</u>	<u>BENEFIT</u> <u>PAYMENTS 2/</u>	<u>INVESTMENT</u> <u>INCOME</u>	<u>NET</u> <u>INCREASE</u>	<u>FUND AT END</u> <u>OF YEAR</u>
1989	\$1,548,541	\$168,448	\$ 41,131	\$216,231	\$131,489	\$124,838	\$1,673,379
1990	1,673,379	192,832	43,750	228,249	142,302	150,634	1,824,013
1991	1,824,013	203,710	46,375	241,299	155,390	164,175	1,988,188
1992	1,988,188	215,240	49,157	255,410	169,656	178,643	2,166,831
1993	2,166,831	222,428	52,107	270,819	185,173	188,889	2,355,720
1994	2,355,720	235,384	55,233	287,281	201,573	204,909	2,560,629
1995	2,560,629	249,117	58,547	304,709	219,379	222,334	2,782,963
1996	2,782,963	263,674	62,060	323,331	238,709	241,112	3,024,075
1997	3,024,075	279,104	65,784	342,573	259,711	262,026	3,286,101
1998	3,286,101	294,270	69,731	363,106	282,547	283,442	3,569,543
1999	3,569,543	311,606	73,915	384,506	307,282	308,297	3,877,840
2000	3,877,840	329,984	78,349	406,733	334,228	335,829	4,213,669
2001	4,213,669	349,464	83,050	429,224	363,652	366,943	4,580,612
2002	4,580,612	370,113	88,033	452,932	395,835	401,049	4,981,661
2003	4,981,661	407,118	93,315	477,668	431,054	453,819	5,435,480
2004	5,435,480	427,619	98,914	503,366	470,993	494,160	5,929,640
2005	5,929,640	438,845	104,849	529,448	514,561	528,807	6,458,447
2006	6,458,447	464,914	111,140	555,470	561,265	581,850	7,040,297
2007	7,040,297	492,548	117,809	581,174	612,775	641,958	7,682,255
2008	7,682,255	521,292	124,877	606,441	669,733	709,461	8,391,716

1/ Numbers may not add due to rounding.

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

PART III
PLAN MEMBERSHIP

Data with respect to active, retired, disabled and terminated vested members as of July 1, 1988 was provided by the Philadelphia Board of Pensions and Retirement for use in the determination of benefit liabilities and annual costs.

The active member data, supplied on tape and on listing, contained information for all employees who were members of the Retirement System as of July 1, 1988. 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. The data was reviewed for consistency and completeness.

The non-active member data, also supplied on tape and on listing, contained information for all retired, disabled and terminated vested members as of July 1, 1988. However, no information was available regarding the beneficiaries of current non-active members.

The "Reconciliation of Included Members," shown as follows, summarizes the changes in plan membership for the period between valuations. Based upon the information provided, changes in status due to retirement, disablement, death and new entrants could be identified. However, information regarding transfers, return to employment, and data corrections was not available. As a result, the term "Net Other Terminations" includes the following:

<u>Active:</u>	Terminated and left member contributions on deposit Died without a spouse or beneficiary Returned to work Transferred from one division to another
<u>Retired or Disabled:</u>	Died during the period Returned to employment
<u>Terminated Vested:</u>	Retired or died during the period Returned to employment

The "Summary of Annual Payroll and Annual Benefits" provides a breakdown of payroll for active members and benefit payments for non-active members.

As the following tables illustrate, plan membership remained relatively stable during the period. The net change in the number of members and the percentage change is as follows:

	<u>Number of Members</u>	<u>Percentage Increase (Decrease)</u>
Active	+1,221	+3.8%
Retired	+426	3.1
Surviving Spouses	+147	2.4
Other Beneficiaries	+43	5.8
Disabled	+68	1.6
Terminated Vested	+23	5.0

A distribution of the active employees for each division by present age and salary, by service as of July 1, 1988 and salary, and by service and age are presented in Tables 9a, b and c through 14a, b, and c.

A distribution of terminated vested members by age and monthly pension is shown in Table 15. Tables 16a, b and c present distributions of the municipal division retired and disabled members by number of members, total monthly pensions and the average monthly pension. This information is shown separately for members retiring before and after July 1, 1987. Similarly, Tables 17a, b and c and 18a, b and c show this information for retired and disabled police members and fire members respectively.

TABLE 8A
RECONCILIATION OF INCLUDED MEMBERS

	1967 PLAN			PLAN 87				TOTAL
	MUNICIPAL	POLICE	FIRE	MUNICIPAL	ELECTED	POLICE	FIRE	
A. Active Members								
1. Active as of July 1, 1987	21,929	6,686	2,575	416	0	177	58	31,841
2. New Entrants	+1,542	+ 4	0	+754	+11	+137	+33	+2,481
3. Separations from Active Service								
a. Refunded Contributions	- 739	- 66	-10	-201	0	-10	0	-1,026
b. Terminated Vested 1/	- 18	- 4	- 1	0	0	0	0	- 23
c. Became Disabled	- 59	- 77	-26	0	0	0	0	- 162
d. Died	- 40	- 21	- 4	0	0	0	0	- 65
e. Retired	- 639	-288	-59	0	0	0	0	- 986
f. Net Other Terminations 2/	+ 747	+ 86	+17	+178	0	0	0	+1,003
4. Active as of July 1, 1988	22,723	6,320	2,492	1,147	11	288	82	33,063
B. Retired Members								
1. Retired as of July 1, 1987	9,057	3,394	1,512	0	0	0	0	13,963
2. New Retirees	+ 639	+288	+59	0	0	0	0	+ 986
3. Terminations								
a. Death	- 188	- 81	-48	0	0	0	0	- 317
b. Other	- 195	- 43	- 5	0	0	0	0	- 243
4. Retired as of July 1, 1988	9,313	3,558	1,518	0	0	0	0	14,389
C. Surviving Spouses								
1. Receiving Benefit as of July 1, 1987	3,580	1,737	866	0	0	0	0	6,183
2. New Spouses	+ 201	+ 94	+51	0	0	0	0	+ 346
3. Net Other Terminations	- 99	- 73	-27	0	0	0	0	- 199
4. Receiving Benefit as of July 1, 1988	3,682	1,758	890	0	0	0	0	6,330
D. Other Beneficiaries								
1. Receiving Benefit as of July 1, 1987	600	107	33	0	0	0	0	740
2. New Beneficiaries	+ 27	+ 8	+ 1	0	0	0	0	+ 36
3. Net Other Terminations	+ 7	- 1	+ 1	0	0	0	0	+ 7
4. Receiving Benefit as of July 1, 1988	634	114	35	0	0	0	0	783

1/ Estimated at 5% of 7/1/87 count.

2/ Includes transfers.

TABLE BA (CONTINUED)
RECONCILIATION OF INCLUDED MEMBERS

	<u>1967 PLAN</u>			<u>PLAN 87</u>				<u>TOTAL</u>
	<u>MUNICIPAL</u>	<u>POLICE</u>	<u>FIRE</u>	<u>MUNICIPAL</u>	<u>ELECTED</u>	<u>POLICE</u>	<u>FIRE</u>	
<u>E. Disabled Members</u>								
1. Disabled as of July 1, 1987	1,977	1,904	469	0	0	0	0	4,350
2. New Disabilities	+59	+77	+26	0	0	0	0	+162
3. Net Other Terminations	-64	-16	-12	0	0	0	0	-92
4. Disabled as of July 1, 1988	<u>1,972</u>	<u>1,965</u>	<u>483</u>	0	0	0	0	<u>4,420</u>
<u>F. Terminated Vested Members</u>								
1. Terminated Vested as of July 1, 1987	368	88	16	0	0	0	0	472
2. New Vested Terminations 1/	+18	+4	+1	0	0	0	0	+23
3. Net Other Terminations	<u>0</u>	<u>0</u>	<u>0</u>	0	0	0	0	<u>0</u>
4. Terminated Vested as of July 1, 1988	<u>386</u>	<u>92</u>	<u>17</u>	0	0	0	0	<u>495</u>

1/ Estimated at 5% of 7/1/87 count.

TABLE 8B
SUMMARY OF ANNUAL PAYROLL AND ANNUAL BENEFITS
 (\$000 OMITTED)

	1967 PLAN			PLAN 87				TOTAL
	MUNICIPAL	POLICE	FIRE	MUNICIPAL	ELECTED	POLICE	FIRE	
A. Active Members								
1. Active as of July 1, 1987	\$553,539	\$194,201	\$75,762	\$ 7,132	\$ 0	\$4,173	\$1,373	\$836,181
2. New Entrants and Pay Increases	<u>38,040</u>	<u>1,542</u>	<u>(52)</u>	<u>16,736</u>	<u>461</u>	<u>3,186</u>	<u>696</u>	<u>60,607</u>
3. Active as of July 1, 1988	\$591,579	\$195,743	\$75,710	\$23,868	\$ 461	\$7,359	\$2,069	\$896,788
B. Retired Members								
1. Retired as of July 1, 1987	\$ 72,312	41,978	\$17,267	\$ 0	\$ 0	\$ 0	\$ 0	\$131,557
2. Net New Retirees	<u>4,470</u>	<u>3,911</u>	<u>663</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>9,044</u>
3. Retired as of July 1, 1988	\$ 76,782	\$ 45,889	\$17,930	\$ 0	\$ 0	\$ 0	\$ 0	\$140,601
C. Surviving Spouses								
1. Receiving Benefit as of July 1, 1987	\$ 10,723	\$ 7,267	\$ 3,568	\$ 0	\$ 0	\$ 0	\$ 0	\$ 21,557
2. Net New Spouses	<u>894</u>	<u>400</u>	<u>177</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>1,471</u>
3. Receiving Benefit as of July 1, 1988	\$ 11,617	\$ 7,667	\$ 3,745	\$ 0	\$ 0	\$ 0	\$ 0	\$ 23,028
D. Other Beneficiaries								
1. Receiving Benefit as of July 1, 1987	\$ 1,681	\$ 341	\$ 142	\$ 0	\$ 0	\$ 0	\$ 0	\$ 2,164
2. Net New Beneficiaries	<u>181</u>	<u>50</u>	<u>11</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>190</u>
3. Receiving Benefit as of July 1, 1988	\$ 1,862	\$ 391	\$ 153	\$ 0	\$ 0	\$ 0	\$ 0	\$ 2,354
E. Disabled Members								
1. Disabled as of July 1, 1987	\$ 15,146	\$ 18,020	\$ 4,945	\$ 0	\$ 0	\$ 0	\$ 0	\$ 38,111
2. Net New Disabilities	<u>346</u>	<u>1,455</u>	<u>15,447</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>1,801</u>
3. Disabled as of July 1, 1988	\$ 15,492	\$ 19,475	\$20,392	\$ 0	\$ 0	\$ 0	\$ 0	\$ 55,359
F. Terminated Vested Members*								
1. Terminated Vested as of July 1, 1987	\$ 2,730	\$ 669	\$ 118	\$ 0	\$ 0	\$ 0	\$ 0	\$ 3,517
2. New Vested Terminations	<u>-230</u>	<u>-173</u>	<u>-38</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>-441</u>
3. Terminated Vested as of July 1, 1988	\$ 2,500	\$ 496	\$ 80	\$ 0	\$ 0	\$ 0	\$ 0	\$ 3,076

* Does not include new 1987 terminated vested.

TABLE 9A
MUNICIPAL (1967 PLAN) ANNUAL EARNINGS BY AGE GROUPS

AGE GROUP	M A L E			F E M A L E			A L L		
	NUMBER OF PEOPLE	TOTAL ANNUAL EARNINGS	AVERAGE ANNUAL EARNINGS	NUMBER OF PEOPLE	TOTAL ANNUAL EARNINGS	AVERAGE ANNUAL EARNINGS	NUMBER OF PEOPLE	TOTAL ANNUAL EARNINGS	AVERAGE ANNUAL EARNINGS
0-19	9	193688	21521	12	182041	15170	21	375729	17892
20-24	276	5628890	20395	286	5373073	18787	562	11001963	19576
25-29	1205	28979511	24049	788	16941545	21499	1993	45921056	23041
30-34	1957	52319163	26734	1182	27156536	22975	3139	79475699	25319
35-39	2458	70064310	28505	1432	33569550	23442	3890	103633860	26641
40-44	2306	69549525	30160	1362	32308788	23722	3668	101858313	27769
45-49	1704	49875072	29269	1231	28281372	22974	2935	78156444	26629
50-54	1709	51064795	29880	1033	23266303	22523	2742	74331098	27108
55-59	1270	36754721	28941	834	18557450	22251	2104	55312171	26289
60-64	743	21349904	28735	498	10302039	20687	1241	31651943	25505
65-69	217	5912638	27247	178	3166074	17787	395	9078712	22984
70-74	18	468886	26049	14	284012	20287	32	752898	23528
75-79	0	0	0	0	0	0	0	0	0
80-84	0	0	0	1	29081	29081	1	29081	29081
85+	0	0	0	0	0	0	0	0	0
TOTAL	13872	392161103	28270	8851	199417864	22531	22723	591578967	26034

('AGE' REPRESENTS ATTAINED AGE.)

TABLE 9B
MUNICIPAL (1967 PLAN) ANNUAL EARNINGS BY SERVICE GROUPS

SERVICE GROUP	M A L E			F E M A L E			A L L		
	NUMBER OF PEOPLE	TOTAL ANNUAL EARNINGS	AVERAGE ANNUAL EARNINGS	NUMBER OF PEOPLE	TOTAL ANNUAL EARNINGS	AVERAGE ANNUAL EARNINGS	NUMBER OF PEOPLE	TOTAL ANNUAL EARNINGS	AVERAGE ANNUAL EARNINGS
0	855	16792395	19640	601	9576005	15933	1456	26368400	18110
1	839	18882006	22505	721	13931039	19322	1560	32813045	21034
2	686	16553097	24130	551	11528205	20922	1237	28081302	22701
3	574	14724959	25653	527	11569666	21954	1101	26294625	23882
4	771	20370685	26421	513	11627751	22666	1284	31998436	24921
5	502	13555245	27002	425	9763543	22973	927	23318788	25155
6-10	2585	74971895	29003	1619	38343766	23684	4204	113315661	26954
11-15	2517	73890847	29357	1306	30407005	23283	3823	104297852	27282
16-20	2348	71876008	30612	1253	29645856	23660	3601	101521864	28193
21-25	1113	35139899	31572	659	16230900	24630	1772	51370799	28990
26-30	709	22824540	32193	416	10252731	24646	1125	33077271	29402
31+	373	12579527	33725	260	6541397	25159	633	19120924	30207
	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0
TOTAL	13872	392161103	28270	8851	199417864	22531	22723	591578967	26034

TABLE 9C

('AGE' REPRESENTS ATTAINED AGE.)

TABLE 10A
POLICE (1967 PLAN) ANNUAL EARNINGS BY AGE GROUPS

AGE GROUP	M A L E			F E M A L E			A L L		
	NUMBER OF PEOPLE	TOTAL ANNUAL EARNINGS	AVERAGE ANNUAL EARNINGS	NUMBER OF PEOPLE	TOTAL ANNUAL EARNINGS	AVERAGE ANNUAL EARNINGS	NUMBER OF PEOPLE	TOTAL ANNUAL EARNINGS	AVERAGE ANNUAL EARNINGS
0-19	0	0	0	0	0	0	0	0	0
20-24	23	631991	27478	12	325793	27149	35	957784	27365
25-29	363	10426275	28723	115	3261687	28362	478	13687962	28636
30-34	788	23433501	29738	204	5883917	28843	992	29317418	29554
35-39	1299	39986182	30782	190	5551115	29216	1489	45537297	30582
40-44	1681	52822654	31423	94	2798854	29775	1775	55621508	31336
45-49	983	31688075	32236	27	846166	31339	1010	32534241	32212
50-54	354	11650411	32911	1	30235	30235	355	11680646	32903
55-59	137	4641354	33878	0	0	0	137	4641354	33878
60-64	45	1629391	36209	0	0	0	45	1629391	36209
65-69	4	135479	33870	0	0	0	4	135479	33870
70-74	0	0	0	0	0	0	0	0	0
75-79	0	0	0	0	0	0	0	0	0
80-84	0	0	0	0	0	0	0	0	0
85+	0	0	0	0	0	0	0	0	0
TOTAL	5677	177045313	31186	643	18697767	29079	6320	195743080	30972

('AGE' REPRESENTS ATTAINED AGE.)

TABLE 10B
POLICE (1967 PLAN) ANNUAL EARNINGS BY SERVICE GROUPS

SERVICE GROUP	M A L E			F E M A L E			A L L		
	NUMBER OF PEOPLE	TOTAL ANNUAL EARNINGS	AVERAGE ANNUAL EARNINGS	NUMBER OF PEOPLE	TOTAL ANNUAL EARNINGS	AVERAGE ANNUAL EARNINGS	NUMBER OF PEOPLE	TOTAL ANNUAL EARNINGS	AVERAGE ANNUAL EARNINGS
0	3	101260	33753	1	24957	24957	4	126217	31554
1	103	2798871	27174	75	2028995	27053	178	4827866	27123
2	178	4945130	27782	93	2554635	27469	271	7499765	27674
3	108	3056037	28297	48	1357769	28287	156	4413806	28294
4	83	2399701	28912	39	1135548	29117	122	3535249	28977
5	13	369406	28416	11	314725	28611	24	684131	28505
6-10	916	27273721	29775	221	6511038	29462	1137	33784759	29714
11-15	1090	33362054	30607	116	3561149	30700	1206	36923203	30616
16-20	1739	54751994	31485	27	825810	30586	1766	55577804	31471
21-25	1126	36484217	32402	9	283159	31462	1135	36767376	32394
26-30	229	8219146	35891	3	99982	33327	232	8319128	35858
31+	89	3283776	36896	0	0	0	89	3283776	36896
	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0
TOTAL	5677	177045313	31186	643	18697767	29079	6320	195743080	30972

TABLE 10C

('AGE' REPRESENTS ATTAINED AGE.)

TABLE 11A
FIRE (1967 PLAN) ANNUAL EARNINGS BY AGE GROUPS

AGE GROUP	M A L E			F E M A L E			A L L		
	NUMBER OF PEOPLE	TOTAL ANNUAL EARNINGS	AVERAGE ANNUAL EARNINGS	NUMBER OF PEOPLE	TOTAL ANNUAL EARNINGS	AVERAGE ANNUAL EARNINGS	NUMBER OF PEOPLE	TOTAL ANNUAL EARNINGS	AVERAGE ANNUAL EARNINGS
0-19	0	0	0	0	0	0	0	0	0
20-24	2	53962	26981	0	0	0	2	53962	26981
25-29	89	2455047	27585	0	0	0	89	2455047	27585
30-34	269	7733113	28748	2	53392	26696	271	7786505	28732
35-39	661	19602651	29656	1	26981	26981	662	19629632	29652
40-44	764	23428164	30665	0	0	0	764	23428164	30665
45-49	468	14732800	31480	0	0	0	468	14732800	31480
50-54	166	5288284	31857	0	0	0	166	5288284	31857
55-59	53	1767790	33355	0	0	0	53	1767790	33355
60-64	15	504059	33604	0	0	0	15	504059	33604
65-69	2	63291	31646	0	0	0	2	63291	31646
70-74	0	0	0	0	0	0	0	0	0
75-79	0	0	0	0	0	0	0	0	0
80-84	0	0	0	0	0	0	0	0	0
85+	0	0	0	0	0	0	0	0	0
TOTAL	2489	75629161	30385	3	80373	26791	2492	75709534	30381

('AGE' REPRESENTS ATTAINED AGE.)

TABLE 11B
FIRE (1967 PLAN) ANNUAL EARNINGS BY SERVICE GROUPS

SERVICE GROUP	M A L E			F E M A L E			A L L		
	NUMBER OF PEOPLE	TOTAL ANNUAL EARNINGS	AVERAGE ANNUAL EARNINGS	NUMBER OF PEOPLE	TOTAL ANNUAL EARNINGS	AVERAGE ANNUAL EARNINGS	NUMBER OF PEOPLE	TOTAL ANNUAL EARNINGS	AVERAGE ANNUAL EARNINGS
0	0	0	0	0	0	0	0	0	0
1	3	79233	26411	0	0	0	3	79233	26411
2	50	1350442	27009	1	26411	26411	51	1376853	26997
3	114	3137532	27522	2	53962	26981	116	3191494	27513
4	110	3095030	28137	0	0	0	110	3095030	28137
5	5	139233	27847	0	0	0	5	139233	27847
6-10	201	5818433	28947	0	0	0	201	5818433	28947
11-15	743	22124303	29777	0	0	0	743	22124303	29777
16-20	505	15392454	30480	0	0	0	505	15392454	30480
21-25	527	16649171	31592	0	0	0	527	16649171	31592
26-30	193	6540227	33887	0	0	0	193	6540227	33887
31+	38	1303103	34292	0	0	0	38	1303103	34292
	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0
TOTAL	2489	75629161	30385	3	80373	26791	2492	75709534	30381

TABLE 11C

('AGE' REPRESENTS ATTAINED AGE.)

TABLE 12A
MUNICIPAL AND ELECTED (PLAN 87) ANNUAL EARNINGS BY AGE GROUPS

AGE GROUP	M A L E			F E M A L E			A L L		
	NUMBER OF PEOPLE	TOTAL ANNUAL EARNINGS	AVERAGE ANNUAL EARNINGS	NUMBER OF PEOPLE	TOTAL ANNUAL EARNINGS	AVERAGE ANNUAL EARNINGS	NUMBER OF PEOPLE	TOTAL ANNUAL EARNINGS	AVERAGE ANNUAL EARNINGS
0-19	4	57141	14285	9	114571	12730	13	171712	13209
20-24	66	1052917	15953	71	1054260	14849	137	2107177	15381
25-29	93	2063153	22184	133	2743266	20626	226	4806419	21267
30-34	110	2613396	23758	102	2206580	21633	212	4819976	22736
35-39	76	1996304	26267	94	2222664	23645	170	4218968	24817
40-44	57	1650766	28961	83	1778825	21432	140	3429591	24497
45-49	37	1161166	31383	39	932912	23921	76	2094078	27554
50-54	16	409193	25575	34	772681	22726	50	1181874	23637
55-59	16	377240	23578	28	404564	14449	44	781804	17768
60-64	15	229040	15269	33	229931	6968	48	458971	9562
65-69	8	105478	13185	26	89865	3456	34	195343	5745
70-74	2	42134	21067	3	6812	2271	5	48946	9789
75-79	1	9000	9000	2	4790	2395	3	13790	4597
80-84	0	0	0	0	0	0	0	0	0
85+	0	0	0	0	0	0	0	0	0
TOTAL	501	11766928	23487	657	12561721	19120	1158	24328649	21009

('AGE' REPRESENTS ATTAINED AGE.)

TABLE 12B
MUNICIPAL AND ELECTED (PLAN 87) ANNUAL EARNINGS BY SERVICE GROUPS

SERVICE GROUP	M A L E			F E M A L E			A L L		
	NUMBER OF PEOPLE	TOTAL ANNUAL EARNINGS	AVERAGE ANNUAL EARNINGS	NUMBER OF PEOPLE	TOTAL ANNUAL EARNINGS	AVERAGE ANNUAL EARNINGS	NUMBER OF PEOPLE	TOTAL ANNUAL EARNINGS	AVERAGE ANNUAL EARNINGS
0	320	7337848	22931	434	8196203	18885	754	15534051	20602
1	153	3668930	23980	194	3674438	18940	347	7343368	21162
2	10	208261	20826	9	168565	18729	19	376826	19833
3	2	29803	14902	2	29584	14792	4	59387	14847
4	2	43156	21578	5	131372	26274	7	174528	24933
5	3	83881	27960	5	118164	23633	8	202045	25256
6-10	4	119844	29961	4	107675	26919	8	227519	28440
11-15	3	102047	34016	2	64892	32446	5	166939	33388
16-20	3	137500	45833	1	27828	27828	4	165328	41332
21-25	0	0	0	0	0	0	0	0	0
26-30	0	0	0	0	0	0	0	0	0
31+	1	35658	35658	1	43000	43000	2	78658	39329
	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0
TOTAL	501	11766928	23487	657	12561721	19120	1158	24328649	21009

MUNICIPAL AND ELECTED (PLAN 87) SERVICE GROUPS BY AGE GROUPS

('AGE' REPRESENTS ATTAINED AGE.)

TABLE 13A

POLICE (PLAN 87) ANNUAL EARNINGS BY AGE GROUPS

AGE GROUP	M A L E			F E M A L E			A L L		
	NUMBER OF PEOPLE	TOTAL ANNUAL EARNINGS	AVERAGE ANNUAL EARNINGS	NUMBER OF PEOPLE	TOTAL ANNUAL EARNINGS	AVERAGE ANNUAL EARNINGS	NUMBER OF PEOPLE	TOTAL ANNUAL EARNINGS	AVERAGE ANNUAL EARNINGS
0-19	0	0	0	0	0	0	0	0	0
20-24	17	431007	25353	5	129277	25855	22	560284	25467
25-29	91	2320499	25500	26	657139	25275	117	2977638	25450
30-34	58	1483610	25579	39	1002521	25706	97	2486131	25630
35-39	21	535327	25492	22	562622	25574	43	1097949	25534
40-44	3	79363	26454	5	127031	25406	8	206394	25799
45-49	0	0	0	0	0	0	0	0	0
50-54	1	30235	30235	0	0	0	1	30235	30235
55-59	0	0	0	0	0	0	0	0	0
60-64	0	0	0	0	0	0	0	0	0
65-69	0	0	0	0	0	0	0	0	0
70-74	0	0	0	0	0	0	0	0	0
75-79	0	0	0	0	0	0	0	0	0
80-84	0	0	0	0	0	0	0	0	0
85+	0	0	0	0	0	0	0	0	0
TOTAL	191	4880041	25550	97	2478590	25552	288	7358631	25551

('AGE' REPRESENTS ATTAINED AGE.)

TABLE 13B
POLICE (PLAN 87) ANNUAL EARNINGS BY SERVICE GROUPS

	M A L E			F E M A L E			A L L		
SERVICE GROUP	NUMBER OF PEOPLE	TOTAL ANNUAL EARNINGS	AVERAGE ANNUAL EARNINGS	NUMBER OF PEOPLE	TOTAL ANNUAL EARNINGS	AVERAGE ANNUAL EARNINGS	NUMBER OF PEOPLE	TOTAL ANNUAL EARNINGS	AVERAGE ANNUAL EARNINGS
0	93	2321001	24957	44	1097381	24940	137	3418382	24952
1	96	2499188	26033	51	1326711	26014	147	3825899	26027
2	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0
5	0	0	0	2	54498	27249	2	54498	27249
6-10	1	29617	29617	0	0	0	1	29617	29617
11-15	0	0	0	0	0	0	0	0	0
16-20	0	0	0	0	0	0	0	0	0
21-25	1	30235	30235	0	0	0	1	30235	30235
26-30	0	0	0	0	0	0	0	0	0
31+	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0
TOTAL	191	4880041	25550	97	2478590	25552	288	7358631	25551

TABLE 13C

('AGE' REPRESENTS ATTAINED AGE.)

TABLE 14A

FIRE (PLAN 87) ANNUAL EARNINGS BY AGE GROUPS

AGE GROUP	M A L E			F E M A L E			A L L		
	NUMBER OF PEOPLE	TOTAL ANNUAL EARNINGS	AVERAGE ANNUAL EARNINGS	NUMBER OF PEOPLE	TOTAL ANNUAL EARNINGS	AVERAGE ANNUAL EARNINGS	NUMBER OF PEOPLE	TOTAL ANNUAL EARNINGS	AVERAGE ANNUAL EARNINGS
0-19	0	0	0	0	0	0	0	0	0
20-24	3	77053	25684	0	0	0	3	77053	25684
25-29	35	898686	25677	0	0	0	35	898686	25677
30-34	35	867768	24793	0	0	0	35	867768	24793
35-39	9	225219	25024	0	0	0	9	225219	25024
40-44	0	0	0	0	0	0	0	0	0
45-49	0	0	0	0	0	0	0	0	0
50-54	0	0	0	0	0	0	0	0	0
55-59	0	0	0	0	0	0	0	0	0
60-64	0	0	0	0	0	0	0	0	0
65-69	0	0	0	0	0	0	0	0	0
70-74	0	0	0	0	0	0	0	0	0
75-79	0	0	0	0	0	0	0	0	0
80-84	0	0	0	0	0	0	0	0	0
85+	0	0	0	0	0	0	0	0	0
TOTAL	82	2068726	25228	0	0	0	82	2068726	25228

('AGE' REPRESENTS ATTAINED AGE.)

TABLE 14B
FIRE (PLAN 87) ANNUAL EARNINGS BY SERVICE GROUPS

SERVICE GROUP	M A L E			F E M A L E			A L L		
	NUMBER OF PEOPLE	TOTAL ANNUAL EARNINGS	AVERAGE ANNUAL EARNINGS	NUMBER OF PEOPLE	TOTAL ANNUAL EARNINGS	AVERAGE ANNUAL EARNINGS	NUMBER OF PEOPLE	TOTAL ANNUAL EARNINGS	AVERAGE ANNUAL EARNINGS
0	33	775706	23506	0	0	0	33	775706	23506
1	47	1241778	26421	0	0	0	47	1241778	26421
2	1	26411	26411	0	0	0	1	26411	26411
3	0	0	0	0	0	0	0	0	0
4	1	24831	24831	0	0	0	1	24831	24831
5	0	0	0	0	0	0	0	0	0
6-10	0	0	0	0	0	0	0	0	0
11-15	0	0	0	0	0	0	0	0	0
16-20	0	0	0	0	0	0	0	0	0
21-25	0	0	0	0	0	0	0	0	0
26-30	0	0	0	0	0	0	0	0	0
31+	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0
TOTAL	82	2068726	25228	0	0	0	82	2068726	25228

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TABLE 14C

('AGE' REPRESENTS ATTAINED AGE.)

TABLE 15
TERMINATED VESTED* (1967 PLAN) MEMBERS AS OF JULY 1, 1988

<u>ATTAINED AGE</u>	<u>MUNICIPAL MEMBERS</u>		<u>POLICE MEMBERS</u>		<u>FIRE MEMBERS</u>	
	<u>NUMBER OF LIVES</u>	<u>MONTHLY PENSION</u>	<u>NUMBER OF LIVES</u>	<u>MONTHLY PENSION</u>	<u>NUMBER OF LIVES</u>	<u>MONTHLY PENSION</u>
UNDER 40	55	\$ 27,134.98	26	\$15,687.61	4	\$2,223.90
40-44	81	52,493.10	32	20,664.56	6	3,488.15
45-49	95	66,415.98	8	3,979.00	1	440.00
50-54	84	53,166.34	2	971.91	1	502.32
55-59	14	7,892.65	0	0.00	0	0.00
60-64	0	0.00	0	0.00	0	0.00
OVER 64	5	1,250.00	0	0.00	0	0.00
TOTAL	334	\$208,353.05	68	\$41,303.08	12	\$6,654.37

AVERAGE MONTHLY PENSION

MUNICIPAL	\$623.81
POLICE	\$607.40
FIRE	\$554.53

* Does not include new 1987 terminated vested.

TABLE 16A
NUMBER OF DISABLED AND RETIRED MUNICIPAL (1967 PLAN) MEMBERS AS OF JULY 1, 1988

ATTAINED AGE	-----DISABLED-----			-----NUMBER OF LIVES-----					
	PRIOR	NEW	TOTAL	PRIOR	NEW	TOTAL	PRIOR	NEW	TOTAL
UNDER 45	83	9	92	405	25	430	488	34	522
45-49	125	13	138	140	10	150	265	23	288
50-54	200	22	222	185	12	197	385	34	419
55-59	378	12	390	1050	255	1305	1428	267	1695
60-64	426	3	429	2023	257	2280	2449	260	2709
65-69	373	0	373	2686	163	2849	3059	163	3222
70-74	198	0	198	2425	78	2503	2623	78	2701
75-79	93	0	93	1849	44	1893	1942	44	1986
80-84	22	0	22	1228	14	1242	1250	14	1264
OVER 84	15	0	15	770	10	780	785	10	795
TOTAL	1913	59	1972	12761	868	13629	14674	927	15601

NOTE - 'PRIOR' INDICATES LIVES WHOSE BENEFIT PAYMENTS COMMENCED MORE THAN ONE YEAR BEFORE THE VALUATION DATE,
 'NEW' INDICATES LIVES WHOSE BENEFIT PAYMENTS COMMENCED IN THE YEAR PRECEDING THE VALUATION DATE.

TABLE 16B

TOTAL MONTHLY PENSIONS OF DISABLED AND RETIRED MUNICIPAL (1967 PLAN) MEMBERS AS OF JULY 1, 1988

ATTAINED AGE	TOTAL MONTHLY PENSION AMOUNTS								
	DISABLED			RETIRED			TOTAL		
	PRIOR	NEW	TOTAL	PRIOR	NEW	TOTAL	PRIOR	NEW	TOTAL
UNDER 45	56280.86	6672.64	62953.50	90610.38	12579.53	103189.91	146891.24	19252.17	166143.41
45-49	81859.93	11825.93	93685.86	47250.96	8237.71	55488.67	129110.89	20063.64	149174.53
50-54	137889.59	22496.75	160386.34	82574.82	6085.48	88660.30	220464.41	28582.23	249046.64
55-59	272949.39	14155.90	287105.29	925966.48	284340.04	1210306.52	1198915.87	298495.94	1497411.81
60-64	287546.77	2939.35	290486.12	1632812.99	208985.96	1841798.95	1920359.76	211925.31	2132285.07
65-69	223206.51	0.00	223206.51	1686365.79	97881.22	1784247.01	1909572.30	97881.22	2007453.52
70-74	112082.32	0.00	112082.32	1134372.49	26303.99	1160676.48	1246454.81	26303.99	1272758.80
75-79	45990.25	0.00	45990.25	696313.99	7401.30	703715.29	742304.24	7401.30	749705.54
80-84	9972.31	0.00	9972.31	383364.75	3392.48	386757.23	393337.06	3392.48	396729.54
OVER 84	5779.74	0.00	5779.74	186348.04	1901.27	188249.31	192127.78	1901.27	194029.05
TOTAL	1233557.67	58090.57	1291648.24	6865980.69	657108.98	7523089.67	8099538.36	715199.55	8814737.91

NOTE - 'PRIOR' INDICATES LIVES WHOSE BENEFIT PAYMENTS COMMENCED MORE THAN ONE YEAR BEFORE THE VALUATION DATE,
 'NEW' INDICATES LIVES WHOSE BENEFIT PAYMENTS COMMENCED IN THE YEAR PRECEDING THE VALUATION DATE.

TABLE 16C

AVERAGE MONTHLY PENSION OF DISABLED AND RETIRED MUNICIPAL (1967 PLAN) MEMBERS AS OF JULY 1, 1988

ATTAINED AGE	-----DISABLED-----			-----AVERAGE MONTHLY PENSION AMOUNTS-----			-----RETIRED-----		
	PRIOR	NEW	TOTAL	PRIOR	NEW	TOTAL	PRIOR	NEW	TOTAL
UNDER 45	678.08	741.40	684.28	223.73	503.18	239.98	301.01	566.24	318.28
45-49	654.88	909.69	678.88	337.51	823.77	369.92	487.21	872.33	517.97
50-54	689.45	1022.58	722.46	446.35	507.12	450.05	572.63	840.65	594.38
55-59	722.09	1179.66	736.17	881.87	1115.06	927.44	839.58	1117.96	883.43
60-64	674.99	979.78	677.12	807.12	813.17	807.81	784.14	815.10	787.11
65-69	598.41	0.00	598.41	627.84	600.50	626.27	624.25	600.50	623.05
70-74	566.07	0.00	566.07	467.78	337.23	463.71	475.20	337.23	471.22
75-79	494.52	0.00	494.52	376.59	168.21	371.75	382.24	168.21	377.50
80-84	453.29	0.00	453.29	312.19	242.32	311.40	314.67	242.32	313.87
OVER 84	385.32	0.00	385.32	242.01	190.13	241.35	244.75	190.13	244.06
TOTAL	644.83	984.59	654.99	538.04	757.04	551.99	551.97	771.52	565.01

NOTE - 'PRIOR' INDICATES LIVES WHOSE BENEFIT PAYMENTS COMMENCED MORE THAN ONE YEAR BEFORE THE VALUATION DATE,
 'NEW' INDICATES LIVES WHOSE BENEFIT PAYMENTS COMMENCED IN THE YEAR PRECEDING THE VALUATION DATE.

TABLE 17A
NUMBER OF DISABLED AND RETIRED POLICE (1967 PLAN) MEMBERS AS OF JULY 1, 1988

ATTAINED AGE	-----DISABLED-----			-----NUMBER OF LIVES-----			-----RETIRED-----		
	PRIOR	NEW	TOTAL	PRIOR	NEW	TOTAL	PRIOR	NEW	TOTAL
UNDER 45	289	50	339	154	18	172	443	68	511
45-49	303	16	319	438	193	631	741	209	950
50-54	265	4	269	704	76	780	969	80	1049
55-59	349	6	355	873	39	912	1222	45	1267
60-64	351	1	352	683	18	701	1034	19	1053
65-69	141	0	141	413	20	433	554	20	574
70-74	117	0	117	557	12	569	674	12	686
75-79	40	0	40	476	5	481	516	5	521
80-84	24	0	24	426	7	433	450	7	457
OVER 84	9	0	9	316	2	318	325	2	327
TOTAL	1888	77	1965	5040	390	5430	6928	467	7395

NOTE - 'PRIOR' INDICATES LIVES WHOSE BENEFIT PAYMENTS COMMENCED MORE THAN ONE YEAR BEFORE THE VALUATION DATE,
'NEW' INDICATES LIVES WHOSE BENEFIT PAYMENTS COMMENCED IN THE YEAR PRECEDING THE VALUATION DATE.

TABLE 178

TOTAL MONTHLY PENSIONS OF DISABLED AND RETIRED POLICE (1967 PLAN) MEMBERS AS OF JULY 1, 1988

ATTAINED AGE	TOTAL MONTHLY PENSION AMOUNTS								
	DISABLED			RETIRED			TOTAL		
	PRIOR	NEW	TOTAL	PRIOR	NEW	TOTAL	PRIOR	NEW	TOTAL
UNDER 45	283054.89	70761.91	353816.80	68148.81	12803.04	80951.85	351203.70	83564.95	434768.65
45-49	269895.27	25412.69	295307.96	484554.67	258831.12	743385.79	754449.94	284243.81	1038693.75
50-54	215755.72	7428.20	223183.92	761788.10	114431.65	876219.75	977543.82	121859.85	1099403.67
55-59	254814.86	10713.17	265528.03	938217.74	49070.66	987288.40	1193032.60	59783.83	1252816.43
60-64	263555.12	1904.77	265459.89	717767.86	19003.41	736771.27	981322.98	20908.18	1002231.16
65-69	100796.79	0.00	100796.79	286837.09	11429.79	298266.88	387633.88	11429.79	399063.67
70-74	77608.00	0.00	77608.00	295377.36	3830.18	299207.54	372985.36	3830.18	376815.54
75-79	23023.93	0.00	23023.93	195124.90	3510.51	198635.41	218148.83	3510.51	221659.34
80-84	13200.00	0.00	13200.00	160486.90	2117.77	162604.67	173686.90	2117.77	175804.67
OVER 84	4950.00	0.00	4950.00	112465.85	550.00	113015.85	117415.85	550.00	117965.85
TOTAL	1506654.58	116220.74	1622875.32	4020769.28	475578.13	4496347.41	5527423.86	591798.87	6119222.73

NOTE - 'PRIOR' INDICATES LIVES WHOSE BENEFIT PAYMENTS COMMENCED MORE THAN ONE YEAR BEFORE THE VALUATION DATE,
 'NEW' INDICATES LIVES WHOSE BENEFIT PAYMENTS COMMENCED IN THE YEAR PRECEDING THE VALUATION DATE.

TABLE 17C

AVERAGE MONTHLY PENSION OF DISABLED AND RETIRED POLICE (1967 PLAN) MEMBERS AS OF JULY 1, 1988

ATTAINED AGE	--DISABLED--			--AVERAGE MONTHLY PENSION AMOUNTS--					
	PRIOR	NEW	TOTAL	PRIOR	NEW	TOTAL	PRIOR	NEW	TOTAL
UNDER 45	979.43	1415.24	1043.71	442.52	711.28	470.65	792.78	1228.90	850.82
45-49	890.74	1588.29	925.73	1106.29	1341.09	1178.11	1018.15	1360.02	1093.36
50-54	814.17	1857.05	829.68	1082.09	1505.68	1123.36	1008.82	1523.25	1048.05
55-59	730.13	1785.53	747.97	1074.71	1258.22	1082.55	976.30	1328.53	988.81
60-64	750.87	1904.77	754.15	1050.90	1055.74	1051.03	949.06	1100.43	951.79
65-69	714.87	0.00	714.87	694.52	571.49	688.84	699.70	571.49	695.23
70-74	663.32	0.00	663.32	530.30	319.18	525.85	553.39	319.18	549.29
75-79	575.60	0.00	575.60	409.93	702.10	412.96	422.77	702.10	425.45
80-84	550.00	0.00	550.00	376.73	302.54	375.53	385.97	302.54	384.69
OVER 84	550.00	0.00	550.00	355.90	275.00	355.40	361.28	275.00	360.75
TOTAL	798.02	1509.36	825.89	797.77	1219.43	828.06	797.84	1267.24	827.48

NOTE - 'PRIOR' INDICATES LIVES WHOSE BENEFIT PAYMENTS COMMENCED MORE THAN ONE YEAR BEFORE THE VALUATION DATE,
 'NEW' INDICATES LIVES WHOSE BENEFIT PAYMENTS COMMENCED IN THE YEAR PRECEDING THE VALUATION DATE.

TABLE 18A
NUMBER OF DISABLED AND RETIRED FIRE (1967 PLAN) MEMBERS AS OF JULY 1, 1988

ATTAINED AGE	-----DISABLED-----			-----NUMBER OF LIVES-----			-----RETIRED-----		
	PRIOR	NEW	TOTAL	PRIOR	NEW	TOTAL	PRIOR	NEW	TOTAL
UNDER 45	52	11	63	52	1	53	104	12	116
45-49	71	9	80	65	34	99	136	43	179
50-54	42	4	46	159	21	180	201	25	226
55-59	45	2	47	164	12	176	209	14	223
60-64	67	0	67	302	10	312	369	10	379
65-69	93	0	93	408	11	419	501	11	512
70-74	47	0	47	513	11	524	560	11	571
75-79	29	0	29	384	9	393	413	9	422
80-84	10	0	10	180	2	182	190	2	192
OVER 84	1	0	1	105	0	105	106	0	106
TOTAL	457	26	483	2332	111	2443	2789	137	2926

NOTE - 'PRIOR' INDICATES LIVES WHOSE BENEFIT PAYMENTS COMMENCED MORE THAN ONE YEAR BEFORE THE VALUATION DATE,
'NEW' INDICATES LIVES WHOSE BENEFIT PAYMENTS COMMENCED IN THE YEAR PRECEDING THE VALUATION DATE.

TABLE 18B
TOTAL MONTHLY PENSIONS OF DISABLED AND RETIRED FIRE (1967 PLAN) MEMBERS AS OF JULY 1, 1988

ATTAINED AGE	TOTAL MONTHLY PENSION AMOUNTS								
	PRIOR	DISABLED NEW	TOTAL	PRIOR	RETIRED NEW	TOTAL	PRIOR	TOTAL NEW	TOTAL
UNDER 45	48765.36	15091.56	63856.92	22298.21	831.14	23129.35	71063.57	15922.70	86986.27
45-49	77955.75	13941.27	91897.02	75037.26	49028.20	124065.46	152993.01	62969.47	215962.48
50-54	44413.12	6989.94	51403.06	191384.67	34903.75	226288.42	235797.79	41893.69	277691.48
55-59	45216.42	3889.10	49105.52	171884.51	13595.79	185480.30	217100.93	17484.89	234585.82
60-64	61756.49	0.00	61756.49	313003.69	6834.29	319837.98	374760.18	6834.29	381594.47
65-69	74193.42	0.00	74193.42	311607.07	6778.27	318385.34	385800.49	6778.27	392578.76
70-74	33689.55	0.00	33689.55	306155.13	3928.68	310083.81	339844.68	3928.68	343773.36
75-79	16926.23	0.00	16926.23	195591.77	2922.68	198514.45	212518.00	2922.68	215440.68
80-84	6350.93	0.00	6350.93	76949.51	766.21	77715.72	83300.44	766.21	84066.65
OVER 84	1722.87	0.00	1722.87	35670.78	0.00	35670.78	37393.65	0.00	37393.65
TOTAL	410990.14	39911.87	450902.01	1699582.60	119589.01	1819171.61	2110572.74	159500.88	2270073.62

NOTE - 'PRIOR' INDICATES LIVES WHOSE BENEFIT PAYMENTS COMMENCED MORE THAN ONE YEAR BEFORE THE VALUATION DATE,
'NEW' INDICATES LIVES WHOSE BENEFIT PAYMENTS COMMENCED IN THE YEAR PRECEDING THE VALUATION DATE.

TABLE 18C
AVERAGE MONTHLY PENSION OF DISABLED AND RETIRED FIRE (1967 PLAN) MEMBERS AS OF JULY 1, 1988

ATTAINED AGE	-----DISABLED-----			-----AVERAGE MONTHLY PENSION AMOUNTS-----			-----RETIRED-----		
	PRIOR	NEW	TOTAL	PRIOR	NEW	TOTAL	PRIOR	NEW	TOTAL
UNDER 45	937.80	1371.96	1013.60	428.81	831.14	436.40	683.30	1326.89	749.88
45-49	1097.97	1549.03	1148.71	1154.42	1442.01	1253.19	1124.95	1464.41	1206.49
50-54	1057.46	1747.49	1117.46	1203.68	1662.08	1257.16	1173.12	1675.75	1228.72
55-59	1004.81	1944.55	1044.80	1048.08	1132.98	1053.87	1038.76	1248.92	1051.95
60-64	921.74	0.00	921.74	1036.44	683.43	1025.12	1015.61	683.43	1006.85
65-69	797.78	0.00	797.78	763.74	616.21	759.87	770.06	616.21	766.76
70-74	716.80	0.00	716.80	596.79	357.15	591.76	606.87	357.15	602.05
75-79	583.66	0.00	583.66	509.35	324.74	505.13	514.57	324.74	510.52
80-84	635.09	0.00	635.09	427.50	383.10	427.01	438.42	383.10	437.85
OVER 84	1722.87	0.00	1722.87	339.72	0.00	339.72	352.77	0.00	352.77
TOTAL	899.32	1535.07	933.54	728.81	1077.38	744.65	756.75	1164.24	775.83

NOTE - 'PRIOR' INDICATES LIVES WHOSE BENEFIT PAYMENTS COMMENCED MORE THAN ONE YEAR BEFORE THE VALUATION DATE,
'NEW' INDICATES LIVES WHOSE BENEFIT PAYMENTS COMMENCED IN THE YEAR PRECEDING THE VALUATION DATE.

PART IV
FINANCIAL EXPERIENCE OF FUND

The assets of the Retirement System as of July 1, 1988 are \$1,489,913,743 on a market value basis and \$1,463,941,702 on a cost value basis. A summary of the asset holdings is shown on Table 19 and the receipts and disbursements statement is shown on Table 20. Table 21 provides a statement of fund equity as of June 30, 1988 and Table 22 provides a summary of administrative expenses for the 1987 fiscal year. Table 23 summarizes the derivation of adjusted market value of assets used for valuation purposes and Table 24 shows the allocation of these assets between all divisions as of June 30, 1988.

Table 20 shows the funds received and disbursed during the fiscal year ending June 30, 1988. The table shows that employee and employer contributions constitute approximately 65% of the receipts for the year. On the disbursement side, benefit payments were approximately 94% of all disbursements, on a market value basis.

In addition to showing the receipts and disbursements, Table 20 indicates the approximate rates of return for the year. The approximate rates of return and a comparison with the prior year is presented in the table below:

	<u>Fiscal Year Ending</u>	
	<u>June 30, 1987</u>	<u>June 30, 1988</u>
Cost Value	13.1%	6.9%
Market Value	10.7%	1.0%

Table 23 shows the derivation of adjusted market value of assets used in the cost calculations. All assets other than equities are valued at market. Equity funds are valued as the product of (i) the 3-year average of the ratio

of market value to book value (but not before July 1, 1985) and (ii) the cost value of the equity funds as of the valuation date. Also shown on the table is the approximate rate of return on an adjusted market value basis of 6.3% (as compared to the prior year of 15.1%).

Table 24 shows the allocation of the assets used for valuation purposes as of July 1, 1988 between all divisions. As required under Act 205, experience gains and losses and changes in the unfunded actuarial accrued liability due to plan amendments and/or changes in actuarial assumptions must be reported separately for each of the participating divisions. This requires, for valuation purposes only, that assets be allocated between the divisions. It should be noted that this allocation does not constitute a legal separation of the assets.

The starting point of the table is valuation assets as of July 1, 1987. These assets were allocated based on the actuarial accrued liability as of that date. The non-investment transactions (item 2 of the table), other than administrative expenses attributable to each division, was provided by the Finance Department of the City of Philadelphia. Administrative expenses were allocated based on the member count of each division as of the beginning of the fiscal year. Investment income (net of investment expenses) were allocated in proportion to the mean fund balance as of the valuation date prior to recognition of fund earnings.

TABLE 19
CITY OF PHILADELPHIA MUNICIPAL RETIREMENT SYSTEM

STATEMENT OF ASSETS AND LIABILITIES
(FISCAL YEAR ENDING JUNE 30, 1988)

	<u>COST VALUE</u>	<u>MARKET VALUE</u>
<u>Assets:</u>		
Cash	\$ 136,171	\$ 136,171
Investment Accounts	1,432,240,568	1,458,212,609
Due From Other Funds	18,244,608	18,244,608
Accounts Receivable	4,147,655	4,147,655
Interest and Dividends Receivable	11,887,876	11,887,876
Due From Other Governmental Units	908,596	908,596
Other Assets	<u>9,720</u>	<u>9,720</u>
Total Assets	\$1,467,575,194	\$1,493,547,235
<u>Liabilities:</u>		
Vouchers Payable	\$ 26,673	\$ 26,673
Accounts Payable	--	--
Salaries and Wages Payable	60,187	60,187
Accrued Expenses	1,065,208	1,065,208
Funds Held in Escrow	3,066	3,066
Deferred Revenue	2,242,859	2,242,859
Other Liabilities	<u>235,499</u>	<u>235,499</u>
Total Liabilities	\$ 3,633,492	\$ 3,633,492
<u>Fund Balance:</u>	\$1,463,941,702	\$1,489,913,743

TABLE 20
CITY OF PHILADELPHIA MUNICIPAL RETIREMENT SYSTEM
STATEMENT OF RECEIPTS AND DISBURSEMENTS

	<u>COST VALUE</u>	<u>MARKET VALUE</u>
<u>Balance as of July 1, 1987</u>	\$1,390,906,779	\$1,497,884,497
<u>Receipts:</u>		
Contributions:		
Commonwealth of Pennsylvania	\$ 24,392,292	\$ 24,392,292
City of Philadelphia	120,433,502	120,433,502
Employees	40,688,578	40,688,578
Quasi-Public Agencies	2,757,526	2,757,526
Interest and Dividends	95,588,444	95,588,444
Gain from Sale of Investments	3,920,203	3,920,203
Miscellaneous Operating Revenues	573,844	573,844
Adjustments to Members' Accounts	505	505
<u>Total Receipts</u>	<u>\$ 288,354,894</u>	<u>\$ 288,354,894</u>
<u>Disbursements:</u>		
Withdrawals	\$ 5,580,376	\$ 5,580,376
Benefit Payments	202,871,531	202,871,531
Administrative Expenses	2,495,932	2,495,932
Investment Manager Fees	4,305,454	4,305,454
Adjustments	66,678	66,678
<u>Total Disbursements</u>	<u>\$ 215,319,971</u>	<u>\$ 215,319,971</u>
<u>Change in Unrealized Appreciation/Depreciation</u>	--	\$ (81,005,677)
<u>Balance as of July 1, 1988</u>	\$1,463,941,702	\$1,489,913,743
<u>Approximate Return on Investments During Year</u>	6.9%	1.0%

TABLE 21
CITY OF PHILADELPHIA MUNICIPAL RETIREMENT SYSTEM
STATEMENT OF FUND EQUITY
(COST VALUE)

Members' Pension Contributions	\$ 344,685,238
Designated for Pension Benefits	<u>1,119,256,464</u>
Total as of June 30, 1988	\$1,463,941,702

TABLE 22
CITY OF PHILADELPHIA MUNICIPAL RETIREMENT SYSTEM
STATEMENT OF ADMINISTRATIVE EXPENSES
FOR YEAR ENDING JUNE 30, 1988

Personal Services	\$1,019,034
Purchase of Services	825,715
Materials and Supplies	87,714
Employer's Share of Fringe Benefits	<u>563,469</u>
Total	\$2,495,932

TABLE 23
CITY OF PHILADELPHIA MUNICIPAL RETIREMENT SYSTEM
DERIVATION OF ASSETS FOR VALUATION PURPOSES

1. Cash		\$ 136,171
2. Equity Securities:		
a. Market Value as of July 1, 1986	\$606,965,947	
b. Cost Value as of July 1, 1986	\$497,996,154	
c. July 1, 1986 Ratio: $[a \div b]$	1.218816535	
d. Market Value as of July 1, 1987	\$696,626,633	
e. Cost Value as of July 1, 1987	\$587,003,262	
f. July 1, 1987 Ratio: $[d \div e]$	1.186750872	
g. Market Value as of July 1, 1988	\$588,300,256	
h. Cost Value as of July 1, 1988	\$562,230,473	
i. July 1, 1988 Ratio: $[g \div h]$	1.04636850	
j. Average of Ratio of Market Value to Cost Value: $[c + f + i] \div 3$	1.15064530	
k. Adjusted Market Value: $(h) \times (j)$		\$ 646,927,851
3. Debt Securities		\$ 869,912,353
4. Other Assets		\$ 9,720
5. Receivables		\$ 35,188,735
6. Liabilities		\$ (3,633,492)
7. Assets for Valuation Purposes: $(1) + (2k) + (3) + (4) + (5) + (6)$		\$1,548,541,338
8. Approximate Return on Investments During Year on Adjusted Asset Basis		6.3%

TABLE 24
ALLOCATION OF ASSETS FOR VALUATION PURPOSES BETWEEN
DIVISIONS AS OF JUNE 30, 1988
 (\$000 OMITTED) 1/

	1967 PLAN			PLAN 87				TOTAL
	MUNICIPAL	POLICE	FIRE	MUNICIPAL	ELECTED	POLICE	FIRE	
1. Assets for Valuation Purposes as of June 30, 1987	\$793,518	\$490,351	\$194,967	\$ 151	\$ 0	\$ 48	\$ 48	\$1,479,083
2. Transactions During Period July 1, 1987 - June 30, 1988:								
a. Contributions								
(i) Commonwealth + City	\$ 78,246	\$ 46,831	\$ 18,361	\$ 844	\$11	\$405	\$128	\$ 144,826
(ii) Employees	23,163	11,997	4,722	403	19	293	92	40,689
(iii) Quasi-Public Agencies	2,758	0	0	0	0	0	0	2,758
b. Refund of Uncancelled Checks	302	34	(28)	0	0	0	0	307
c. Pension Benefits	104,165	71,855	26,851	0	0	0	0	202,872
d. Withdrawals	3,859	1,522	167	33	0	0	0	5,580
e. Administrative Expenses 2/	<u>1,627</u>	<u>604</u>	<u>237</u>	<u>18</u>	<u>0</u>	<u>3</u>	<u>8</u>	<u>2,496</u>
f. Net Transactions: (a) + (b) - (c) - (d) - (e)	\$ (5,183)	\$ (15,118)	\$ (4,201)	\$1,196	\$30	\$696	\$212	\$ (22,369)
3. Mean Fund Balance Prior to Allocation of Realized and Unrealized Income: (1) + [1/2 x (2f)]	\$790,927	\$482,792	\$192,866	\$ 749	\$15	\$396	\$153	\$1,467,899
4. Realized and Unrealized Income for Period July 1, 1987 - June 30, 1988 (Allocated in Proportion to (3))	\$ 49,478	\$ 30,202	\$ 12,065	\$ 47	\$ 1	\$ 25	\$ 10	\$ 91,827
5. Assets for Valuation Purposes as of June 30, 1988: (1) + (2) + (4)	\$837,814	\$505,435	\$202,831	\$1,394	\$31	\$769	\$269	\$1,548,541

1/ Numbers may not add due to rounding.

2/ Allocated in proportion to the number of active and non-active members in each division as of July 1, 1986.

PART V

SALIENT FEATURES OF THE RETIREMENT SYSTEM

	<u>MUNICIPAL (PLAN J)</u>	<u>1967 PLAN</u> <u>UNIFORMED (PLANS D AND X)</u>
1. <u>Participation:</u>	Full-time employees commence participation on their date of employment. Temporary employees commence participation after the completion of 6 months of employment. Participation is limited to employees hired before January 8, 1987. District Council 33 members continue to be participants of this Plan regardless of hire date.	Same as municipal
2. <u>Credited Service:</u>	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
3. <u>Total Compensation:</u>	<p>Total compensation means:</p> <p>(a) for members represented by AFSCME District Council 33, AFL-CIO or District Council 47, AFL-CIO or employees of the Common Pleas Court, Municipal Court or Traffic Court, the base rate of pay, longevity payments and overtime received during a 12-month period</p> <p>(b) for members who hold an elected office, exempt position or other position not represented by a union, the base rate of pay and longevity payments received during a 12-month period.</p>	Total compensation means the base rate of pay and longevity payments received during a 12-month period.
4. <u>Final Compensation:</u>	Final compensation means the greater of the annual base rate of pay at the time of termination and the total compensation received during the 12-month period immediately preceding termination.	Same as municipal
5. <u>Average Final Compensation:</u>	<p>Average final compensation means:</p> <p>(a) for members represented by AFSCME District Council 33, AFL-CIO or District Council 47, AFL-CIO or employees of the Common Pleas Court, Municipal Court or Traffic Court, the arithmetic average of the total compensation received during the three calendar or anniversary years which produces the highest average</p>	<p>Average final compensation means the highest of (a), (b) and (c) below:</p> <p>(a) the total compensation received during the 12-month period which produces the highest figure; or</p> <p>(b) the annual base rate of pay, excluding longevity payments, calculated from the final pay period; or</p>

1967 PLAN		
	MUNICIPAL (PLAN J)	UNIFORMED (PLANS D AND X)
	(b) for members who hold an elected office, exempt position or other positions not represented by a union, the arithmetic average of the total compensation received during the three calendar or anniversary years which produces the highest average.	(c) the arithmetic average of the total compensation received during the five calendar years of employment which produces the highest average.
6. <u>Employee Contributions:</u>	<p>Each employee who participates in the Social Security System, contributes 3-3/4% of his total compensation up to the taxable wage base (\$43,800 in 1987 and \$45,000 in 1988) and 6% of his total compensation above the taxable wage base to the Retirement System.</p> <p>Each employee who does not participate in the Social Security System contributes 6% of his total compensation to the Retirement System.</p>	Same as municipal
7. <u>Service Retirement:</u>		
a. <u>Eligibility:</u>	Each municipal employee is eligible to retire and receive a service pension upon the attainment of age 55.	Each uniformed employee is eligible to retire and receive a service pension upon the attainment of age 45.
b. <u>Benefit Amount:</u>	<p>The service pension equals the sum of:</p> <p>2-1/2% of the employee's average final compensation multiplied by his years of credited service to a maximum of 20 years;</p> <p style="text-align: center;">plus</p> <p>2% of the employee's average final compensation multiplied by his years of credited service in excess of 20;</p> <p>such sum limited to 80% of the employee's average final compensation.</p>	The service pension equals 2-1/2% of the employee's average final compensation multiplied by his years of credited service, subject to a maximum of 100% of average final compensation.
8. <u>Deferred Vested Retirement:</u>		
a. <u>Eligibility:</u>	A terminating employee who has completed 10 or more years of credited service is eligible for a deferred vested retirement benefit.	Same as municipal

1967 PLAN

	MUNICIPAL (PLAN J)	UNIFORMED (PLANS D AND X)
b. <u>Benefit Amount:</u>	<p>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 commences at his service retirement date. If the member dies prior to the commencement of his deferred vested benefit, an ordinary death benefit is payable (see item 11 below).</p> <p>Alternatively, the terminating employee may request at any time prior to benefit commencement to receive a return of employee contributions (without interest) in lieu of the deferred vested benefit.</p>	Same as municipal
9. <u>Withdrawal Benefit:</u>	Each terminating employee who has completed less than 10 years of credited service will receive a withdrawal benefit equal to his employee contributions (without interest).	Same as municipal
10. <u>Service-Connected Death:</u>		
a. <u>Eligibility:</u>	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
b. <u>Benefit Amount:</u>	<p>The death benefit equals the sum of:</p> <p>the total employee contributions paid to the Retirement System; plus</p> <p>a yearly payment of 60% of the employee's final compensation reduced by any death benefits payable under the provisions of the Workers' Compensation Act.</p> <p>This benefit is payable to the spouse until her 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.</p>	Same as municipal

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 yearly payment of 15% of final compensation for the remainder of his lifetime.

11. Ordinary Death:

a. Eligibility:

The beneficiary of an active employee (or a terminated vested employee who did not withdraw his employee contributions) who dies after completion of 10 years of credited service or who has attained 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 any employee who dies while actively employed (or a terminated vested employee who did not withdraw his 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 beneficiary of an active employee who dies before completion of 10 years of credited service and attainment of age 55 is eligible for a lump sum payment.

The beneficiary may be any relative by blood or marriage.

b. Annual Pension:

The annual ordinary death pension, payable for life, is equal to the regular service pension the employee would have received had he been eligible to retire on the day before he died and had elected option 2, joint and 100% contingent annuitant (see item 14 below).

The annual ordinary death pension, payable for life, is equal to the regular service pension the employee would have received (based upon a minimum of 10 years of service) had he been eligible to retire on the day before he died and had elected option 2, joint and 100% contingent annuitant (see item 14 below).

c. Lump Sum Payment:

The lump sum payment is equal to:

Same as municipal

10% of the deceased employee's average final compensation multiplied by his 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 life insurance which was paid for by the City.

1967 PLAN

MUNICIPAL (PLAN J)

UNIFORMED (PLANS D AND X)

12. Service-Connected Disability:

a. Eligibility:

An active employee who is 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.

Same as municipal

b. Benefit Amount:

The service-connected disability benefit is equal to:

Same as municipal

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 provisions of the Workers' Compensation Act.

If the employee leaves his employee contributions with the Retirement System, he may choose a survivor benefit option (see item 14 below) in order to provide for continuation of benefit payments after his death. If he elects to receive his employee contributions, the benefit is payable for his lifetime only.

13. Ordinary Disability:

a. Eligibility:

An active employee who is found by the Board to be mentally or physically permanently incapacitated from the further performance of duties due to an accident or illness not caused by the performance of duties is eligible for an immediate ordinary disability benefit provided he has completed at least 10 years of credited service.

An active employee who is found by the Board to be mentally or physically permanently incapacitated from the further performance of duties due to an accident or illness not caused by the performance of duties is eligible for an immediate ordinary disability benefit provided he has completed at least 5 years of credited service and is a fireman. If the disability is permanent and partial and the employee is a policeman, he must have completed at least 10 years of credited service. If the disability is permanent and total and the employee is a policeman, there is no service requirement.

MUNICIPAL (PLAN J)	1967 PLAN	UNIFORMED (PLANS D AND X)
The annual ordinary disability benefit is equal to the benefit determined under the service pension formula using average final compensation and credited service as of the date of disablement.		Same as municipal, except that each eligible employee is automatically credited with a minimum of 10 years of service for purposes of calculating the annual 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 2, 3, and 4 provide benefits actuarially equivalent to a lifetime only pension while option 1 has no reduction.		Same as municipal
<u>Option 1</u> provides that a benefit is payable to the employee with the provision that upon 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.		
<u>Option 2</u> provides a reduced benefit payable to the employee with the provision that 100% of the reduced benefit will continue to be paid to the designated beneficiary for life after the death of the employee.		
<u>Option 3</u> is the same as option 2 except that only 50% of the reduced benefit is continued to the designated beneficiary.		
<u>Option 4</u> provides that upon the employee's death, 50% of the benefit will continue to be paid to the surviving spouse for the remainder of her lifetime, provided that the employee and his spouse were married for 2 years prior to retirement. If there is no eligible spouse at the time the employee dies, or the spouse dies before the full amount of the contributions have been returned, 50% of the benefit is continued to dependent children until age 18, or if no dependent children, payments are given to dependent parents for the remainder of their lives. In addition, option 4 provides for a guaranteed return of employee contributions as described in option 1 above.		

1967 PLAN

	MUNICIPAL (PLAN J)	UNIFORMED (PLANS D AND X)
15. <u>Minimum Pension:</u>	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 maximum of 10 years.	The monthly minimum pension to pensioners receiving service-connected disability benefits is equal to \$500. The monthly minimum pension to all other pensioners is equal to \$440 with the provision that such pension will increase to \$500 at the time the pensioner attains age 60.
16. <u>Waiver of Benefit:</u>	Any employee at service retirement age with less than 3 years, but more than 1 year of credited service, may waive his right to receive a monthly benefit and in lieu thereof, receive a lump sum payment of twice his employee contributions without interest.	Same as municipal
17. <u>Service-Connected Health Care Benefit:</u>	Not applicable.	In the event of the death of a uniformed employee resulting from the performance of his 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 as were in force at the time of the employee's death. Payments to the spouse cease upon remarriage and to dependent children at age 18 (age 22 if full-time student).

	PLAN 87	
	MUNICIPAL (PLAN M)	UNIFORMED (PLANS A AND B)
1. <u>Participation:</u>	Full-time employees commence participation on their date of employment. Temporary employees commence participation after the completion of 6 months of employment. Participation is limited to employees hired on or after January 8, 1987. Any members of the 1967 Plan may irrevocably elect to participate in Plan 87. District Council 33 members do not participate in this Plan.	Same as municipal
2. <u>Credited Service:</u>	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
3. <u>Total Compensation:</u>	Total compensation means the base rate of pay and longevity payments received during a 12-month period.	Same as municipal
4. <u>Final Compensation:</u>	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
5. <u>Average Final Compensation:</u>	Average final compensation means the arithmetic average of the total compensation received during the three calendar or anniversary years which produces the highest average.	Average final compensation means the arithmetic average of the total compensation received during the two calendar or anniversary years which produces the highest average.
6. <u>Employee Contributions:</u>	Total employee contributions equal 30% of the gross normal cost for all members in the municipal division.	Total employee contributions equal 5% of total compensation, but not less than 30% or greater than 50% of total normal cost for members in the uniformed division.
7. <u>Service Retirement:</u>		
a. <u>Eligibility:</u>	Each municipal employee is eligible to retire and receive a service pension upon the attainment of age 60 and has 10 or more years of credited service.	Each uniformed employee is eligible to retire and receive a service pension upon the attainment of age 50 and has 10 or more years of credited service.
b. <u>Benefit Amount:</u>	The service pension equals the sum of 2% of the employee's average final compensation multiplied by his years of credited service.	The service pension equals 2.2% of the employee's average final compensation multiplied by his years of credited service to a maximum of 20 years
		plus
		2% of the employee's average final compensation multiplied by his years of credited service in excess of 20.

PLAN 87

MUNICIPAL (PLAN M)

UNIFORMED (PLANS A AND B)

8. Early Retirement:

a. Eligibility:

Each municipal employee is eligible to retire and receive a reduced service pension upon the attainment of age 52 and has 10 or more years of credited service. Alternatively, a member is eligible if he has 33 years of credited service regardless of age.

Each uniformed employee is eligible to retire and receive a reduced service pension upon the attainment of age 40. Alternatively, a member is eligible if he has 25 years of credited service, regardless of age.

b. Benefit Amount:

The annual amount is calculated the same as for service retirement, reduced by 1/2 of 1% for each month the employee is younger than his minimum retirement age.

The annual amount is calculated the same as for 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.

9. Deferred Vested Retirement:

a. Eligibility:

Benefits are not reduced if the employee has 33 or more years of credited service. A terminating employee who has completed 10 or more years of credited service is eligible for a deferred vested retirement benefit provided he has not withdrawn his contributions.

Same as municipal

b. 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 commences at his service retirement date. If the member dies prior to the commencement of his deferred vested benefit, an ordinary death benefit is payable (see item 12 below).

Same as municipal

Alternatively, the terminating employee may request at any time prior to benefit commencement to receive a return of employee contributions (without interest) in lieu of the deferred vested benefit.

10. Withdrawal Benefit:

Each terminating employee who has completed less than 10 years of credited service will receive a withdrawal benefit equal to his employee contributions (without interest).

Same as municipal

PLAN 87

11. Service-Connected Death:

MUNICIPAL (PLAN M)

UNIFORMED (PLANS A AND B)

a. 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

b. Benefit Amount:

The death benefit equals the sum of:
the total employee contributions paid to the Retirement System (without interest); plus

Same as municipal

a yearly payment of 60% of the employee's final compensation reduced by any death benefits payable under the provisions of the Workers' Compensation Act.

This benefit is payable to the spouse until her 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 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 yearly payment of 15% of final compensation for the remainder of his lifetime.

12. Ordinary Death:

a. Eligibility:

The beneficiary of an active employee (or a terminated vested employee who did not withdraw his employee contributions) who dies after completion of 10 years of credited service or who has attained age 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 any employee who dies while actively employed (or a terminated vested employee who did not withdraw his employee contributions) is eligible for a 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 completion of 10 years of credited service and attainment of age 60 is eligible for a lump sum payment.

The beneficiary may be any relative by blood or marriage.

The beneficiary may be any relative by blood or marriage.

PLAN 87

	MUNICIPAL (PLAN M)	UNIFORMED (PLANS A AND B)
b. <u>Annual Pension:</u>	The annual ordinary death pension, payable for life, is equal to the regular service pension the employee would have received had he been eligible to retire on the day before he died and had elected option 2, joint and 100% contingent annuitant (see item 14 below).	The annual ordinary death pension, payable for life, is equal to the regular service pension the employee would have received (based upon a minimum of 10 years of service) had he been eligible to retire on the day before he died and had elected option 2, joint and 100% contingent annuitant (see item 14 below).
c. <u>Lump Sum Payment:</u>	<p>The lump sum payment is equal to:</p> <p>10% of the deceased employee's average final compensation multiplied by his years of credited service to a maximum of 10; plus</p> <p>the deceased employee's contributions to the Retirement System (without interest); minus</p> <p>the total amount of the deceased employee's life insurance which was paid for by the City.</p>	Same as municipal
13. <u>Service-Connected Disability:</u>		
a. <u>Eligibility:</u>	An active employee who is found by the Board of Pensions and Retirement to be mentally or physically permanently incapacitated from any further performance of duties due solely to the result of the performance of duties is eligible for an immediate service-connected disability pension. The application for benefit must be made within one year after termination of employment.	Same as municipal
b. <u>Benefit Amount:</u>	<p>The service-connected disability benefit is equal to:</p> <p>the employee's contributions to the Retirement System; plus</p> <p>a yearly benefit of 70% of the employee's final compensation; reduced by any disability benefits payable under the provisions of the Workers' Compensation Act.</p>	Same as municipal

14. Ordinary Disability:a. Eligibility:

An active employee who is found by the Board to be mentally or physically permanently incapacitated from the further performance of duties due to an accident or illness not caused by the performance of duties is eligible for an immediate ordinary disability benefit provided he has completed at least 10 years of credited service.

The application for benefits must be made within one year after termination of employment.

An active employee who is found by the Board to be mentally or physically permanently incapacitated from the further performance of duties due to an accident or illness not caused by the performance of duties is eligible for an immediate ordinary disability benefit provided he has completed at least 5 years of credited service and is a fireman. If the disability is permanent and partial and the employee is a policeman, he must have completed at least 10 years of 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 of employment.

b. Benefit Amount:

The annual ordinary disability benefit is equal to the benefit determined under the service pension formula using average final compensation and credited service as of the date of disablement.

Same as municipal, except that each eligible employee is automatically credited with a minimum of 10 years of service for purposes of calculating the annual benefit.

15. Survivor Benefits:

Service pensions, deferred vested benefits, service-connected disability benefits, and ordinary disability benefits are payable under 3 optional forms. Options 2 and 3 provide benefits actuarially equivalent to a lifetime only pension while option 1 has no reduction.

Same as municipal

Option 1 provides that a benefit is payable to the employee with the provision that upon 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 provides a reduced benefit payable to the employee with the provision that 100% of the reduced benefit will continue to be paid to the designated beneficiary for life after the death of the employee.

Option 3 is the same as option 2 except that only 50% of the reduced benefit is continued to the designated beneficiary.

PLAN 87	
MUNICIPAL (PLAN M)	UNIFORMED (PLANS A AND B)

16. Service-Connected Health
Care Benefit:

Not applicable.

In the event of the death of a uniformed employee resulting from the performance of his 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 as were in force at the time of the employee's death. Payments to the spouse cease upon remarriage and to dependent children at age 18 (age 22 if full-time student).

PLAN 87
ELECTED (PLAN L)

1. Participation: Full-time employees commence participation on their date of employment. Temporary employees commence participation after the completion of 6 months of employment. Participation is limited to employees hired on or after January 8, 1987. Any members of the 1967 Plan may irrevocably elect to participant in Plan 87. District Council 33 members do not participate in this Plan.
2. 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.
3. Total Compensation: Total compensation means the base rate of pay and longevity payments received during a 12-month period.
4. 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.
5. Average Final Compensation: Average final compensation means the arithmetic average of the total compensation received during the three calendar or anniversary years which produces the highest average.
6. Employee Contributions: Total employee contributions equal 30% of the gross normal cost for all members in the elected division calculated under the municipal plan plus 100% of the gross normal cost which exceeds the cost for the municipal plan.
7. Service Retirement:
 - a. Eligibility: Each elected official is eligible to retire and receive a service pension upon the attainment of age 55 and has 10 or more years of credited service.
 - b. Benefit Amount: The service pension equals 3.5% of the employee's average final compensation multiplied by his years of credited service.
8. Early Retirement:
 - a. Eligibility: Each elected official is eligible to retire if he has 33 years of credited service, regardless of age.
 - b. Benefit Amount: Benefits are not reduced if the employee has 33 or more years of credited service.
9. Deferred Vested Retirement:
 - a. Eligibility: A terminating employee who has completed 10 or more years of credited service is eligible for a deferred vested retirement benefit provided he has not withdrawn his contributions.
 - b. 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 commences at his service retirement date. If the member dies prior to the commencement of his deferred vested benefit, an ordinary death benefit is payable (see item 12 below).

Alternatively, the terminating employee may request at any time prior to benefit commencement to receive a return of employee contributions (without interest) in lieu of the deferred vested benefit.

PLAN 87
ELECTED (PLAN L)

10. Withdrawal Benefit:

Each terminating employee who has completed less than 10 years of credited service will receive a withdrawal benefit equal to his employee contributions (without interest).

11. Service-Connected Death:

a. 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.

b. 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 provisions of the Workers' Compensation Act.

This benefit is payable to the spouse until her 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 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 yearly payment of 15% of final compensation for the remainder of his lifetime.

12. Ordinary Death:

a. Eligibility:

The beneficiary of an active employee (or a terminated vested employee who did not withdraw his employee contributions) who dies after completion of 10 years of credited service or who has attained 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 completion of 10 years of credited service and attainment of age 55 is eligible for a lump sum payment.

The beneficiary may be any relative by blood or marriage.

b. Annual Pension:

The annual ordinary death pension, payable for life, is equal to the regular service pension the employee would have received had he been eligible to retire on the day before he died and had elected option 2, joint and 100% contingent annuitant (see item 14 below).

c. Lump Sum Payment:

The lump sum payment is equal to:

10% of the deceased employee's average final compensation multiplied by his years of 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 for by the City.

13. Service-Connected Disability:

a. Eligibility:

An active employee who is 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.

b. 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 provisions of the Workers' Compensation Act.

14. Ordinary Disability:

a. Eligibility:

An active employee who is found by the Board to be mentally or physically permanently incapacitated from the further performance of duties due to an accident or illness not caused by the performance of duties is eligible for an immediate ordinary disability benefit provided he has completed at least 10 years of credited service.

b. 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.

15. Survivor Benefits:

Service pensions, deferred vested benefits, service-connected disability benefits, and ordinary disability benefits are payable under 3 optional forms. Options 2 and 3 provide benefits actuarially equivalent to a lifetime only pension while option 1 has no reduction.

Option 1 provides that a benefit is payable to the employee with the provision that upon 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.

PLAN 87
ELECTED (PLAN L)

Option 2 provides a reduced benefit payable to the employee with the provision that 100% of the reduced benefit will continue to be paid to the designated beneficiary for life after the death of the employee.

Option 3 is the same as option 2 except that only 50% of the reduced benefit is continued to the designated beneficiary.

16. Service-Connected Health
Care Benefit:

Not applicable.

PART VI
ACTUARIAL COST METHOD, FACTORS AND
ASSUMPTIONS USED IN COST DETERMINATIONS

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

1. Member Data: The member data used in the determination of cost estimates consists of pertinent information with respect to the 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.
2. Valuation Date: July 1, 1988.
3. Actuarial Cost Method: The costs of the System have been determined in accordance with the individual entry age actuarial cost method. The Bogen unfunded actuarial accrued liability is amortized in level dollar payments over 20 years ending June 30, 1992 and 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. The remaining unfunded actuarial accrued liability as of July 1, 1985 is amortized over 40 years ending June 30, 2019 with payments increasing 6.0% per annum. Changes in the actuarial accrued liability realized after July 1, 1985 are amortized in level dollar payments as follows:
 - a. Changes in actuarial assumptions: 20 years
 - b. Experience gains and losses: 15 years
 - c. Benefit modifications applicable to active members: 20 years
 - d. Benefit modifications applicable to non-active members: 10 years

4. Annual Rate of Withdrawal Prior to Retirement: The assumed annual rates of withdrawal may best be illustrated by the following probabilities at quinquennial ages:

<u>Attained Age</u>	<u>Municipal and Elected Officials</u>		<u>Uniformed</u>
	<u>Males</u>	<u>Females</u>	<u>Unisex</u>
20	.120022	.109707	.021000
25	.090326	.100505	.020300
30	.055510	.073123	.016544
35	.032213	.049504	.009848
40	.023083	.035723	.005592
45	.018176	.028560	.000000
50	.014635	.023075	.000000
55	.000000	.000000	.000000

In addition, it is assumed that a terminating employee who is vested (10 years of service) will elect a refund of employee contributions unless his age plus years of service at termination sum to 55 or more (rule of 55), in which event he will be assumed to elect a deferred pension commencing at service retirement age.

5. Annual Rate of Disability Prior to Retirement: The assumed annual rates of disability may best be illustrated by the following probabilities at quinquennial ages:

<u>Attained Age</u>	<u>Municipal and Elected Officials</u>		<u>Uniformed</u>
	<u>Males</u>	<u>Females</u>	<u>Unisex</u>
20	.000010	.000012	.000994
25	.000028	.000054	.001220
30	.000339	.000230	.002265
35	.001137	.000602	.004608
40	.002661	.001423	.008668
45	.005740	.003288	.016239
50	.010706	.007249	.020000
55	.014193	.010450	.020000
60	.015000	.011250	.020000
65	.000000	.000000	.000000

In addition, it is assumed that 90% of all disabilities among municipal and elected members are ordinary (10% are service-connected) and that 80% of all disabilities among uniformed members are ordinary (20% are service-connected).

6. Annual Rate of Mortality Prior to Retirement: It is assumed that deaths among active municipal and elected male members may be represented by 55% of the UP-84 Mortality Table with ages set forward one year. Deaths among municipal and elected female members are assumed to be represented by 50% of the UP-84 Mortality Table with ages set back four years. In addition, it is assumed that 95% of all deaths among active municipal and elected members are ordinary (5% are service-connected).

It is assumed that deaths among active uniformed members may be represented by 55% of the UP-84 Mortality Table with ages set forward one year. In addition, it is assumed that 90% of all deaths among active uniformed members are ordinary (10% are service-connected).

7. Service Retirement: It is assumed that active members in the 1967 Plan will retire in accordance with the following rates:

<u>Attained Age</u>	<u>Municipal and Elected Officials Unisex</u>	<u>Uniformed Unisex</u>
45	--	.150
46	--	.090
47	--	.100
48	--	.105
49	--	.115
50	--	.120
51	--	.125
52	--	.145
53	--	.150
54	--	.170

(Illustration continued on following page)

<u>Attained Age</u>	<u>Municipal and Elected Officials Unisex</u>	<u>Uniformed Unisex</u>
55	.175	.180
56	.090	.200
57	.090	.225
58	.090	.225
59	.090	.225
60	.115	.230
61	.115	.230
62	.300	.300
63	.180	.300
64	.180	.300
65	.300	.300
66	.225	.300
67	.200	.300
68	.200	.300
69	.200	.300
70+	1.000	1.000

The corresponding rates for members under Plan 1987 are as follows:

<u>Age</u>	<u>Municipal and Elected Officials</u>		<u>Uniformed</u>		
	<u>Full Benefits</u>		<u>Reduced Benefits</u>	<u>Full Benefits</u>	
	<u>First Year Eligible</u>	<u>Subsequent Years</u>		<u>First Year Eligible</u>	<u>Subsequent Years</u>
40	--	--	.040	.500	.125
41	--	--	.040	.500	.125
42	--	--	.040	.500	.125
43	--	--	.040	.500	.125
44	--	--	.040	.500	.125
45	--	--	.040	.500	.125
46	--	--	.040	.480	.125
47	--	--	.040	.460	.125
48	--	--	.040	.440	.125
49	--	--	.040	.420	.125

(Illustration continued on following page)

Age	Municipal and Elected Officials			Uniformed		
	Reduced Benefits	Full Benefits		Reduced Benefits	Full Benefits	
		First Year Eligible*	Subsequent Years		First Year Eligible	Subsequent Years
50	--	--	--	.040	.400	.125
51	--	--	--	.040	.400	.125
52	.033	.450	.060	.040	.400	.140
53	.033	.420	.060	.040	.400	.150
54	.033	.390	.060	.040	.400	.170
55	.033	.360	.060	.040	.400	.190
56	.033	.330	.060	.040	.400	.215
57	.033	.300	.060	.040	.400	.225
58	.033	.300	.060	.040	.400	.225
59	.033	.300	.080	.040	.400	.230
60	.033	.300	.100	.040	.400	.230
61	.033	.350	.150	.040	.400	.245
62	.033	.430	.300	.040	.400	.295
63	.033	.500	.187	.040	.400	.265
64	.033	.500	.199	.040	.400	.260
65	.033	.600	.309	1.000	.400	1.000
66	.033	.600	.232	--	--	--
67	.033	.600	.214	--	--	--
68	.033	.600	.214	--	--	--
69	.033	.600	.238	--	--	--
70	1.000	.600	1.000	--	--	--

* Earlier of age 62 and 10 years of service, or 33 years of service.

8. Annual Rate of Mortality After Retirement: Post-retirement mortality has been assumed to follow the UP-84 Mortality Table with ages set forward one year for males and to follow 94% of the UP-84 Mortality Table with ages set back four years for females. Post-disablement mortality has been assumed to follow the above mentioned table with the following adjustment factors applied at each age.

<u>Attained Age</u>	<u>Adjustment Factor</u>		<u>Attained Age</u>	<u>Adjustment Factor</u>	
	<u>Male</u>	<u>Female</u>		<u>Male</u>	<u>Female</u>
47 & Before	5.40	6.90	62	1.57	2.00
48	4.59	5.87	63	1.51	1.93
49	4.10	5.24	64	1.46	1.86
50	3.78	4.83	65	1.40	1.79
51	3.46	4.42	66	1.35	1.73
52	3.19	4.07	67	1.32	1.68
53	2.86	3.66	68	1.30	1.66
54	2.59	3.31	69	1.30	1.66
55	2.38	3.04	70	1.24	1.59
56	2.16	2.76	71	1.19	1.52
57	1.94	2.48	72	1.19	1.52
58	1.84	2.35	73	1.13	1.45
59	1.73	2.21	74	1.10	1.41
60	1.67	2.14	75 & Later	1.08	1.38
61	1.62	2.07			

9. Salary Scale: It is assumed that salaries, including longevity and overtime, will increase at a compound annual rate of 6.0% per annum.
10. Rate of Investment Return: It is assumed that the assets of the fund will accumulate at a compound annual rate of 9% per annum, net of the annual expenses incurred in the investment of the fund's assets by the equity and debt money managers contracted by the Board of Pensions and Retirement.
11. Expenses: The administrative expenses of servicing the Retirement System are estimated based upon the estimated operating budget of the Board of Pensions and Retirement for fiscal year 1988 excluding the costs of the money managers contracted to invest the fund's assets.
12. Value of Investments: Assets held by the fund exclusive of equity securities are valued at market value as reported by the City. Equity securities are determined based on the product of (i) the average of

the ratio of the market value of the equity securities to their cost value as of the valuation date and the two immediately preceding July 1 dates (but not prior to July 1, 1984) and (ii) the corresponding cost value of the equity securities as of the valuation date.

13. Family Composition: It is assumed that 70% of all active members and 60% of all non-active members will be survived by a spouse and that female (male) spouses are four years younger (older) than members.
14. Form of Annuity: It is assumed that all members will elect Option 4 unless otherwise indicated in the participant's data.
15. Capitalized Value of Bonds: In order that both current assets and non-active liabilities be valued on the same basis, the portion of the fixed income portfolio which can be matched with expected future payments is determined based on the valuation interest rate and the difference between this value of assets and the market value of assets is subtracted from the accrued liability.
16. Rate of Covered Payroll Growth: It is assumed that the annual rate of growth of total covered payroll is 6% per annum. This is supported by the actuarial experience study for the 5-year period ending July 1, 1985 which showed that the rate of growth of covered payroll averaged 7.5% for the period of the study.

PART VII

STATEMENT OF ACTUARIAL PRESENT VALUE OF ACCRUED BENEFITS UNDER GASB STATEMENT NO. 5

The Governmental Accounting Standards Board (GASB) Statement No. 5 relates to the disclosure of pension liabilities on a public employer's financial statements. Beginning in 1987, GASB Statement No. 5 must be followed by any public employee retirement system that follows generally accepted accounting principles (GAAP).

The disclosures required by GASB Statement No. 5 are intended to provide users with information needed to assess the funding status of retirement systems on a going-concern basis, progress made in accumulating assets to pay benefits when due, and whether employers are making actuarially determined contributions to plans.

Footnote disclosures required by GASB Statement No. 5 include a description of the plan, a summary of significant accounting policies and actuarial assumptions, funding status of the plan using a standardized measure of pension obligation, and contributions required and contributions made during the period. The standardized measure of the pension obligation is the actuarial present value of credited projected benefits prorated on service. Ten-year historical trend information is to be included as required supplementary information. This historical information need not be supplied retroactively if information is not available.

It has been our interpretation of GASB No. 5 that vested liabilities do not include liabilities for future salary increases. Therefore, all liabilities for salary increases for vested members are included in non-vested liabilities.

Pension liabilities under GASB No. 5 are presented on the following page.

GASB STATEMENT NO. 5, DISCLOSURE INFORMATION
AS OF JULY 1, 1988
(\$000 OMITTED)

Current Employees

Employee Contributions	\$ 360,361
Employer-Financed Vested	\$ 636,194
Employer-Financed Non-Vested	\$ 637,476

Non-Active Participants

Retirees and Beneficiaries Currently Receiving Benefits and Terminated Employees Not Yet Receiving Benefits	\$1,789,434
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Total Pension Benefit Obligation \$3,423,465

Assets at Cost Value \$1,463,942
(Market Value = \$1,489,914)

Unfunded Pension Benefit Obligation \$1,959,523