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CITY OF PHILADELPHIA

MUNICIPAL RETIREMENT SYSTEM

JULY 1, 1990

ACTUARIAL VALUATION REPORT

Prepared by:

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April 19, 1991 Washington DC

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Table of Contents

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		Page
1.	Summary and Analysis of Findings	1
2.	Cost Derivation	11
3.	Plan Membership	34
4.	Financial Experience of Fund	72
5.	Salient Features of the Retirement System	81
6.	Actuarial Cost Method, Factors, and Assumptions Used in Cost Determinations	98
7.	Statement of Actuarial Present Value of Accrued Benefits Under GASB Statement No. 5	106

1. Findings

This report summarizes the findings of the actuarial valuation and analyzes the change in cost and liabilities as of July 1, 1990 of the City of Philadelphia Municipal Retirement System.

Findings Summary

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Table 1 shows actuarial valuation results for all divisions as of July 1, 1990. City contributions for the July 1, 1991 through June 30, 1992 fiscal year will be calculated using these values. The valuation reflects the funding requirements of the Municipal Pension Plan Funding Standard and Recovery Act (Act 205).

(Thousands)	 _
Participants	
Active Retired and Beneficiaries Disabled Terminated Vested Total	32,314 23,606 4,832 <u>549</u>
Total Annual Salaries	\$ 61,301 936,981
Net Actuarial Accrued Liability	\$ 3,969,454
Assets for Valuation Purposes	\$ 1,748,583
Unfunded Actuarial Accrued Liability	\$ 2,220,871
City Normal Cost as Percent of Payroll (before deduction of contributions from Commonwealth)	
Assuming Beginning of Year Payment Assuming End of Year Payment	6.719% 7.324%

July 1, 1990 Actuarial Valuation (Thousands)

Section 2 presents more detail on these determinations and contains a comparison of official funding policies and funding standards specified under generally accepted accounting principles along with the fund's estimated 20-year progress, from July 1, 1990 through June 30, 2010.

Analysis of Findings

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Table 2 compares the July 1, 1990 valuation and the July 1, 1989 valuation.

- 2 -

Current Versus Previous Valuation Comparison

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	July 1, 1989	July 1, 1990	Change
City Normal Cost Rate Assuming Payment at Beginning of Year			
1967 Plan Municipal Division Police Division Fire Division	5.830% 8.695 8.553	5.915% 8.699 8.622	+ .085% + .004 + .069
Plan 87 Municipal Division Elected Officials Police Division Fire Division	4.593 5.807 6.630 6.773	4.793 6.016 6.605 7.175	+ 200 + 209 - 025 + 402
otal	6.636%	6.719%	+.083%
Infunded Actuarial Accrued iability (Thousands)	\$2,117,773	\$2,220,871	+\$103,098

Normal cost rate changes in Table 2 are primarily the result of actuarial experience after July 1, 1989. In accordance with Act 189 of 1990, to determine the City's normal cost for the year ending June 30, 1992, the rates should be applied to the City's payroll in the year in which the 1992 fiscal budget is determined.

Actuarial Experience and Other Changes

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During the plan year ending June 30, 1990, the actuarial experience resulted in a net loss of \$28,604,000. This includes favorable investment experience with a 10.7% return on the adjusted asset value, compared to the 9% assumed rate.

The principal cause of the experience loss was a \$46,244,000 loss due to the pay increases over the assumed 6% rate. This was not due to large pay increases. Rather, it was due to a 6% increase effective retroactively to July 1, 1989 which was not included in the 1989 valuation date.

Accordingly, for police and fire members, this year's valuation reflects both the July 1, 1989 increase (6%) and the July 1, 1990 increase (5%) for a total of 11% plus merit increases. When the 1989-90 \$16,244,000 actuarial loss for pay increases is combined with the prior years \$40,467,000 actuarial gain, the result is a net two year loss of less than \$6,000,000.

Timing of City Contributions

The report presents the recommended city contribution assuming payment is made at the beginning of the year (July 1, 1990) and, alternatively at the end of the year (June 30, 1991). The end of the year payment reflects one year's interest at the valuation rate of 9%. In accordance with our interpretation of recently adopted Act 189 of 1990, the City is not legally required to pay this interest if the payment is made

- 4 -

by June 30, 1992. **However**, the full year's interest charge must be paid if its contribution is made later than June 30, 1992. This incudes interest during the year plus interest from the end of the year to date paid. Interest after the end of the year is at the greater of 9% or at the 6 month maturity U.S. Treasury Bills discount rate as of June 30, 1992.

If the City contributions are made by June 30, 1992, any interest not paid will be treated as an actuarial loss and be amortized over 15 years.

Results of July 1, 1990 Actuarial Valuation

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		Normal Cost Rate (Beginning of Year)	Unfunded Actuarial Accrued Liability (Thousands)
1.	Expected July 1, 1990 Results Based on July 1, 1989 Valuation Report	6.636%	\$2,192,267
2.	Impact of Actuarial Experience		
	a. Investment Return		\$ - 1,085
	b. Salary Increases	-	46,244
	c. Other Actuarial Experience	.083%	. 9,665
	d. Asset Method Adjustment		-26,220
	e. Subtotal	.083%	28,604
3.	Benefit Improvements		**
\$.	Change In Actuarial Assumptions		
5.	Total Changes (2) + (3) + (4)	.083	28,604
i.	July 1, 1990 Valuation Results (1) + (5)	6.719%	\$2,220,871

Employee Contributions

Table 4

Employee Contribution Rates Effective July 1, 1991

	Municipal	Elected	Police	Fire
1967 Plan	3.75%		6.00%	6.00%
Plan 87	2.05%	8.72%	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 will contribute 30% of the municipal plan calculated gross normal cost plus 100% of the gross normal cost due to additional benefits payable under the elected officials plan. The rates should go into effect July 1, 1991.

Funding Method

Act 205 requires the unfunded actuarial accrued liability be funded in annual level dollar payments. Because the City of Philadelphia is classified as a Distress Level III municipality, it is exempt from this requirement with respect to unfunded liabilities as of July 1, 1985 and amortizes the unfunded actuarial accrued liability as follows: The remaining July 1, 1985 unfunded actuarial accrued liability (net of the Bogen and

- 7 -

Dombrowski class action obligations) is amortized over 40 years ending June 30, 2019 in annual payments increasing 6% per year.

Changes in the actuarial accrued liability realized after July 1, 1985 are amortized in level dollar payments over the years shown:

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

This valuation determines the City's fiscal year ending June 30, 1992 contribution requirements. The unfunded actuarial accrued liability is adjusted from July 1, 1990 to July 1, 1991 to recognize the one-year delay in report findings. Table 4 summarizes the unfunded actuarial accrued liability payment derivation for the fiscal year ending June 30, 1992.

Total Annual Payment Toward the Unfunded Actuarial Accrued Liability for Fiscal Year Ending June 30, 1992 (Thousands)

			Beginning of Year Payments	End-of-Yea Payments
1.	Exp act	pected June 30, 1992 payment based on July 1, 1989 uarial valuation		
	a.	Dombrowski	• • • • •	
	b.	Bogen	\$ 3,498	\$ 3,813
	C.	Remaining	4,618	5,034
	d.	Subtotal	119,965	<u>_130,762</u>
			\$128,081	\$139,609
2.	Cha valu	nges in payment based on July 1, 1990 actuarial ation		
	a.	(Gains)/Losses (15-Year Amortization)	3.549	<u>3.868</u>
3.	Tota	I annual payment as of June 30, 1992 based on July 1,		
	1990) valuation $(1d) + (2)$	* ****	
			\$131,630	\$143,477

Other Report Sections

Section 3 presents supporting tables, including an employee age/service *scatter* along with salaries by age and service groupings. In addition, there are tables of current pension amounts by age.

Section 4 summarizes financial information used in the valuation, including a statement of assets and a statement of receipts and disbursements for the fiscal year ending June 30, 1990 as well as the development of the actuarial asset valuation.

Section 5 presents the Retirement System's salient features that valuation determinations are based on.

Section 6 presents the actuarial cost method, factors, and assumptions used to determine costs and liabilities.

Section 7 presents the actuarial present value of projected benefit obligation according to GASB Statement No. 5. This Section reflects a measurement of the accrued benefits for the Retirement System as of July 1, 1990 and compares the value of these accrued benefits to the cost value of funds.

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2. Cost Derivation

This section develops the Retirement System's costs. Cost estimates have been determined using the entry age actuarial cost method. The cost estimates derived in this actuarial valuation will be used as the basis for pension costs for the fiscal year ending June 30, 1992. Pension costs consist of the normal cost and the unfunded actuarial accrued liability payment.

Derivation of Normal Cost

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

- 11 -

Derivation of the Unfunded Actuarial Accrued Liability

The actuarial accrued liability is the sum of the actuarial present value of all normal costs that 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 are determined as of July 1, 1990 on an actuarial asset method, that spreads investment experience over a 5-year period to minimize the investment volatility on the Retirement System's cost. Specifically, the method adopted measures gains or losses against the assumed 9% investment yield, recognizing one fifth of the gain or loss over 5 years prospectively.

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

Experience gains and losses is the difference between the expected unfunded actuarial accrued liability and the actual unfunded actuarial accrued liability (determined in the preceding paragraphs) calculated at 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 year. Changes in the actuarial accrued liability realized after

- 12 -

July 1, 1985 are amortized in level dollar payments over the following years according to Act 205:

- Changes in actuarial assumptions 20 years
- Experience gains and losses 15 years

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- Benefit modifications applicable to active members 20 years
- Benefit modifications applicable to nonactive members 10 years

A detailed analysis of the derivation of plan costs is presented in the Tables 5 through 11.

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July 1, 1990 Derivation of Normal Cost (Dollars in Thousands)

			<u>1967 Plan</u>	L		F			
_		Municipal	Potice	Fire	Municipal	Elected	Police	Fire	Total
1.	Number of Active Members	21,061	5,593	2,243	2,119	11	1,083	204	32,31
2.	Total Normal Cost								
	 a. Service Retirement b. Preretirement Death c. Disability Retirement d. Vested Termination e. Refund of Nonvested Members' 	\$ 31,304 3,777 5,253 7,693	\$ 20,893 1,331 4,682 1,249	\$ 8,075 526 1,808 536	\$ 2,132 299 304 564	\$52 5 3 2	\$ 2,032 174 664 626	\$ 403 36 141 114	\$ 64,89 6,148 12,855 10,784
	Contributions f. Health Care Benefit g. Administrative Expenses h. Total	3,844 0 <u>2,269</u> \$ 54,140	932 29 <u>815</u> \$ 29,931	408 11 <u>315</u> \$ 11,679	207 0 <u>124</u> \$ 3,630	5 0 <u>1</u> \$ 6 8	196 4 <u>63</u> \$3,759	33 1 <u>12</u> \$ 740	5,629 49 <u>3,599</u>
	Expected Employee Contributions	\$ 20,927	\$ 12,218	\$ 4,791	\$ 1,089	\$ 40	\$ 1,619	\$ 304	\$ 103,947 \$ 40,988
	City Normal Cost (2h) - (3)	\$ 33,213	\$ 17,714	\$ 6,888	\$ 2,541	\$ 28	\$ 2,139	\$ 436	\$ 62,959
	Current Total Annual Payroll	\$ 561,532	\$ 203,625	\$ 79,889	\$ 53,005	\$ 463	\$ 32,390	\$ 6,077	\$ 936,981
	City Normal Cost as a Percent of Pay Assuming Payment at Beginning of Year (4) + (5)	5.915%	8.699%	8.622%	4.793%	6.016%	6.605%	7.175%	6.7199
	City Normal Cost as a Percent of Pay Assuming Payment at End of Year (6) x 1.09	6.447%	9.482%	9.398%	5.224%	6.557%	7.199%	7.8 21%	7.324%

Note: Numbers may not add due to rounding.

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Derivation of Linfunded Actuarial Accrued Liability as of July 1, 1990 (Dollars in Thousands)

			1967 Plan				lan 87		
		Municipal	Police	Fire	Municipal	Elected	Police	Fire	- Total
. N	umber of Members								
a.	Active	21,061	5,593	2.243					
Ь,	Retired	15,103	5,961	2,542	2,119	11	1,083	204	32,31
С.	Disabled	2,036	2,237	• · · -	0	0	0	0	23,60
d.	Terminated Vested	437		559	0	0	0	0	4,83
e,	Total	38,637	<u>95</u> 13,886	_ <u>17</u> 5,361	<u>0</u> 2,119	0	0	0	54
To	tal Annual Benefits			0,001	2,119	11	1,083	204	61,30
a .	Retired	\$ 116,060	\$ 67,916	\$ 26,829	\$ 0	• •	_ _		
b,	Disabled	17,956	28,281	7,755	• -	\$ 0	\$ 0	\$ O	\$ 210,80
C.	Terminated Vested	3,666	773	. 114	0	0	0	0	53,992
d,	Total	\$ 137,683	\$ 96,970	\$ 34,698	<u> </u>	0 \$_0	<u> </u>	0	4,553
Pr	esent Value of Benefits				• •	4 U	\$ 0	\$ O	\$ 269,351
a.	Active Members								
	Service Retirement		• •						
	Preretirement Death	\$ 996,856	\$ 683,572	\$291,324	\$24,710	\$1,485	\$26,092	\$5,125	\$2.020 tes
	Disability Retirement	99,077	30,102	12,538	3,526	106	2,227	455	\$2,029,163
	Vested Termination	127,348	93,184	37,404	3,773	86	8,472		148,030
		173,541	15,793	5,364	6,895	38	8,167	1,767	272,033
	Refund of Nonvested				-,000		0,107	1,508	211,306
	Members' Contributions	10,447	1,468	308	2,174	<i>c</i>			
	Health Care Benefit	0	474	193	0	6	2,526	424	17,352
	Subtotal	\$1,407,269	\$ 824,593	\$347,130	\$41,077	0 \$1,720	<u>49</u> \$47,532	<u>10</u> \$9,289	726
Ь.	Nonactive Members					• • •		4 3,208	\$2,678,610
	Service Retired	\$ 903,538	\$ 590,074	****					
	Disabled	131,219		\$213,354	\$ 0	\$ 0	\$ 0	\$ 0	\$1,706,966
	Terminated Vested	19,559	240,935	65,204	0	0	0	0	437,358
	Nonvested Members'	19,009	6,376	942	0	0	Ö	Ō	26,877
	Contributions	1,264	136	70	_				,-
	Health Care Benefit	0	<u>3,564</u>	72	0	0	0	0	1,472
	Subtotal	\$1,055,580	<u> </u>	<u>1,584</u> \$281,156	<u> </u>	0	0	0	5,148
С.	Total			4401,10 0	γU	\$ 0	\$ 0	\$ 0	\$2,177,821
		\$2,462,849	\$1,665,678	\$628,286	\$41,077	\$1,720	\$47,532	\$9,289	\$4,856,431

Note: Numbers may not add due to rounding.

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Table 6 (Continued)

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Derivation of Unfunded Actuarial Accrued Liability as of July 1, 1990 (Thousands)

		+	1967 Plan			Р	an 87		
		Municipal	Police	Fire	Municipal	Elected	Police	Fire	Total
	Present Value of Future Normal								
Ç	Costs								
a	a. Service Retirement	\$ 269,453	\$ 174,612	\$ 62,743	\$21,563				
b		34,865	11,101			\$ 325	\$25,757	\$4,809	\$ 559,262
¢		48,151	39,038	· · · · ·	3,110	30	2,210	437	55,823
đ		76,302	10,435		3,332	23	8,389	1,682	114,661
8	. Refund of Nonvested		10,400	3,373	6,086	14	8,077	1,425	106,312
	Members' Contributions	35,259	7,400	2,946					
f.		0	239		1,985	34	2,507	403	50,534
9		\$ 464,030	\$ 242,824		0	0	48	10	386
•		\$ \$04,000	₽ 242,824	\$ 87,867	\$36,075	\$ 427	\$46,988	\$8,766	\$ 886,977
A	ctuarial Accrued Liability								
(3	3) - (4)								
a.	Active Members								
	Service Retirement	\$ 727,404	\$ 508.960	\$ 226,580	\$ 3,146	£1.100			
	Preretirement Death	64,212	19,001	8,468	416	\$1,160	\$ 335	\$ 315	\$1,469,901
	Disability Retirement	79,197	54,146	23,357		76	17	18	92,207
	Vested Termination	97,239	5,358	1,390	440	63	83	85	157,372
	Refund of Nonvested		0,000	1,350	810	23	90	83	104,994
·	Members' Contributions	(24,812)	(5,932)	(0.627)					
	Health Care Benefit	0		(2,637)	189	(28)	18	21	(33,180)
	Subtotal	\$ 943,239	<u>235</u> \$ 581,769	104	0	0	0	<u> </u>	339
		\$ 543,239	9 281,/09	\$ 259,263	\$ 5,002	\$1,294	\$ 543	\$ 523	\$1,791,633
b.	Nonactive Members								· · · ·
	 Service Retired 	\$ 903,538	\$ 590,074	\$213,354	• •				
	Disabled	131,219	240,935	€5,204	\$ 0	\$ 0	\$ O	\$ O	\$1,706,966
	Terminated Vested	19,559	6,376		0	Ó	0	0	437,358
	Nonvested Members'		0,370	942	0	0	0	0	26,877
	Contributions	1,264	100						,
	Health Care Benefit	1,204 0	136	72	0	0	0	0	1,472
	Subtotal	\$1,055,580	<u>3,564</u>	<u>1,584</u>	0	Q	0	. O	5,148
-		91,000,00U	\$ 841,085	\$281,156	\$ 0	\$ 0	\$ 0	\$ <u>0</u>	\$2,177,821
C.	Total	\$1,998,819	\$1,422,854	\$ 540,418	\$ 5,002	\$1,294	\$ 543	\$ 523	\$3,969,454

Note: Numbers may not add due to rounding.

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Table 6 (Continued)

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Derivation of Unfunded Actuariat Accrued Liability as of July 1, 1990 (Thousands)

			1967 Plan			PL	Plan 87		
		Municipal	Police	File	Municipal	Elected	Police	ā	Total
								:	
ġ	Assets for Valuation Purposes	\$ 958,699	\$ 548,730 \$ 226,315	\$ 226,315	\$ 7,989	\$ 279	\$5,206	\$1,366	\$1,748,583
	Untrunced Actuarial Accrued Liability (5c) - (6)	\$1,040,120	\$ 874,125 \$ 314,104	\$ 314,104	\$(2,988)	\$1,015	\$ (4,662)	\$(842)	\$2,220,871
Not	Note: Numbers may not add due to rounding.								

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- 21 -

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Development of the Expected Unfunded Actuarial Accrued Liability for Fiscal Year Ending June 30, 1992 (Thousands)

			1967 Plan			P	tan 87		
		Municipal	Police	Fire	Municipal	Elected	Police	Fire	Total
1. Chi Act	Expected July 1, 1990 Unfunded Actuarial Accrued Liability based on July 1, 1989 Valuation hange in July 1, 1990 Unfunded tuarlal Accrued Liability Due to	\$1,086,856	\$806,422	\$300,718	\$ (1,579)	\$1,024	\$(869)	\$(305)	\$2,192,267
2.	Actuarial Experience	\$ (46,736)	\$ 67,703	\$ 13,386	\$ (1,408)	\$ (10)	# (0 mon)	<i>i</i> -	
3.	Actual Unfunded Actuarial Accrued			,	• (1,400)	a (10)	\$(3,793)	(537)	\$ 28,604
	Liability Juty 1, 1990 (1) + (2)	\$1,040,120	\$874,125	\$314,104	\$(2,988)	\$1,015	\$(4,662)	\$(842)	\$2,220,871
	Expected Changes in Unfunded Act arial Accrued Liability from July 1, 1990 to July 1, 1991:	tu-							
	a. Interest .09 x (2)	\$ (4,206)	\$ 6,093	\$ 1,205	\$ (127)	\$ (1)	\$ (341)	\$ (48)	\$ 2,574
	 Increase in Unfunded Actuarial Accrued Liability from July 1, 1990 to July 1, 1991 Accord- ing to Amortization Schedule 	ł					• (=,	• (45)	₩2,374
	Per 1990 Valuation Report	37,278	<u>18,689</u>	<u>8,325</u>	54	<u>(41</u>)	31	<u>10</u>	64,346
	c. Subtotal	\$ 33,072	\$ 24,782	\$ 9,530	\$ (73)	S (40)	\$ (310)	\$(38)	\$66,920
	Expected July 1, 1991 Unfunded Actuarial Accrued Liability						• • • - •	+()	₩₩J,32U
	(3) + (4c)	\$1,073,192	\$898,907	\$323,633	\$(3,061)	\$ 973	\$(4,973)	\$(881)	\$2,287,791

Note: Numbers may not add due to rounding.

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- 18 -

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Development of Municipal Division (1967 Plan) Annual Payment Toward the Unfunded Actuarial Accrued Liability for Fiscal Year Ending June 30, 1992 (Thousands)

	• · · · ·	Fiscal Year Ending	1 June 30, 1992	
 ······································	Outstanding Balance July 1, 1990	Expected Balance July 1, 1991	Amortization Period Remaining	Annual Payment
Expected July 1, 1990 Unfu Actuarial Accrued Liability b on July 1, 1989 valuation	nded ased			
a. Dombrowski	\$ 18,013	\$ 17,622	18	\$ 2,013
b. Bogan	4,674	2,438	1	2,657
c. Remaining	<u>1,064,169</u>	1,104,075	**	<u>59,372</u> *
d. Subtotal	\$1,086,856	\$1,124,134	-	<u>\$64,042</u>
Changes in Unfunded Actual Accrued Liability, July 1, 199	ial D			
(Gains)/Losses	\$ (46,736)	\$ (50,942)	15	\$ (6,320)
Total (1d) + (2)	\$1,040,120	\$1,073,192	-	\$57,722

Note: Numbers may not add due to rounding.

a. Payment increasing 6% per year, all other payments are level dollar.

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Development of Police Division (1967 Pian) Annual Payment Toward the Unfunded Actuarial Accrued Liablity for Fiscal Year Ending June 30, 1992 (Thousands)

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			Fiscal Year Endi	ng June 30, 1992	
		Outstanding Balance July 1, 1990	Expected Balance July 1, 1991	Amortization Period Remaining	Annual Payment
	Expected July 1, 1990 Unfunded Actuarial Accrued Liability based on July 1, 1989 valuation				
	a. Dombrowski	\$ 11,523	\$ 11,272	18	\$ 1,287
	b. Bogen	2,990	1,559	1	1,700
	c. Remaining	791,909	812,279	*-	<u>53,152</u> *
	d. Subtotal	\$806,422	\$825,111	-	\$56,139
	Changes in Unfunded Actuarial Accrued Liability, July 1, 1990				
	(Gains)/Losses	\$ 67,703	\$ 73,796	15	\$ 9,155
:	Total (1d) + (2)	\$874,125	\$898,907	-	\$ 65,294

Note: Numbers may not add due to rounding.

a. Payment increasing 6% per year, all other payments are level dollar.

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Development of Fire Division (1967 Plan) Annual Payment Toward the Unfunded Actuarial Accrued Liability for Fiscal Year Ending June 30, 1992 (Thousands)

				Fiscal Year End	ing June 30, 1992	
			Outstanding Balance July 1, 1990	Expected Balance July 1, 1991	Amortization Period Remaining	Annual Payment
•	Expected July 1, 199 Actuarial Accrued Lia on July 1, 1989 valua	bility based				
	a. Dombrowski		\$ 4,588	\$ 4,489	18	\$ 513
	b. Bogen		1,191	621	1	677
	c. Remaining		294,938	303,933		<u>18,447</u> *
	d. Subtotal		. \$300,718	\$309,043	-	\$19,637
2.		Changes in Unfunded Actuariai Accrued Liability, July 1, 1990				
	(Gains)/Losse	5	\$ 13,386	\$ 14,591	15	\$ 1,810
k.	Total (1d) + (2)		\$314,104	\$323,633	-	\$21,447

Note: Numbers may not add due to rounding.

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a. Payment increasing 6% per year, all other payments are level dollar.

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Development of Municipal Division (Plan 87) Annual Payment Toward the Unfunded Actuarial Accrued Liability for Fiscal Year Ending June 30, 1992 (Thousands)

			Fiscal Year Endin	<u>g June</u> 30, 1992	
·		Outstanding Balance July 1, 1990	Expected Balance July 1, 1991	Amortization Period Remaining	Annual Payment
1. 2.	Expected July 1, 1990 Unfunded Actuarial Accrued Liability based on July 1, 1989 valuation Changes in Unfunded Actuarial Accrued Liability, July 1, 1990	\$(1,579)	\$(1,526)	-	\$(196)
	(Gains)/Losses	\$ (1,408)	\$(1,535)	15	\$(190)
	Total (1) + (2)	\$(2,988)	\$(3,061)	-	\$(386)

Note: Numbers may not add due to rounding.

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- 22 -

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Development of Elected Division (Plan 87) Annual Payment Toward the Unfunded Actuarial Accrued Liability for Fiscal Year Ending June 30, 1992 (Thousands)

Outstanding Balance July 1, 1990 \$1,024	Expected Balance July 1, 1991 \$ 984	ng June 30, 1992 Amortization Period Remaining	Annual Payment \$133
	\$ 984		\$133
\$ (10)	\$(10)	15	\$(1)
\$1,015	\$ 973	*	\$131
			•

Note: Numbers may not add due to rounding.

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Development of Police Division (Plan 87) Annual Payment Toward the Unfunded Actuarial Accrued Liability for Fiscal Year Ending June 30, 1992 (Thousands)

	-	Fiscal Year Endir	ng June 30, 1992	
	Outstanding Balance July 1, 1990	Expected Balance July 1, 1991	Amortization Period Remaining	Annual Payment
 Expected July 1, 1990 Unfunded Actuariat Accrued Liability based on July 1, 1989 valuation Changes in Unfunded Actuarial 	\$ (869)	\$ (838)	-	\$(109)
Accrued Liability, July 1, 1990				
(Gains)/Losses	\$(3,793)	\$(4,135)	15	\$(513)
Totat (1) + (2)	\$(4,662)	\$(4,973)		\$(622)

Note: Numbers may not add due to rounding.

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Development of Fire Division (Plan 87) Annuat Payment Toward the Unfunded Actuarial Accrued Liability for Fiscal Year Ending June 30, 1992 (Thousands)

			LISCAL LEAF CUO	riscal rear Ending June 30, 1992	
1		Unistanding Balance July 1, 1990	Expected Balance July 1, 1991	Arrortization Period Remaining	Annual Payment
	Expected July 1, 1990 Unfunded Actuarial Accrued Liability based on July 1, 1989 valuation	\$(305)	\$(295)	-	((37)
	Changes in Unfunded Actuarial Accrued Liability, July 1, 1990				
	(Gains)/Losses	(2E3) \$	\$ (586)	15	\$ (73)
	Total (1) + (2)	\$(842)	\$(881)	ı	\$ (110)

Note: Numbers may not add due to founding.

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Development of Total Division Annual Payment Toward the Unfunded Actuarial Accrued Liability for Fiscal Year Ending June 30, 1991 (Thousands)

			Fiscal Year End	ling June 30, 1992	
		Outstanding Balance July 1, 1990	Expected Balance July 1, 1991	Amortization Period Remaining	Annual Payment
A	Expected July 1, 1990 Unfunded ctuarial Accrued Liability based n July 1, 1989 valuation				
a	. Dombrowski	\$ 34,125	\$ 33,383	18	\$ 3,813
Ь	. Bogen	8,855	4,618	1	5.034
C,	Remaining	2,149,288	2,218,612	· •	<u>130,763</u> *
d.	Subtotal	\$2,192,267	\$2,256,613	-	\$139,609
Ci Li	hanges in Unfunded Actuarial Accrued ability as of July 1, 1990				
	(Gains)/Losses	\$ 28,604	\$ 31,178	. 15	\$ 3,868
Τo	tal (1d) + (2)	\$2,220,871	\$2,287,791		\$143,477

Note: Numbers may not add due to rounding.

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

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- 26 -

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Schedule of Annual Payments to Fund the Anticipated July 1, 1990 Unfunded Actuarial Accrued Liability (Thousands)

Fiscal Year			Annu	al End of Year Pa	Witherat				Progress		Annual
Ending		<u> 1967 Plan</u>				n 87			of Unfunded		Payment as
June 30	Municipal	Police	Fire	Municipal	Elected	Police	Fire	Total	Actuarial Accrued Liability	Estimated Annual Payroll	a Percent of Payroll
1991	N/A	N/A	N/A	N/A	N/A						
1992	\$ 57,722	\$ 65,294	\$ 21,447	\$ (386)	\$ 131	N/A	N/A	N/A	\$ 2,287,791	\$ 936,981	N/A
1993	58,779	65,980	21,721	(386)		\$ (622)	\$ (110)	\$ 143,477	2,350,215	993,200	14.4
1994	62,715	68,508	22,730	(386)	131	(622)	(110)	145,493	2,416,242	1,052,792	13.8
1995	66,887	71,187	23,799	(386)	131	(622)	(110)	152,965	2,480,738	1,115,959	13.7
		,	401.03	(300)	131	(622)	(110)	160,886	2,543,118	1,182,917	13.6
1996	71,310	74.028	24,932	(386)					, . <u>-</u>		10.0
1997	75,998	77,039	26,132	• • •	131	(622)	(110)	169,283	2,602,716	1,253,892	13.5
1998	80,527	79,689	27,197	(386)	. 131	(622)	(110)	178,183	2,658,778	1,329,126	13.5
1999	85,795	83,071		(386)	131	(622)	(110)	186,426	2,711,641	1,408,873	
2000	91,378	86,657	28,546	(386)	131	(622)	(110)	196,425	2,759,264	1,493,405	13.2
	01,010	00,037	29,976	(386)	131	(622)	(110)	207,025	2,800,573		13.2
2001	97,297	85,259					. ,		2,000,010	1,583,010	13.1
2002	103,571	-	29,395	(386)	131	(622)	(110)	210,964	2,841,661	1 677 000	
2003	119,189	89,288 07.550	31,002	(386)	131	(622)	(110)	222,874	2,874,537	1,677,990	12.6
2004	126,188	97,580	34,834	(386)	131	(622)	(110)	250,615	2,882,630	1,778,670	12.5
2005	127,016	99,930	36,192	(386)	131	(630)	(128)	261,297	2,880,769	1,885,390	13.3
-000	127,010	98,696	37,374	(287)	(17)	(564)	(103)	262,115		1,998,513	13.1
2006	105 003				- ,	••••	(100)	402,110	2,877,923	2,118,424	12.4
2007	135,607	100,138	38,205	(216)	(6)	(516)	(73)	273,137	0.000		
2008	150,322	96,375	38,546	(27)	(4)	(3)	(1)	265,208	2,863,799	2,245,530	12.2
2009	158,738	102,049	40,805	(27)	(4)	(3)	(1)		2,836,333	2,380,261	12.0
	168,171	108,107	43,221	(27)	(4)	(3)	(1)	301,556	2,790,046	2,523,077	12.0
2010	176,158	113,242	45,270	(27)	(4)	(3)		319,465	2,721,686	2,674,462	11.9
				• •	19	(3)	(1)	334,635	2,632,003	2,834,930	11.8
2011	187,255	120,265	47,969	0	0	0	•	0.55 (+			
2012	198,490	127,481	50,847	ō	ŏ	0	0	355,489	2,513,394	3,005,025	11.8
2013	210,399	135,130	53,898	ō	ŏ	-	0	376,818	2,362,782	3,185,327	11.8
2014	223,023	143,238	57,132	ŏ	ŏ	0	0	399,427	2,176,005	3,376,446	11.8
2015	236,405	151,832	60,560	õ	0	0	0	423,393	1,948,452	3,579,033	11.8
				Ŭ	U	0	0	448,796	1,675,017	3,793,775	11.8
2016	250,589	160,942	64,193	0	~	-				· ····	
2017	265,624	170,599	68.045	0	0	0	0	475,724	1,350,044	4,021,402	11.8
2018	281,562	180,834	72,128	0	0	0	0	504,268	967,281	4,262,686	11.8
2019	298,455	191,685	76,455	0	0	0	0	534,524	519,812	4,518,447	11.8
2020	316,363	203,166	81,043		0	0	0	566,595	0	4,789,554	
·			01,040	0	0	0	0	600,591	(600,591)	5,076,927	11.8 11.8

Note: Numbers may not add due to rounding.

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valuations are reflected. Under GAAP standards, adjustments determined under subsequent valuations are amortized over a 40-year period from when first recognized.

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Table 17 shows the annual and accumulated *deficit* between the funding policies of the City and those under GAAP. Because the City's funding policy results in the complete amortization of the unfunded actuarial accrued liability, the accumulated deficit between the City's funding policy and GAAP decreases to 0 at the end of the last 40-year GAAP amortization period.

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- 29 -

Comparison of Official Unfunded Accrued Liability Funding With Funding Under the Provisions of APB No. 8 (Thousands)

Fiscal	Schedule of A	ungal payments	s to Fund the Ar	nticipated July 1,	1990 Unfunded	Accrued Liabilit	¥		Year	n of Official Sche Amortization Unc	der GAAP
Year					-			<u> </u>	GAAP		
Ending	Unfunded /	Accrued Liability	1967 Plan	11.4					40-Year		
June 30	Municipal	Police	Fire		unded Accrued	Liability 1987 Pl			Amorti-	GAAP	Accumulated
	• - ::			Municipal	Elected	Police	Fire	Total	zation	Deficit	Deficit
1982											
1983	N/A	N/A	N/A	N/A	N/A	N/A	N/A	60.067	100.000		
1984	N/A	N/A	N/A	N/A	N/A	N/A	N/A	68,257	136,206	67,950	67,950
-	N/A	N/A	N/A	N/A	N/A	N/A		72,118	136,206	64,088	138,153
1985	N/A	N/A	N/A	N/A	N/A	N/A	N/A	73,696	130,870	57,173	207,761
1986	N/A	N/A	N/A	N/A	N/A	N/A	N/A	77,912	130,870	52,958	279,417
				.,		N/A	N/A	84,717	125,707	40,989	345,554
1987	N/A	N/A	N/A	N/A	N/A	N/A	b) / 4				
1988	N/A	N/A	N/A	N/A	N/A	N/A	N/A	95,276	136,909	41,633	418,287
1989	N/A	N/A	N/A	N/A	N/A		N/A	68,533	129,411	40,878	496,810
1990	N/A	N/A	N/A	N/A	N/A	N/A N/A	N/A	96,819	131,435	34,616	576,139
1991	N/A	N/A	N/A	N/A	N/A	•	N/A	116,105	141,451	25,346	653,338
		•		- All	nyn.	N/A	N/A	132,959	148,192	15,233	727,372
1992	57,722	65,294	21,447	(386)	.131	10001					
1993	58,779	65,960	21,721	(386)	131	(622)	(110)	143,477	151,090	7,613	800,448
1994	62,715	68,508	22,730	(386)		(622)	(110)	145,493	151,090	5,597	678,085
1995	66,887	71,187	23,799	(386)	131	(622)	(110)	152,965	151,090	(1,876)	955,237
1996	71,310	74,028	24,932		131	(622)	(110)	160,886	151,090	(9,797)	1,031,412
			29,932	(386)	131	(622)	(110)	169,283	151,090	(18,193)	1,106,047
1997	75,998	77,039	26,132	(000)						(,	1,100,047
1998	80,527	79,689	27, 197	(386)	131	(622)	(110)	178,183	151,090	(27,093)	1,178,498
1999	85,795	83.071		(386)	131	(622)	(110)	186,426	151,090	(35,337)	
2000	91,378	86,657	28,546	(386)	131	(622)	(110)	196,425	151,090	(45,335)	1,249,226
2001	97,297		29,976	(386)	131	(622)	(110)	207,025	151,090		1,316,322
2001	51,291	85,259	29,395	(386)	131	(622)	(110)	210,964		(55,935)	1,378,856
2002	103,571	00.000				· ·	(),	210,004	151,090	(59,874)	1,443,079
2003	119,189	89,288	31,002	(386)	131	(622)	(1 10)	222,874	151 000	· · · · · ·	
2004		97,580	34,834	(386)	131	(622)	(110)	250,615	151,090	(71,784)	1,501,172
2005	126,188	99,930	36,192	(386)	131	(630)	(128)		151,090	(99,526)	1,536,751
	127,016	98,696	37,374	(287)	(17)	(564)	(123)	261,297	151,090	(110,207)	1,564,852
2006	135,607	100,138	38,205	(218)	(6)	(516)		262,115	151,090	(111,026)	1,594,663
000-				• -/	(0)	(510)	(73)	273,137	151,090	(122,048)	1,616,135
2007	150,322	96,375	38,546	(27)	(4)	(2)	(4)				
2008	158,738	102,049	40,805	(27)	(4)	(3)	(1)	285,208	151,090	(134,118)	1,627,469
2009	168,171	108,107	43,221	(27)	(4)	(3)	(1)	301,556	151,090	(150,466)	1,623,475
2010	176,158	113,242	45,270	(27)		(3)	(1)	319,465	151,090	(168,375)	1,601,213
2011	187,255	120,265	47,969	0	(4)	(3)	(1)	334,635	151,090	(183,545)	1,561,777
				U	0	0	0	355,489	151,090	(204,399)	1,497,938

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Table 17 (Continued)

Comparison of Official Unfunded Accrued Liability Funding With Funding Under the Provisions of APB No. 8 (Thousands)

Fiscal	Schedule of A	nnual payments	to Fund the An	ticipated July 1,	1990 Unfunded	Accrued Liability			Year A	of Official Sche mortization Und	ler GAAP
Year Ending	Unfunded A	ccrued Liability				Liability 1987 Plan			GAAP 40-Year		
June 30	Municipal	Potice	Fire	Municipal	Elected	Police	Fire	Total	Amonti- zation	GAAP Deficit	Accumulate Deficit
2012	198,490	127,481	50,847								
2013	210,399	135,130	•	0	Û	0	0	376,818	151.090	(225,728)	1 407 00
2014	223,023	143,238	53,898	0	0	0	0	399,427	151,090	(248,337)	1,407,02
2015	236,405	151,832	57,132	0	Ο.	0	0	423,393	151,090	(272,303)	1,285,31
2016	250,589	160,942	60,560	0	0	0	0	448,796	151,090	(297,707)	1,128,69
	0,000	100,942	64,193	0	0	0	0	475,724	151,090		932,57
2017	265,624	170,599					_		131,030	(324,634)	691,86
2018	281,562		68,045	0	0	0	0	504,268	151.090	1050 400	
2019	298,455	180,834	72,128	0	0	Û	ŏ	534,524	• • •	(353,178)	400,95
2020	•	191,685	76,455	0	0	0	ō	566,595	151,090	(383,434)	53,61
2021	0	0	0	0	0	0	ŏ	0	151,090	(415,505)	(357,070
EQEI	Ō	0	0	0	0	0	ŏ		151,090	151,090	(238,117
2022						•	v	0	151,090	151,090	(108,457
2023	0	0	0	0	0	0	0	•			
2024	0	0	0	0	0	ŏ	ŏ	0	14,884	14,884	(103,335)
	0	0	Ð	0	ō ́	õ		0	14,884	14,884	(97,752
2025	0	D	0	0	ō	ō	0	0	20,220	20,220	(86,329)
2026	0	0	0	0	ō	ő	0	0	20,220	20,220	(73,879)
				-	-	U	0	0	25,383	25,383	(55,145)
2027	0	0	0	0	0	•	-				
2028	0	0	0	ŏ	ŏ	0	0	0	14,181	14,181	(45,927)
2029	0	0	ō	õ	0	0	0	Û	21,679	21,679	(28,381)
2030	0	0	ŏ	ŏ	0	0	0	0	19,655	19,655	(11,281)
2031	0	0	õ	ő		0	0	0	9,638	9,638	(2,659)
		-	v	U	0	0	0	0	2,898	2,898	(2,003)

Note: Numbers may not add due to rounding.

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Estimated Pension Fund Progress

Table 18 shows the pension fund's estimated progress for fiscal years 1991 through 2010. The July 1, 1990 adjusted market value of fund assets is the starting point. This projection shows the emerging benefit payments of the fund and the concurrent fund growth. The projection is based on the same assumptions used to determine the Retirement System's annual cost and related liabilities.

The City contribution of normal cost plus the scheduled payments toward amortizing the unfunded actuarial accrued liability is used in the projection. The first year of the projection reflects the anticipated City contribution based on the July 1, 1989 valuation. Subsequent contributions are based on the July 1, 1990 valuation. The contribution's normal cost component increases 6.0% annually, reflecting anticipated increases in the aggregate salary. The projected employee contributions also increase annually, reflecting assumed salary increases at 6.0%.

The fund projection is limited to the period ending with the fiscal year ending June 30, 2010. Fluctuations from the figures shown in this 20-year period are to be expected.

The fund's underlying growth trend tends to follow that shown in Table 18, even though the actual numbers vary. The projection shows the City and employee combined fund contributions no longer exceed the benefits paid. This results primarily from the impact of the early retirement window. However, expected contributions combined with expected investment earnings cover the cashflow requirements to meet benefit payments and allow for continued fund growth.

- 32 -

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64

Estimated Progress of City of Philadelphia Municipal Retirement System Fund for the Period July 1, 1990 Through June 30, 2010 (Thousands)

FISCAL YEAR ENDING JUNE 30	FUND AT BEGINNING OF YEAR	CITY CONTRIBUTIONS [®]	EMPLOYEE CONTRIBUTIONS®	BENEFIT PAYMENTS®	INVESTMENT	NET INCREASE	FUND AT END OF YEAR
1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001	\$1,748,583 1,868,304 2,006,203 2,154,202 2,317,670 2,497,888 2,696,070 2,914,016 3,152,271 3,413,662	\$200,733 216,220 222,600 234,699 247,524 261,118 275,529 289,613 305,803 322,965	\$40,963 42,698 45,260 47,975 50,854 53,905 57,140 60,568 64,202 68,054	\$269,082 278,552 289,431 301,669 314,870 329,260 344,441 360,682 378,189 395,842	\$147,107 157,534 169,571 182,462 196,710 212,419 229,718 248,756 269,575 292,479	\$119,721 137,899 147,999 163,468 180,218 198,183 217,945 238,256 261,391 287,657	\$1,868,304 2,006,203 2,154,202 2,317,670 2,497,888 2,696,070 2,914,016 3,152,271 3,413,662 3,701,319
2002 2003 2004 2005 2006 2007 2008 2009 2010	3,701,319 4,010,589 4,350,518 4,738,717 5,162,331 5,615,636 6,112,205 6,658,199 7,263,911 7,938,664	333,861 353,145 388,703 407,670 417,270 437,601 459,540 486,348 515,344 542,267	72,137 76,466 81,054 85,917 91,072 96,536 102,328 108,468 114,976 121,875	414,443 434,522 456,221 478,778 501,191 523,752 546,007 567,677 588,032 607,576	317,715 344,840 374,664 408,806 446,154 486,183 530,133 578,574 632,465 692,623	309,270 339,929 388,199 423,614 453,305 496,568 545,994 605,712 674,753 749,188	4,010,589 4,350,518 4,738,717 5,162,331 5,615,636 6,112,205 6,658,199 7,263,911 7,938,664 8,687,852

Note: Numbers may not add due to rounding.

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

- 33 -

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3. PLAN MEMBERSHIP

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Active, retired, disabled, and terminated vested members data as of July 1, 1990 was provided by the Philadelphia Board of Pensions and Retirement to determine benefit liabilities and annual costs.

The active member data, supplied on tape and list, contained information for all Retirement System members as of July 1, 1990. 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 data was also verified against the July 1, 1989 data for continued active member coverage. Members in 1989 not active or new nonactive members were analyzed and allocated to the most probable nonactive status.

The nonactive member data, also supplied on tape and list, contained information for all retired, beneficiary, disabled, and terminated vested members as of July 1, 1990.

Table 19 summarizes the changes in plan membership for the period between valuations. Based on the information provided, changes in status due to retirement, disablement, death, and new entrants could be identified. However, information

- 34 -

regarding transfers, return to employment, and data corrections was not available, resulting in *Net Other Terminations* consisting of:

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

Table 19 summarizes the changes in membership, thus illustrating total plan membership remained relatively stable during the period.

Table 19

	Number of New Members	Percentage Increase (Decrease)
Active	. 021	
Retired	+ 931	+ 3.0%
	+ 27	+ 0.2
Surviving Spouses	+ 139	+ 2.2
Other Beneficiaries	+ 42	+ 5.0
Disabled	+ 199	+ 4,3
Terminated Vested	+ 29	+ 4.5

Total Plan Membership Net Change

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

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- 35 -

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Reconciliation of included Members

Active, July 1, 1989 New Entrants Separations from Active Service Refunded Contributions Terminated Vested Became Disabled Died Retired Net Other Terminations ⁴ Active, July 1, 1990	Municipal 21,016 +1,456 - 946 - 32 - 110 - 51 - 313 + 41 21,061	<i>Police</i> 5,651 + 3 -164 0 -160 - 19 -240 +522 5,593	Fine 2,279 + 1 - 38 - 1 - 45 - 3 - 63 + 113	Municipal 1,686 +771 -324 0 0 0	<u>Plan</u> Elected 11 0 0 0 0 0 0 0 0	611 +701 - 9 0 0	Fire 129 + 100 - 7 0 0	Total 31,383 + 3,032 - 1,488 - 33 - 315
New Entrants Separations from Active Service Refunded Contributions Terminated Vested Became Disabled Died Retired Net Other Terminations ^a Active, July 1, 1990	+ 1,456 - 946 - 32 - 110 - 51 - 313 <u>+ 41</u>	+ 3 -164 0 -160 - 19 -240 <u>+522</u>	+ 1 - 38 - 1 - 45 - 3 - 63	+771 -324 0 0 0	0 0 0 0 0	+701 - 9 0 0	+ 100 - 7 0	+ 3,032 -1,488 - 33
New Entrants Separations from Active Service Refunded Contributions Terminated Vested Became Disabled Died Retired Net Other Terminations ^a Active, July 1, 1990	+ 1,456 - 946 - 32 - 110 - 51 - 313 <u>+ 41</u>	+ 3 -164 0 -160 - 19 -240 <u>+522</u>	+ 1 - 38 - 1 - 45 - 3 - 63	+771 -324 0 0 0	0 0 0 0 0	+701 - 9 0 0	+ 100 - 7 0	+ 3,032 -1,488 - 33
Separations from Active Service Refunded Contributions Terminated Vested Became Disabled Died Retired Net Other Terminations ⁴ Active, July 1, 1990	+ 1,456 - 946 - 32 - 110 - 51 - 313 <u>+ 41</u>	+ 3 -164 0 -160 - 19 -240 <u>+522</u>	+ 1 - 38 - 1 - 45 - 3 - 63	+771 -324 0 0 0	0 0 0 0 0	+701 - 9 0 0	+ 100 - 7 0	+ 3,032 -1,488 - 33
Refunded Contributions Terminated Vested Became Disabled Died Retired Net Other Terminations [®] Active, July 1, 1990	- 946 - 32 - 110 - 51 - 313 <u>+ 41</u>	-164 0 -160 - 19 -240 <u>+ 522</u>	- 38 - 1 - 45 - 3 - 63	-324 0 0 0	0 0 0 0	- 9 0 0	+ 100 - 7 0	+ 3,032 -1,488 - 33
Refunded Contributions Terminated Vested Became Disabled Died Retired Net Other Terminations [®] Active, July 1, 1990	- 32 - 110 - 51 - 313 <u>+ 41</u>	0 -160 - 19 -240 <u>+ 522</u>	- 1 - 45 - 3 - 63	0 0 0	0 0 0	0 0	- 7 0	•1,488 • 33
Terminated Vested Became Disabled Died Retired Net Other Terminations ^a Active, July 1, 1990	- 32 - 110 - 51 - 313 <u>+ 41</u>	0 -160 - 19 -240 <u>+ 522</u>	- 1 - 45 - 3 - 63	0 0 0	0 0 0	0 0	0	- 33
Became Disabled Died Retired Net Other Terminations ^a Active, July 1, 1990	- 110 - 51 - 313 <u>+ 41</u>	-160 • 19 -240 <u>+522</u>	- 45 - 3 - 63	0	0 0 0	0 0	0	- 33
Died Retired Net Other Terminations [®] Active, July 1, 1990	- 51 - 313 <u>+ 41</u>	+ 19 -240 <u>+ 522</u>	- 3 - 63	0	0	0	-	-
Retired Net Other Terminations ⁴ Active, July 1, 1990	- 313 <u>+ 41</u>	-240 <u>+ 522</u>	- 63	Ō	o	=	0	- 319
Net Other Terminations ⁴ Active, July 1, 1990	+ 41	+ 522	- 63	-	-	n		
Active, July 1, 1990	<u>+ 41</u> 21,061	+ 522		U U		-	0	- 73
	21,061				0	0	0	- 616
· · · · ·			2,243	- 14	<u>0</u> 11	<u>- 220</u>	<u>-18</u>	+ 424
		0,000	4,243	2,119	11	1,083	204	32,314
ired Members								
Retired as of July 1, 1989	10 530							
New Retirees	10,578	3,924	1,595	0	0	0	ο.	16,097
Terminations	+313	+ 240	+ 63	0	Ō	ő	ő	+ 616
Death					-	Ŷ	v	+ 010
Other	- 222	- 109	- 54	0	0	0	•	
	<u>- 155</u>	<u>- 31</u>	- 18	0		0	0	- 385
Retired, July 1, 1990	10,514	4,024	1,586	0	Q 	_0	_0	<u>204</u> 16,124
viving Spouses					-	Ū	5	10,124
Receiving Benefit, July 1, 1989								
New Spouses	3,801	1,761	893	Q	0	•	-	
	+ 246	+ 109	+ 57	0	0	0	0	6,455
Net Other Terminations	<u>· 168</u>		- 32	-	0	0	0	+ 412
Receiving Benefit, July 1, 1990	3,879	<u>- 73</u> 1,797	918		_ <u>0</u> 0	_0	_0_0	- 273
	-,	11.01	310	0	O	0	0	6,594

a. Includes transfers.

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36 -

Foster Higgins

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Table 20 (Continued)

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Reconciliation of Included Members

		167 Plan	-		Plan	87		
	Municipal	Police	Fire	Municipal	Elected	Police	Fire	Total
her Boneficiaries								
Receiving Benefit, July 1, 1989 New Beneficiaries Net Other Terminations Receiving Benefit, July 1, 1990	685 + 27 <u>- 2</u> 710	124 + 19 <u>- 3</u> 140	37 0 - + 1 38	0 0 0	0 0 0 0	0 0 _0	0 0 0 0	846 + 46 <u>- 4</u>
sabled Members				-	U	U	U	888
Disabled, July 1, 1989 New Disabilities Net Other Terminations Disabled, July 1, 1990 Iminated Vested Members	1,994 + 110 <u>- 68</u> 2,036	2,114 +160 <u>-37</u> 2,237	525 + 45 <u>- 11</u> 559	0 0 0 0	0 0 0	0 0 0 0	0 0 0	4,633 + 315 <u>-116</u> 4,832
Terminated Vested, July 1, 1989 New Vested Terminations Net Other Terminations Terminated Vested, July 1, 1990	405 + 32 0 437	97 0 <u>- 2</u> 95	18 +1 <u>-2</u> 17	0 0 0 0	0 0 0	0 0 0 0	0 0 0 0	520 + 33 <u>- 4</u> 549

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- 37 -

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- 14 - (14 - 1

Summary of Annual Payroll and Annual Benefits (Thousands)

		<u>1967 Plan</u>			Plan	87			
······	Municipal	Police	Fire	Municipal	Elected	Police	Fire	Total	
ctive Members									
Active as of July 1, 1989	\$546,289	\$179,462	\$73,103	**** ***	• • • •	_			
New Entrants and Pay Increases	15,243	<u>_24,163</u>	<u>_6,786</u>	\$33,740	\$463	\$16,261	\$ 3,539	\$ 852,857	
Active as of July 1, 1990	\$561,532	\$203,625	\$79,889	_ <u>19,265</u> \$53,005	0 \$463	<u>16,129</u> \$32,390	<u>2,538</u> \$ 6,077	<u>84,124</u> \$ 936,981	
etired Members									
Retired as of July 1, 1989	\$ 98,805	¢ 55 070	**						
Net New Retirees	1,472	\$ 55,978	\$21,847	\$ 0	\$ 0	\$ 0	\$ 0	\$176,630	
Retired as of July 1, 1990	\$100,277	<u>3,014</u> \$ 58,992	<u>725</u> \$22,572	\$ 0	<u> 0</u> \$ 0	<u>0</u> \$0	<u> </u>	<u>5,211</u> \$181,841	
rviving Spouses									
Receiving Benefit as of									
July 1, 1989	\$ 12.654	\$ 7,996	\$ 3,892	\$ 0	* •				
Net New Spouses	843		<u>188</u>	. 0	\$ 0	\$ 0	\$ 0	\$ 24,542	
Receiving Benefit as of					0	0	0	<u>1,413</u>	
July 1, 1990	\$ 13,497	\$ 8,378	\$ 4,080	\$ 0	\$ 0	\$ 0	- \$ 0	\$ 25,955	
her Beneficiarles									
Receiving Benefit as of									
July 1, 1989	\$ 2,205	\$ 574	\$ 196						
Net New Beneficiaries	82	<u>- 27</u>		\$ 0	\$ 0	\$ 0	\$ 0	\$ 2,975	
Receiving Benefit as of			<u>- 20</u>	0	0	0	0	<u>35</u>	
July 1, 1990	\$ 2,287	\$ 547	\$ 176			_			
	4 -1-01	₩ 0 1 1	φ I/D	\$ 0	\$ 0	\$ O	\$ 0	\$ 3,010	

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- 38 -

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Table 21 (Continued)

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Summary of Annual Payroll and Annual Benefits (Thousands)

		<u>1967 Plan</u>	<u> </u>		Plan	87		
	Municipal	Police	Fire	Municipal	Elected	Police	Fire	Total
abled Members								
Disabled as of July 1, 1989 Net New Disabilities Disabled as of July 1, 1990	\$ 16,973 <u>983</u> \$ 17,956	\$ 25,227 <u>3,054</u> \$ 28,281	\$ 6,886 <u>869</u> \$ 7,755	\$ 0 0 \$ 0	\$ 0 \$ 0	\$0 \$0	\$0 0 \$0	\$ 49,086 <u>4,906</u> \$ 53,992
minated Vested Members"								
Terminated Vested as of July 1, 1989 New Vested Terminations Terminated Vested as of July 1, 1990	\$ 2,432 1,234 \$ 3,666	\$ 490 	\$83 <u>31</u> \$114	\$0 0 \$0	\$0 _0 \$0	\$0 0 \$0	\$0 0 \$0	\$ 3,005 <u>1,548</u> \$ 4,553

Does not include new 1987, 1988 or 1989 terminated vested. a.

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A distribution of the active employees' annual earnings for each division by age and service group as of July 1, 1990 are presented in Tables 22 through 42.

A distribution of terminated vested members by age and monthly pension is shown in Table 43. Tables 44, 45, and 46 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, 1989. Similarly, Tables 47, 48, 49, 50, 51, and 52 show this information for retired and disabled police and fire members respectively.

Foster Higgins

- 40 -

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Table 22

Municipal (1967 Plan) Annual Earnings by Áge Groups

	N	l a lo		Fer	nale			A	
Age Group	Number of People	Total Annual Earnings	Average Annual Earnings	Number Of People	Total Annual Eamings	Average Annual Eamings	Number Of People	Total Annual Eamings	Average Annual Earnings
0-19	6	96	16	12	213	 18			17
20-24	244	5280	22	230	4277	19	474	9557	20
25-29	904	21600	24	687	14587	21	1591	36187	20
30-34	1688	45798	27	1174	27496	23	2862	73294	26
35-39	2033	58334	29	1408	33555	24	3441	91889	20
40-44	2541	76977	30	1540	38580	25	4081	115557	28
45-49	1732	53247	31	1284	30768	24	3016	84016	28
50-54	1546	46784	30	1087	25776	24	2633	72560	28
55-59	953	27849	29	665	15380	23	1618	43229	20 27
60-64	558	15996	29	385	8831	23	943	24826	27
65-69	144	4375	30	139	2986	21	283	7361	20 26
70-74	51	1569	31	42	960	23	93		-
75-79	6	168	28	2	51	25		2529	27
30-84	0	0	0	Ō	0	20	8 0	219	27
15+	0	Ď	õ	õ	0	0	0	0	0
otal	12406	358074	29	8655	203459	24	21061	0 561533	0 27

Note: Age represents attained age

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18

- 41 -

Municipal (1967 Plan) Service Groups by Age Groups

Age					Servid	ce Grou	٥			
Group	0	1	2	3	4	5	6-10	11-15	OVER	TOTAL
					Male				EB Inc.	
0-19	1	5	٥	o	0	0	0	0	0	(
20-24	113	59	36	19	10	6	1	0	0	244
25-29	139	134	161	136	121	58	155	ŏ	0	24* 904
30-34	107	141	160	172	134	121	666	183	4	1688
35-39	89	69	138	. 98	93	92	553	622	279	2033
40-44	47	66	106	98	69	 79	426	589	1061	2030
45-49	31	37	54	47	45	34	248	282	954	1732
50-54	19	26	36	38	32	34	172	195	994	1734
55-59	9	22	18	28	26	28	136	134	552	953
60-64	4	8	16	17	12	18	115	108	260	556
65-69	0	2	3	3	4	3	52	27	200 50	144
70-74	2	1	0	0	2	2	14	10	20	51
75-79	0	0	0	Ō	1	ō	3	1	20	
80-84	0	O	0	0	Ó	õ	Ő	0	o o	
85+	0	0	0	0	Ō	õ	0 0	ő	0	
Total	561	570	728	656	549	475	2541	2151	4175	12406
					Fema	l e				
0-19	7	5	0	0	0	0	0	Q	0	12
20-24	80	69	36	33	9	3	õ	ŏ	0	230
25-29	125	101	79	114	69	51	143	5	Ď	687
10-34	121	134	115	129	94	92	363	109	17	1174
15-39	117	123	101	139	94	85	313	225	211	1408
10-44	65	91	72	98	69	74	330	271	470	1540
5-49	55	71	62	40	40	47	224	157	588	1284
0-54	35	37	36	25	30	43	166	147	568	1087
5-59	20	21	18	28	14	22	119	101	322	665
0-64	6	10	8	12	9	25	73	67	175	385
5-69	3	4	2	3	4	3	35	14	71	139
0-74	1	з	1	ĩ	1	1	35 9	6	19	42
5-79	0	0	0	0	Ō	ò		0	1	42
0-84	0	o	0	ō	ŏ	õ	ò	0	0	2
85+	0	0	0	Ō	ō	ů	Ö	0	0 0	0
fotal	635	669	530	622	433	446	1776	1102	2442	8655

Note: Age represents attained age

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48

Foster Higgins

- 43 -

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Ag e Group	Number of People	Total Annual Eamings	Average Annual Earnings	Number of People	Total Annual Earnings	Average Annual Eamings	Number of People	Total Annual Earnings	Average Annual Eamings
D-19	0	0	O	0	0	0	·····		
20-24	10	317	32	4	127	32	0 14	0	0
25-29	274	9900	36	98	3381	35		444	32
30-34	686	25412	37	196	6894		372	13281	36
35-39	1056	40731	39	210	7519	35	882	32306	37
40-44	1471	57226	39	148	5309	36	1266	48250	38
45-49	904	35676	39	32	1182	36	1619	62535	39
50-54	335	13414	40	4	151	37	936	36858	39
55-59	117	4833	41	ō		38	339	13565	40
50-64	42	1790	43	0	0	0	117	4833	41
65-69	6	263	44	0	, O	0	42	1790	43
70-74	ō	0	0		. 0	0	6	263	44
75-79	õ	ő		0	0	0	0	0	Ó
30-84	ů	0	0	0	0	0	O	0	0
35+	ő	0		0	0	0	0	0	0
otal	4901	_	0	0	0	0	0	0	0
- (p)	1001	189563	39	692	24563	35	5593	214126	38

Police (1967 Plan) Annual Earnings by Age Groups

Note: Age represents attained age

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- 44 -

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Police (1967 Plan) Annual Earnings by Service Groups

			Mal	0	Føm.	a i e		A I I	
Service Group	Number of People	Total Annual Earnings	Average Annual Eamings	Number of People	Total Annual Earnings	Average Annual Earnings	Number of People	Total Annual Earnings	Average Annual Eamings
0	2	59	29						
1	13	401	31	8	29	29	3	88	29
2	106	3644	34	45	250	31	21	651	31
3	204	7200	35	122	1490	33	151	5135	34
4	173	6291	36	87	4187	34	326	11388	35
5	109	3981	37		3052	35	260	9343	36
6-10	679	25254	37	44	1559	35	153	5540	36
11-15	810	30796		228	8091	35	907	33345	37
16-20	1558	60973	38 39	98	3669	37	908	34465	38
21-25	945	37587		45	1704	38	1603	62677	39
26-30	227	9881	40	14	532	38	959	38118	40
31+	75	3496	44	0	0	0	227	9881	44
	0		47	0	0	0	75	3496	47
	0	0	0	0	0	0	0	0	0
Total		0	0	0	0	0	0	Ō	0
	4901	189563	39	692	24563	35	5593	214126	38

Note: Age represents attained age

- 45 -

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Police (1967 Plan) Service Groups by Age Groups

Age					Servi	се Grou	n	-		
Group	0	1	2	3	4	5	р 6-10	11-15	Over	Total
					Ma	1.0				
0-19	0	0	o	0	0					
20-24	0	4	2	3	ŏ	0 1	٥	٥	0	C
25-29	1	2	41	84	51	36	0	0	0	10
30-34	0	6	39	70	75	33	58	1	0	274
35-39	1	1	17	36	40		357	106	0	686
10-44	0	0	6	11	-0	29	170	383	379	1056
5-49	0	Õ	ō	0	ó	10	89	257	1091	1471
0-54	0	Ō	ō	õ	0 0	0	4	59	841	904
5-59	0	ō	õ	ő	0	0	1	4	330	335
0-64	0	ō	1	Ő	0	0	0	0	117	117
5-69	O	ō	ò	0	0	0	0	0	41	42
0-74	0	Ō	ŏ	a		0	0	O	6	6
5-79	ō	ō	õ	0	0	0	0	0	Û	C
0-84	õ	õ	ō	0	-	0	0	0	0	C
85+	ō	ŏ	ō	0	0	0	0	Ð	0	0
otal	2	13	106	204	0	0	0	0	0	0
	_			204	173	109	679	810	2805	4901
0-19	· _	_			Fe	male				
0-19 0-24	0	0	0	0	0	0	0	0	0	0
	0	1	1	2	0	0	ò	ŏ	ŏ	4
5-29	1	4	8	32	19	11	23	õ	ŏ	98
0-34	0	1.	19	36	34	21	72	13	ŏ	196
5-39	0	2	9	37	19	. 8	76	40	19	210
0-44	0	0	8	15	15	4	56	27	23	148
5-49	0	0	0	0	0	0	1	17	14	32
)-54	0	0	0	0	0	Ō	o	1	3	
5-59	0	0	0	0	0	0	ŏ	Ó	0	
)-64	0	0	0	0	0	Ō	ŏ	ŏ	ő	0
5-69	0	0	0	0	0	Ō	õ	0 0	ŏ	0
-74	0	٥	O	0	0	Ō	ő	Ő	0 0	0
-79	0	0	0	0	õ	ō	0 0	0	0	
-84	° 0	0	0	0	ō	0 0	0	0	_	0
85+	0	0	0	0	ō	ŏ	0	0	0 0	0
otal	1	8	45	122	87	44	228	98	59	0 692

Note: Age represents attained age

- 46 -

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Fire (1967 Plan) Annual Earnings by Service Groups

			Mal	8		Føm.	ale		A
Service Group	Number of People	Total Annuai Earnings	Average Annual Eamings	Number of People	Total Annual Earnings	Average Annual Earnings	Number of People	Total Annual Eamings	Average Annual Eaming:
0	1	29	29	0	0	0		29	
1	1	30	30	0	0	Ō	1	30	30
2	32	1038	32	0	0	0	32	1038	32
3	45	1537	34	0	0	0	45	1537	34
4	45	1538	34	2	68	34	47	1605	34
5	113	3871	34	1	34	34	114	3905	34
6-10	194	6746	35	0	0	0	194	6746	34
11-15	526	18937	36	0	0	ō	526	18937	36
16-20	522	19418	37	0	Ō	ō	522	19418	
21-25	516	19513	38	0	ō	ŏ	516	19513	37
26-30	215	8611	40	ò	ō	ō	215		38
31+	30	1281	43	õ	ő	0	30	8611	40
OTAL	2240	82550	37	3 3	101	34	2243	1281 82651	43 37

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Note: Age represents attained age

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- 48 -

Fire (1967 Plan) Service Groups by Age Groups

Age					Servic	e Grou	0			
Group	0	1	2	3	4	5	6-10	11-15	Over	Total
					M	n t e		•		
0-19	O	0	0	0	0	O	0	0	0	C
20-24	0	0	0	0	0	ō	ŏ	õ	õ	(
25-29	1	0	9	18	8	20	7	ŏ	0	63
30-34	0	1	14	18	22	46	75	5	2	183
35-39	0	0	8	` 8	10	40	78	266	100	510
40-44	0	D	1	1	5	7	34	244	526	818
45-49	0	0	0	0	0	Ó	0	11	420	431
50-54	0	0	0	0	0	ō	õ	0	185	185
55-59	0	0	0	0	0	Ō	ō	ŏ	37	37
60-64	0	0	0	0	0	0	ů.	ŏ	11	11
5 5-69	0	0	0	0	0	Ō	õ	õ	1	
70-74	0	0	0	0	0	0	ō	õ	1	1
75-79	0	0	0	0	0	0	ō	ŏ	Ö	0
30-84	0	0	0	0	0	0	Ō	õ	ō	0
85+	0	0	0	0	0	0	Ō	õ	õ	0
Total	1	1	32	45	45	113	194	526	1283	2240
					F e	male				
0-19	0	0	0	0	0	0	0	0	0	o
20-24	0	0	0	0	0	0	O	Ō	Ō	0
25-29	0	0	· 0	0	٥	0	0	Ō	Ō	Ő
30-34	0	0	0	0	1	0	0	0	Ō	1
35-39	0	0	0 .	0	1	1	Ō	ō	ō	2
0-44	0	0	0	Ð	0	0	Ó	ō	Ō	Ō
5-49	O	0	0	0	0	0	0	0	Ō	Ō
0-54	0	0	_ ٥	. 0	0	. 0	0	0	0	0
5-59	0	0	0	0	0	0	0	0	0	0
0-64	0	0	0	0	0	0	0	0	0	0
5-69	0	0	0	0	0	0	0	0	0	0
0-74	0	0	0	0	0	0	0	0	0	Ō
5-79	0	0	0	0	0	0	0	0	0	Ō
0-84	0	0	0	0	0	0	0	Ó	0	0
35+	0	0	0	0	0	0	0	0	0	0
fotal	0	0	0	0	• 2	1	0	0	0	3

Note: Age represents attained age

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Ag o Group	Number of People	Total Annual Eamings	Average Annual Earnings	Number of People	Total Annual Eamings	Average Annual Earnings	Number of People	Total Annual Earnings	Average Annual Earning:
0-19	8	75	9	25	300				·
20-24	103	2186	21	23 80	1535	12	33	375	11
25-29	192	4942	26	233	5619	19	183	3721	20
30-34	168	4491	27	206	5203	24	425	10561	25
35-39	150	4253	28	182	4736	25	374	9694	26
40-44	118	3261	28	163	4291	26 26	332	8989	27
45-49	64	1829	29	83	2155	26	281	7552	27
50-54	47	1498	32	65	1676	20 26	147	3984	27
55-59	26	608	23	58	1270	20	112	3174	28
30-64	28	693	25	37	812	22	84	1878	22
5-69	18	444	25	38	870	23	65 56	1506	23
0-74	8	205	26	19	456	23	50 27	1314	23
5-79	0	0	0	0	-30	24		661	24
0-84	0	ō	ŏ	õ	Ő	0	0	0	0
85+	0	Õ	Ō	ō	0 0	0	0	0	0
lotal	930	24485	26	1189	28923	24	0 2119	0 53408	0 25

Municipal (Plan 1987) Annual Earnings by Age Groups

Table 31

Note: Age represents attained age

- 50 -

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Table 32

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Municipal (Plan 87) Annual Earnings by Service Groups

		Mai	8	Fei	male.			A LI	
Service Group	Number of People	Total Annual Eamings	Average Annuat Eamings	Number of People	Total Annual Eamings	Average Annual Earnings	Number of Peopl a	Total Annual Eamings	Average Annual Earnings
0 ·	288	7026	24	371	8339	22	659		
1	257	6473	25	322	7712	24		15364	23
2	251	6929	28	336	8586		579	14185	24
3	107	3221	30	120	3130	26	587	15516	26
4	7	254	36	11		26	227	6351	28
5	5	153	31	• •	327	30	18	581	32
6-10	10	252		5	110	22	10	263	26
1-15	4		25	20	584	29	30	836	28
6-20		139	35	2	63	31	6	201	34
1-25	1	38	38	1	42	42	2	80	40
	0	0	0	1	30	30	1	30	30
6-30	0	0	0	0	0	0	0	0	
31+	0	0	0	0	Ō	õ	ŏ		0
lota!	930	24485	26	1169	28923	24	2119	0 53408	0 25

Note: Age represents attained age

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Service					Servic	e Grou	o			
Group	0	1	2	3	4	5	6-10	11-15	Over	Total
					Ma					
0-19	7	1	O	0	0					
20-24	55	25	14	7	0	0	0	0	0	8
25-29	63	66	40	21	0	1	1	0	0	103
30-34	54	45	45	22	1	1	0	Ö	0	192
35-39	44	25	57	20	2	0	0	0	0	168
40-44	17	41	38	11	0	1	2	1	0	150
45-49	13	15	23	11 11	2	1	5	3	0	118
50-54	15	11	12		0	0.	1	0	1	64
55-59	10	9		8	0	0	1	0	0	47
50-64	7	10	5	2	0	0	0	0	0	26
65-69	Ó	5	8	1	2	0	0	0	0	28
0.74	3	4	9	3	0	1	0	0	0	18
5-79	õ		0	1	0	0	0	0	0	. 8
0-84	0 0	0	0	0	0	0	0	0	ō	0
85+	Ő	0	0.	0	0	0	0	Ó	Ō	õ
Total	288		0	0	0	0	0	0	Ō	ŏ
	206	257	251	107	7	5	10	4	1	930
					F e m	a 1 o				
0-19	20	5	0	0	0	0		_		
0-24	35	25	10	9	1	ō	0	0	0	25
5-29	90	65	61	14	Ó	1	0	0	0	80
0-34	68	54	57	23	2	o o	2	0	0	233
5-39	44	49	62	22	1	1	2	0	0	206
0-44	44	39	47	23	2	1	2	1	0	182
5-49	22	18	29	10	3	ů í	5	0	2	163
0-54	11	18	22	9	õ		1	0	0	83
5-59	16	18	19	2	1	1 0	4	0	0	65
2-64	6	11	13	4	0	-	2	0	0	58
5-69	9	15	11	2	1	1	1	1	0	37
)-74	6	5	5	2	0	0	0	0	0	38
5-79	Ō	õ	ő	0		0	1	0	0	19
)-84	Õ	ŏ	ō	0	0	0	0	0	0	0
15+	ŏ	ŏ	0	-	0	0	0	0	0	0
otal	371	322	336	0	0	0	Q	0	0	0
-	- ···	YEE.	330	120	11	5	20	2	2	1189

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Municipal (Plan 87) Service Groups by Ace Groups

Note: Age represents attained age

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Elected (Plan 87) Annual Earnings by Age Groups

	~	fale		Fer	male			AII	
Age Group	Number of People	Total Annual Earnings	Average Annual Eamings	Number of People	Total Annual Earnings	Average Annual Eamings	Number of People	Total Annual Eamings	Average Annual Earnings
0-19	0	0	0	0	o	o	0	o	0
20-24	0	0	0	0	0	O	0	Ō	Ō
25-29	O	0	0	0	0	0	0	Ō	Ō
0-34	0	0	0	0	0	0	0	0	0
5-39	0	Ð	0	0	0	0	0	0	0
0-44	2	80	40	0	0	0.	2	80	40
5-49	0	0	0	0	0	0	0	0	0
0-54	3	120	40	1	40	40	4	160	40
5-59	1	40	40	2	86	43	3	126	. 42
0-64	1	40	40	0	0	0	1	40	40
5-69	1	58	58	0	Ð	0	1	58	58
0-74	0	0	0	0	0	0	0	0	0
5-79	0	0	0	0	0	0	0	0	0
0-84	0	0	D	0	0	0	0	0	0
85+	0	0	0	. 0	0	0	Ó	Ō	0
Total	8	338	42	. 3	126	42	11	463	42

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Note: Age represents attained age

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Elected (Plan 87) Annual Earnings by Service Groups

		Ma I	8	Fer	nale		AII			
Service Group	Number of People	Total Annual Earnings	Average Annual Eamings	Number of People	Total Annual Earnings	Average Annual Earnings	Number of People	Total Annual Earnings	Average Annual Earning:	
0	0	0	0	0	0	0	0	 0	 0	
1	C	0	0	Ō	Ō	ŏ	ñ	ŏ	ō	
2	3	120	40	Ō	Ō	ō	3	120	40	
3	0	0	0	Ō	Ū	ŏ	ñ	0	0	
4	0	0	0	Ó	Ō	ō	õ	ő	0	
5	0	0	0	0	ū	ō	ō	0	ŏ	
6-10	1	40	40	1	40	40	2	60	40	
1-15	1	40	40	1	43	43	2	83	41	
6-20	2	98	49	0	Ō	0	2	98	49	
21-25	1	40	40	0	Ó	ō	1	40	40	
6-30	0	·0	0	Ō	ō	õ	, 0	0	0	
31+	0	0	Ō	1	43	43	1	43	43	
Total	8	338	42	3	126	42	11	463	42	

Note: Age represents attained age

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- 54 -

Table 36	Ta	ble	36
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Elected (Plan 87) Service Groups by Age Groups

Age					Servic	e Grou	0			
Group	0	1	2	3	4	5	6-10	11-15	Over	Total
					Ma					
0-19	0	0	0	0	0	0	0	0	0	
20-24	0	0	0	Ō	ō	õ	ů 0	0	0	(
25-29	0	Ó	0	0	õ ·	ő	0	0	0	(
30-34	O	0	Ō	Ō	õ	õ	ů ů	0	0	(
35-39	0	0	Ō	ō	ŏ	ō	0	0	0	(
40-44	0	Û	Ō	Ō	õ	0 0	1	0		(
45-49	0	Ó	Ō	ō	ŏ	0	1 0	0	1	2
50-54	0	ō	2	Ū	ŏ	0	0	0	0	(
55-59	0	ō	ō	õ	ŏ	0	0	1	1 0	3
50-64	0	Ō	1	õ	õ	Ő.	0	0		
5-69	Ő	Ō	ò	õ	õ	ŏ.	o	0	0	1
70-74	0	0	Ō	õ	ŏ	ő	0	0		1
75-79	0	ō	õ	ŏ	Ö	õ	0	0	0	0
80-84	0	ō	ō	õ	õ	ŏ	0	0	0	0
85+	0	Ō	ō	ō	ō	ŏ	ů ů	0	0	0
Total	0	Ō	3	ŏ	ŏ	Ö	1	1	03	0
		-	•	•	Ū	U	•	•	3	8
					F e m	a i e				
0-19	0	0	0	0	0	0	0	0 ·	0	a
0-24	0	0	0	0	0	Ō	Ō	õ	ŏ	0
5-29	0	0	0	0	Ō	Ō	õ	õ	ŏ	Ö
10-34	0	0	· 0	0	0	Ō	ō	õ	ŏ	Ő
5-39	0	0	0	0	0	ō	ŏ	õ	ō	ő
0-44	0	0	0	O	0	ō	õ	ũ	ŏ	0
5-49	0	0	0	Ō	0	ŏ	ŏ	ő	0	0
0-54	0	. O	0	0	Ō	ō	1	õ	Ő	1
5-59	0	0	0	0	Ō	ō	o	1	1	2
0-64	0	0	0	0	Ō	õ	õ	0	0	0
5-69	0	0	0	Ō	ō	õ	0 0	0	ő	0
0-74	0	0	0	0	õ	õ	õ	0	ŏ	0
5-79	0	D	0	ō	ŏ	õ	Ő	ŏ	ŏ	0
0-84	0	Ō	ō	ŏ	Ŭ,	õ	ŏ	0	0	
65 +	0	Ō	· ŏ	ŏ	ŏ	0	Ö	0	Ŭ	0
lotal	0	0	a	ō	õ	õ	1	1	1	0 3

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Note: Age represents attained age

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	N	la le		Før	nale		AII			
Age Group	Number of People	Total Annual Earnings	Average Annual Earnings	Number of People	Total Annual Earnings	Average Annual Earnings	Number of People	Total Annual Earnings	Average Annual Earnings	
0-19	15	438	29	3	88					
20-24	317	9534	30	69	2100	29	18	525	29	
25-29	290	8804	30	89	2724	30	386	11634	30	
10-34	131	3967	30	76		31	379	11528	30	
15-39	46	1415	31	46	2306	30	207	6274	30	
0-44	0	0	0	-	1382	30	92	2797	30	
5-49	1	35	35	0	0	0	0	0	0	
0-54	Ō	0	0	0	0	0	1	35	35	
5-59	ŏ	ŏ	0	0	0	0	0	0	0	
0-64	ŏ	ő		0	0	0	0	0	0	
5-69	õ	0	0	0	0	0	0	0	0	
0-74	Ď	ŏ	0	0	0	0	0	0	0	
5-79	Ő	0	0	0	0	0	0	0	0	
0-84	ŏ	0	0	0	D	0	0	0	0	
85+	ō	0	0	0	0	0	0	0	0	
lotal	800	-	0	0	0	0	0	0	0	
0.4)	000	24193	30	283	8599	30	1083	32792	30	

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Police (Plan 87) Annual Earnings by Age Groups

Table 37

Note: Age represents attained age

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Police (Plan 87) Annual Earnings by Service Groups

			M a I	e	Fem.	a I e		A	
Service Group	Number of People	Total Annual Eamings	A verage Annual Earnings	Number of People	Total Annual Earnings	Аverage Aonual Earnings	Number of People	Total Аплиal Eamings	Average Annual Earnings
0	543	15930	- 29	154	4509		697	20439	29
1	252	8108	32	125	3967	32	377	12075	32
2	. 1	29	29	1	29	29	2	59	29
3	1	28	28	1	33	33	2	62	31
4	0	0	0	1	30	30	1	30	30
5	0	0	0	0	0	0	0	0	õ
6-10	2	62	31	1	30	30	3	92	31
11-15	1	35	35	0	0	0	1	35	35
16-20	0	0	٥	0	0	0	0	0	0
21-25	0	0	0	0	0	0	Ō	ō	õ
26-30	0	0	0	0	0	Ō	ō	Ő	ŏ
31+	0	0	0	0	0	0	ō	ő	ŏ
Total	800	24193	30	283	8599	30	1083	32792	30

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Note: Age represents attained age

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Police (Plan 87) Service Groups by Age Groups

Age					Servic	ө Grou	n			
Group	0	1	2	3	4	5	6-10	11-15	Over	Total
					Ma	1 0		<u> </u>		
0-19	15	0	0	0	0	0	O	0	0	15
20-24	225	90	1	1	ō	Ő	0	0		
25-29	189	101	0	0	õ	ŏ	ŏ	ŏ	0	317
30-34	90	39	Ó	Ó	ō	õ	2	0	0	290
35-39	24	22	0	0	õ	õ	ō	0	0	131
40-44	0	0	Ō	ō	õ	ŏ	, U	0	0	46
45-49	0	0	. 0	ō	ŏ	ŏ	Ő	-	0	0
50-54	0	0	Ō	ō	õ	ő		1	0	1
55-59	٥	0	ō	ō	D	0	0	0	0	0
60-64	0	0	ō	ō	ŏ	0	0	0	0	0
55-69	Ð	Ō	ō	õ	ŏ	0	0	0	. 0	0
70-74	0	0	ŏ	õ	õ	0		0	0	0
75-79	0	0	õ	ō	ō	0	0	0	0	0
30-84	0	0	Ū	õ	ŏ	0	-	0	0	0
85+	0	ū	õ	õ	ŏ	0	0	0	0	0
Total	543	252	1	1	õ	0	0	0	0	0
			•	•	v	, U	2	1	0	800
					Fem	a i e				
0-19	3	0	0	0	0	0	0	0	0	3
0-24	38	31	0	0	õ	Ō	Ŭ	0	0	
5-29	42	46	0	1	0	ō	ő	ő	0	89
0-34	43	30	1	0	1	ŏ	1	0	-	-
5-39	28	18	0	Ō	Ó	Ő	ò	0	0	76
0-44	0	0	0	0	ō	õ	0	0	0	46
5-49	0	0	ō	ō	õ	0	0	0		0
0-54	0	O	Ō	Ō	õ	ō	· 0	0	0	0
5-59	0	0	ō	ŏ	ŏ	õ	Ő		0	0
0-64	0	0	õ	ō	ŏ	0	0	0	0	0
5-69	0	0	ō	ō	ŏ	0	-	0	0	0
0-74	Ō	Ō	ō	õ	ŏ.	0	0	0	0	0
5-79	Ō	ō	ō	Ö	0	0	0	0	0	0
0-84	ō	õ	ŏ	0 ·	0		0	0	0	0
85+	ō	ō	ō	0	0	0 0	0	0	0	0
otal	154	125	1	1	U 1		0	0	0	. 0
			1	r	L	0	1	0	0	283

Note: Age represents attained age

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Foster Higgins

- 58 -

			Før	n a í e		AII				
Age Group	Number of People	Total Annual Eamings	Average Annual Eamings		umber of ople	Total Annual Earnings	Average Annual Earnings	Number of People	Total Annual Earnings	Average Annual Earnings
0-19	0	o	0	i	Ð	0	o	0	•	
20-24	17	541	32		2	69	35	19	0 610	0
25-29	68	2146	32	:	5	161	32	73	2307	32
30-34	66	1990	30	•	1	31	31	67	2021	32
35-39	37	1106	30		D.	0	0	37		30
40-44	8	252	32	:	ŏ	ő	0	37	1106	30
45-49	O	0	0		ō	ő	ŏ		252	32
60-54	Ū	ō	ō		õ	ŏ	0	0	0	0
55-59	0	Ō	õ		ŏ	ŏ	0	-	0	0
50-64	0	Ō	ō	-	õ	õ	0	0	0	0
65-69	0	õ	ŏ	1	ō	ŏ	ŏ	0	0	0
0-74	Ō	0	ŏ	:	ŏ	ŏ	0	0	0	0
75-79	0	ŏ	Ū	:	ŏ	õ	0	0	0	0
0-84	ō	ō	ŏ		ŏ	Ő	0	0 0	0	0
65+	Ō	· õ	õ		ŏ	0	0	-	0	0
Total	196	6035	31	:	8	262	33	0 204	0 6296	0 31

Fire (Plan 67) Annual Earnings by Age Groups

Note: Age represents attained age

- 59 -

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				olice Members	Fire N	Fire Members	
Age	Lives	Monthly Pension	Lives	Monthly Pension	Lives	Monthly Pensior	
Under 40	44	\$ 26,164	29	\$18,284	4	\$2,228	
40-44	116	83,241	41	31,004	6	3,948	
45-49	113	85,137	23	14,146	4	2,170	
50-54	106	76,824	2	972	2	690	
55-59	54	32,387	0	0	1	502	
60-64	2	1,244	O	o	0	C	
wer 64	2	500	0	0	0	c	
Total	437	\$305,498	95	\$64,406	17	\$9,538	

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Terminated Vested (19	57 Ptan)	Members,	July 1	. 1990
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Average Monthly P	ension
Municipal	\$699
Police	\$678
Fire	\$561

Note: Does not include 1987, 1988 or 1989 terminated vested.

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Disabled and Retired Municipal (1967 Plan) Members, July 1, 1990

				nber of Lives		······································			
<u> </u>	Disabled			Retired			Total		
Prior	Naw	Total	Prior	New	Total	Prior	New	Total	
100	29	129	430	23	453	530	52	582	
127	29	156	135	13	148	262	42	304	
213	33	246	309	17	326	522	50	572	
ັ 350	15	365	1412	205	1617	1762	220	1982	
38 3	з	386	2442	129	2571	2825		2957	
369	1	370	2949	92	3041	3318		3411	
221	O	221	2657	40	2697	2878		2918	
119	0	119	1965	34	1999			2118	
25	o	25	1329	19	1348			1373	
19	0	19	88 9	14	903			922	
1926	110	2036	14517	586	15103	16443	696	17139	
	100 127 213 350 383 369 221 119 25 19	Prior New 100 29 127 29 213 33 350 15 383 3 369 1 221 0 119 0 25 0 19 0	Prior New Total 100 29 129 127 29 156 213 33 246 350 15 365 383 3 386 369 1 370 221 0 221 119 0 119 25 0 25 19 0 19	Prior New Total Prior 100 29 129 430 127 29 156 135 213 33 246 309 350 15 365 1412 383 3 386 2442 369 1 370 2949 221 0 221 2657 119 0 119 1965 25 0 25 1329 19 0 19 889	PriorNewTotalPriorNew 100 29 129 430 23 127 29 156 135 13 213 33 246 309 17 350 15 365 1412 205 383 3 386 2442 129 369 1 370 2949 92 221 0 221 2657 40 119 0 119 1965 34 25 0 25 1329 19 19 0 19 889 14	PriorNewTotalPriorNewTotal 100 29 129 430 23 453 127 29 156 135 13 148 213 33 246 309 17 326 350 15 365 1412 205 1617 383 3 386 2442 129 2571 369 1 370 2949 92 3041 221 2657 40 2697 119 0 119 1965 34 1999 25 0 25 1329 19 1348 19 0 19 889 14 903	Prior New Total Prior New Total Prior 100 29 129 430 23 453 530 127 29 156 135 13 148 262 213 33 246 309 17 326 522 350 15 365 1412 205 1617 1762 383 3 386 2442 129 2571 2825 369 1 370 2949 92 3041 3318 221 0 221 2657 40 2697 2878 119 0 119 1965 34 1999 2084 25 0 25 1329 19 1348 1354 19 0 19 889 14 903 908	Prior New Total Prior New Total Prior New 100 29 129 430 23 453 530 52 127 29 156 135 13 148 262 42 213 33 246 309 17 326 522 50 350 15 365 1412 205 1617 1762 220 383 3 386 2442 129 2571 2825 132 369 1 370 2949 92 3041 3318 93 221 0 221 2657 40 2697 2878 40 119 0 119 1965 34 1999 2084 34 25 0 25 1329 19 1348 1354 19 19 0 19 689 14 903 908 14	

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

63 -

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Total Monthly Pensions of Disabled and Retired Municipal (1967 Plan) Members, as of July 1, 1990

	. <u> </u>			Total Mol	nthly Pension An	nounts					
		Disable	d		Retired		<u>_</u> _	Total			
Age	Prior	New	Total	Prior	New	Total	Prior	New	Tota		
Under 45	93937.40	35940.92	129878.32	109474.64	13927.11	123395.75	203412.05	49862.03	253274.07		
45-49	101137.20	34265.35	135402.55	47497.85	10894.58	58392.43	148635.06	45159.93	193794.98		
50-54	174725.98	34495.78	209221.77	215388.92	11411.77	226800.69	390114.90	45907.55	436022.45		
55-59	271335.38	16004.45	287339.83	1470687.07	241455.03	1712142.10	1742022.45	257459.48	1999481.93		
60-64	280962.55	3953.42	284915.96	720.68	102880.08	2432600.75	2610683.22	106833.50	2717516.72		
65-69	230557.88	1170.17	231728.05	2178777.63	55803.83	2234581.46	2409335.52	56974.00	2466309.51		
70-74	131747.74	0.00	131747.74	1397377.96	18619.42	1415997.38	1529125.71	18619.42	1547745.13		
75-79	65562.37	0.00	65562.37	780967.75	11897.09	792864.83	846530.12	11897.09	858427.20		
80-84	13263.79	0.00	13263.79	429607.12	4768.26	434375.38	• 442870.91	4768.26	447639.17		
Over 84	7254.17	0.00	7254.17	235400.78	5165.73	240566.52	242654.96	5165.73	247820.69		
Total	1370484.47	125830.08	1496314.55	9194900.42	476816.88	9671717.30	10565384.89	602646.96	11168031.86		

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

- 64 -

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168

Average Monthly Pension of Disabled and Retired Municipal (1967 Plan) Members, July 1, 1990

<u> </u>				Average	e Monthly Pension	n Amounts				
	Disabled				Retired			Total		
Age 	Prior	New ·	Total	Prior	New	Total	Prior	New	Total	
Under 45	\$ 939.37	\$1239.34	\$1006.81	\$ 254.59	\$ 605.27	\$ 272.40	\$363.60	\$ 958.89	\$ 435.18	
45-49	796.36	1181.56	867.97	351.84	838.04	394.54	567.31	1075.24	637.48	
50-54	820.31	1045.33	850.49	697.05	671.28	695.71	747.35	918.15	762.28	
55-59	775.24	1066.96	787.23	1041.56	1177.83	1058.84	988.66	1170.27	1008.82	
60-64	733.58	1317.81	738.12	954.02	797.52	946.17	924.14	809.34	919.01	
65-69	624.82	1170.17	626.29	738.82	606.56	734.82	726.14	612.62	723.05	
70-74	596.14	0.00	596.14	525.92	465.49	525.03	531.32	465.49	530.41	
75-79	550.94	0.00	550.94	397.44	349.91	396.63	406.20	349.91	405.30	
80-84	530.55	0.00	530.55	323.26	250.96	322.24	327.08	250.96	326.03	
wer 84	381.80	0.00	381.80	264.79	368.98	266.41	267.24	368.98	268.79	
Total	711.57	1143.91	734.93	633.39	813.68	640.38	642.55	865.87	651.62	

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

18

Number of Disabled and Retired Police (1967 Plan) Members, July 1, 1990

<u> </u>				Numb	er of Lives				
Disabled				<u>_</u>	Retired		Total		
Age	Prior	New	Total	Prior	New	Total	Prior	New	Total
Under 45	346	106	452	169	18	187	515	124	639
45-49	382	36	418	572	165	737	954	201	1155
50-54	279	13	292	846	69	915	1125	82	1207
55-59	340	4	344	935	32	967	1275	36	1311
60-64	344	1	345	8 48 ⁻	28	876	1192	29	1221
65-69	168	0	188	476	14	490	664	14	678
70-74	113	0	113	460	16	496	593	16	609
75-79	49	O	49	493	8	501	542	8	550
80-84	22	0	22	388	9	397	410	9	419
Over 84	14	0	14	386	9	395	400	9	409
Total	2077	160	2237	5593	368	5961	7670	528	8198

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

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Total Monthly Pensions of Disabled and Retired Police (1967 Plan) Members, as of July 1, 1990

		<u> </u>		Total	Monthly Pension	Amounts			
		Disabled			Retired	<u>.</u>	Total		
Age	Prior	New	Total	Prior	New	Totai	Prior	New	Total
Under 45	\$ 471371.13	\$189225.58	\$ 660596.71	\$ 100214.23	\$ 9926.14	\$ 110140.37	\$ 571585.36	\$ 199151.72	\$ 770737.0
45-49	422613.32	63168.97	485782.29	722714.44	253549.41	976263.85	1145327.76	316718.38	1462046.1
50-54	282906.79	23160.79	306067.58	1039069.11	101698.38	1140767.49	1321975.90	124859.17	1446835.0
55-59	297989.20	7595.34	305584.54	1081581.96	40673.29	1122255.24	1379571.16	48268.62	1427839.7
60-64	288112.55	2285.76	290398.31	949930.87	31005.37	980936.24	1238043.43	33291.13	1271334.5
65-69	153973.41	0.00	153973.41	444410.11	8375.54	452785.65	598383.52	8375.54	606759.0
70-74	91909.07	0.00	91909.07	287364.62	8045.78	295410.39	379273.69	8045.78	387319.4
75-79	37387.76	0.00	37387.76	255443.03	2444.87	257887.90	292830.79	2444.87	295275.6
80-84	15346.09	0.00	15346.09	158632.97	2475.00	161107.97	173979.06	2475.00	176454.0
ver 84	9 710.61	0.00	9710.61	159184.03	2935.05	162119.08	168894.64	2935.05	171829.6
Total	2071319. 9 4	285436.44	2356756.38	5198545.36	461128.83	5659674.19	7269865.30	746565.26	8016430.5

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

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Average Monthly Pension of Disabled and Retired Police (1967 Plan) Members, July 1, 1990

	<u> </u>	Disabled			Retir <u>ed</u>				
Age	Prior	New	Total	Prior	New	Total	Prior	Nøw	Total
Under 45	\$1362.34	\$1785.15	\$1461.50	\$ 592.98	\$ 551.45	\$ 588.99	\$1109.87	\$1606.06	\$1206.16
45-49	1106.32	1754.69	1162.16	1263.49	1536.66	1324.65	1200.55	1575.71	1265.84
50-54	1014.00	1781.60	1048.18	1228.21	1473.89	1246.74	1175.09	1522.67	1198.70
55-59	876.44	1898.83	888.33	1156.77	1271.04	1160.55	1082.02	1340.80	1089.12
60-64	837.54	2285.76	841.73	1120.20	1107.33	1119.79	1038.63	1147.97	1041.22
65-69	819.01	0.00	819.01	933.63	598.25	924.05	901.18	598.25	894.92
70-74	813.35	0.00	813.35	598.68	502.86	595.59	639.58	502.86	635.99
7 5 -79	763.02	0.00	763.02	518.14	305.61	514.75	540.28	305.61	536.86
80-84	697.55	0.00	697.55	408.85	275.00	405.81	424.34	275.00	421.13
ver 84	693.61	0.00	693.61	412.39	326.12	410.43	422.24	326.12	420.12
Total	997.27	1783.98	1053.53	929.47	1253.07	949.45	947.83	1413.95	977.85

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

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	<u>_</u>			!	Number of Lives					
	<u> </u>	Disabled			Retired			Total		
Age	Prior	New	Total	Prior	New	Tota/	Prior	New	Tota	
Under 45	48	22	70	46	2	48	94	24	118	
45-49	97	16	113	124	42	166	221	58	279	
50-54	79	5	84	198	16	214	277	21	298	
55-5 9	54	2	56	207	12	219	261	14	275	
60-64	51	0	51	238	10	248	289	10	299	
65-69	84	0	84	392	7	399	476	7	483	
70-74	55	0	55	458	14	472	513	14	527	
75-79	29	0	29	431	12	443	460	12	472	
80-84	17	0	17	218	4	222	235	4	239	
ver 84	0	0	0	110	1	111	110	1	111	
Total	514	45	559	2422	120	2542	2936	165	3101	

Number of Disabled and Retired Fire (1967 Plan) Members July 1 1990

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

- 69 -

Total Monthly Pensions of Disabled and Retired Fire (1967 Plan) Members, as of July 1, 1990

		Disabled		·	Retired		. <u> </u>	Total	
Age	Prior	New	Total	Prior	New	Total	Prior	New	Total
Under 45	\$ 53103.38	\$37516.51	\$ 90619.89	\$ 27145.01	\$ 1852.32	\$ 28997.32	\$ 80248.38	\$ 39368.83	\$ 119617.2
45-49	123579.85	28465.99	152045.83	161257.17	68063.48	229320.65	284837.02	96529.46	381366.4
50-54	103184.47	9394. 58	112579.05	277803.10	30522.28	308325.38	380987.57	39916.85	420904.43
55-59	74281.46	3485.92	77767.38	266023.00	18768.50	284791.50	340304.46	22254.42	362558.8
60-64	52628.44	0.00	52628.44	256294.54	6991.08	263285.62	308922.98	6991.08	315914.0
65-69	77376.25	0.00	77376.25	363386.12	4117.52	367503.64	440762.36	4117.52	444879.8
70-74	47063.38	0.00	47063.38	326409.85	4898.58	331308.43	373473.23	4898.58	378371.8
75-79	23351.35	0.00	23351.35	261602.21	3747.65	265349.85	284953.56	3747.65	288701.2
80-84	12838.43	0.00	12838.43	112653.64	1283.93	113937.57	125492.07	1283.93	126776.00
Ner 84	0.00	0.00	0.00	42606.20	300.00	42906.20	42606.20	300.00	42906.2
Total	567406.99	78862.99	646269.99	2095180.84	140545.33	2235726.17	2662587.83	219408.32	2881996.1

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

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Average Monthly Pension of Disabled and Retired Fire (1967 Plan) Members July 1 1990

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<u>_</u>		<u>_</u>	······	Average	e Monthly Pension	n Amounts			
	Disabled				Retired		Total		
Age	Prior	New	Total	Prior	New	Total	Prior	New	Total
Under 45	\$1106.32	\$1705.30	\$1294.57	\$ 590.11	\$ 926.16	\$ 604.11	\$ 853.71	\$1640.37	\$1013.71
45-49	1274.02	1779.12	1345.54	1300.46	1620.56	1381.45	1288.86	1664.30	1366.90
50-54	1306.13	1878.92	1340.23	1403.05	1907.64	1440.77	1375.41	1900.80	1412.43
55-59	1375.58	1742.96	1388.70	1285.14	1564.04	1300.42	1303.85	1589.60	1318.40
60-64	1031.93	0.00	1031.93	1076.87	699.11	1061.64	1068.94	699.11	1056.57
65-69	921.15	0.00	921.15	927.01	588.22	921.06	925.97	588.22	921.08
70-74	855.70	. 0.00	855.70	712.69	349.90	701.92	728.02	349.90	717.97
75-79	805.22	0.00	805.22	606.97	312.30	598.98	619.46	312.30	611.66
80-84	755.20	0.00	755.20	i 516.76	320.98	513.23	534.01	320.98	530.44
Ver 84	0.00	0.00	D.00	387.33	300.00	386.54	387.33	300.00	386.54
Total	1103.90	1752.51	1156.12	865.06	1171.21	879.51	906.88	1329.75	929.36

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

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- 71 -

Rates of Return Comparison

	Fiscal Year Ending				
<u> </u>	June 30, 1989	June 30, 1990			
Cost Value	8.2%	9.5%			
Market Value	13.6%	9.1%			
Adjusted Market Value	7.7%	10.7%			

Table 57 derives the adjusted market value of assets used in the cost calculations. All assets are valued each year at market value and compared to the expected value of assets based on a 9% return assumption. The difference is spread equally over the current year and the next 4 years.

Table 58 shows the July 1, 1990 assets allocation used for valuation purposes 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 participating divisions. For the valuation assets must be allocated between the divisions. However, this allocation does not constitute a legal separation of the assets.

The table begins with July 1, 1989 valuation assets. These assets were allocated by the actuarial accrued liability as of that date. The noninvestment transactions (item 2, Table 58), other than administrative expenses attributable to each division, were provided by the City of Philadelphia's Finance Department. 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) was allocated in propor-

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tion to the mean fund balance as of the valuation date before recognizing fund earnings.

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- 74 -

Statement of Assets and Liabilities (Fiscal Year Ending June 30, 1990)

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	Cost Value	Market Value
Assets		
Cash	\$ 8,244,818	• • • • • • • • •
Investment Accounts	• • =••,•••	\$ 8,244,81
Due From Other Funds	1,573,366,975	1,682,594,65
Accounts Receivable	43,265,847	43,265,84
Interest and Dividends Receivable	2,509,708	2,509,70
Due From Other Governmental Units	11,870,804	11,870,80
Other Assets	2,507,971	2,507,97
	11,220	11,22
Total Assets	\$1,641,777,343	\$1,751,005,02
labilitles		
Vouchers Payable	\$ 38,150	\$ 38,15
Accounts Payable	1,050,371	1,050,37
Salaries and Wages Payable	24,003	24,00
Accrued Expenses	1,248,695	1,248,69
Funds Held in Escrow	3,066	3,06
Deferred Revenue	1,919,444	1,919,44
Other Liabilities	274,487	274,48
		2/4,40
Total Liabilities	\$ 4,558,216	\$ 4,558,21
und Balance	\$1,637,219,127	\$1,746,446,80

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Statement of Receipts and Disbursements

· · · · · · · · · · · · · · · · · · ·	Cost Value	Market Value
Balance as of July 1, 1989	\$1,531,784,967	\$1,638,351,70
Receipts		
Contributions:		
Commonwealth of Pennsylvania	\$ 40,947,829	\$ 40,947,82
City of Philadelphia	147,682,905	40,547,82 147,682,90
Employees	40,281,126	40,281,12
Quasi-Public Agencies	3,261,288	3,261,28
Interest and Dividends	84,306,356	84,306,35
Gain from Sale of Investments	65,898,238	65,898,23
Miscellaneous Operating Revenues	280,886	280,88
Total Receipts	\$ 382,658,628	\$ 382,658,62
Disbursements		
Withdrawals	\$ 7,186,438	¢ 7 100 40
Benefit Payments	260,568,087	\$ 7,186,43 260,568,08
Administrative Expenses	3,399,301	3,399,30
Investment Manager Fees	6.070.642	6,070,642
Total Disbursements	\$ 277,224,468	\$ 277,224,468
Change in Unrealized Appreciation/		
Depreciation		\$ 2,660,937
Balance as of July 1, 1990	\$1,637,219,127	\$1,746,446,805
Approximate Return on Investments		
During Year	9.5%	9.1%

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Statement of Fund Equity (Cost Value)

Members' Pension Contributions	\$ 353,136,758
Designated for Pension Benefits	1,284,082,369
Total as of June 30, 1990	\$1,637,219,127

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Statement of Administrative Expenses for Year Ending June 30, 1990

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Personal Services	\$1,644,838
Purchase of Services	1,430,626
Materials and Supplies	55,629
Employer's Share of Fringe Benefits	268,208
Total	\$3,399,301

- 78 -

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Derivation of Assets for Valuation Purposes

as of July 1, 1990

5-Year Spread Gain Method

July 1	Total Gain or (Loss)	1986	1987	1988	1989	1990	Unrecognized Amount
1986	154,573,771	30,914,755	30,914,754	30,914,754	30,914,754	\$30,914,754	\$ 0
1987	23,702,415	-	4,740,483	4,740,483	4,740,483	4,740,483	4,740,483
1988	(119,614,517)	. –	Ī	(23,922,904)	(23,922,904)	(23,922,903)	(47,845,806)
1989	66,836,337	-	ļ	-	13,367,268	13,367,268	40, 101, 801
1990	1,084,726	-	ļ		-	216,946	<u> </u>
Total							\$ (2,135,742)
1. Jul	y 1, 1990 Market Vatue		\$1,	746,446,605			
2. Uni	ecognized Gain/(Loss)			(2,135,742)			
3. July	y 1, 1990 Adjusted Market	(1) - (2)	\$1,	748,582,547			

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Allocation of Assets for Valuation Purposes Between

Divisions as of June 30, 1990

(Thousands)

	[967 Plan		·····	Plan 87				
	Municipal	Police	Fire	Municipal	Elected	Police	Fire	Totai
Assets for Valuation Purposes		n	<u> </u>	~ <u> </u>	· •			
as of June 30, 1989	\$878,789	\$519,174	\$211,181	\$3,967	\$116	\$2,331	\$ 696	\$1,616,25
Transactions During Period July 1, 1989 - June 30, 1990:								
a. Contributions								
Commonwealth and City	\$100,474	\$ 60,329	\$ 23,039	\$2,709	\$102	\$1,618	\$ 361	\$ 188.63
Employees	21,758	11,676	4,687	993	42	912	213	40,28
Quasi-Public Agencies	3,261	0	0	· 0	0	Q	0	3,26
b. Miscellaneous Income and Expenses	54	(62)	16	O	0	0	0	
c. Pension Benefits	133,207	93,194	34,150	16	0	1	0	260,56
d. Withdrawals	3,792	2,784	427	177	0	4	2	7,18
e. Administrative Expenses [®]	2,182	775	303	96	_1	35	7	3.39
f. Net Transactions								
(a) + (b) - (c) - (d) - (e)	\$(13,635)	\$(24,811)	\$(7,138)	\$3,413	\$143	\$2,491	\$ 564	\$ (38,973
Mean Fund Balance Prior to Allo- cation of Realized and Unrealized		ļ						
Income (1) + (1/2 x (21))	\$ 871,972	\$ 506,769	\$207,612	\$5,674	\$188	\$3,577	\$ 978	\$1,596,76
Realized and Unrealized Income								
for Period July 1, 1989 - June 30,								
1990 (allocated in proportion to (3))	\$ 93,544	\$ 54,366	\$ 22,272	\$ 609	\$ 20	\$ 384	\$ 105	\$ 171,30
Assets for Valuation Purposes as of		i						
June 30, 1990 (1) + (21) + (4)	\$958,699	\$548,730	\$226,315	\$7,989	\$279	\$5,206	\$1,366	\$1,748,58

Note: Numbers may not add due to rounding.

a. Allocated in proportion to the number of active and non-active members in each division as of July 1, 1969.

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

5. Salient Features of the Retirement System

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- 81 -

	MUNICIPAL (PLAN J)	UNIFORMED (PLANS D AND X)
· · · · · · · · · · · · · · · · · · ·		
	• For members represented by AFSCME District Council 33, AFL- CIO or District Council 47, AFL- CIO or employees of the Common Pleas Court, Municipal Court, or Traffic Court, the arithmetic average of the total compensation received during the three calendar or anniversary years that produces the highest average	 The total compensation received during the 12-month period; or
	 For members who hold an elected office, exempt position or other positions not represented by a union, the arithmetic average of the total compensation received during the three calendar or anniversary years that produces the highest average, 	 The annual base rate of pay, excluding longevity payments, calculated from the final pay period; or
		 The arithmetic average of the total compensation received during the five calendar years o employment.
Employee Contributions	Each employee who participates in the Social Security System, contributes 3- 3/4% of his total compensation up to the taxable wage base (\$51,300 in 1990 and \$53,400 in 1991) and 6% of his total compensation above the taxable wage base to the Retirement System.	Same as municipal.
	Each employee who does not participate in the Social Security System contributes 6% of his total compensation to the Retirement System.	
Service Retirement		
Eligibility	Each municipal employee is eligible to retire and receive a service pension at age 55.	Each uniformed employee is eligible t retire and receive a service pension at age 45.
Benefit Amount	The service pension equals 2-%% of the employee's average final compensation multiplied by his years credited service to a maximum of 20 years plus 2% of the employee's average final compensation multiplied by his years credited service in excess of 20, such sum limited to 80% of the employee's average final compensation.	The service pension equals a 2-1/2% of the employee's average final compensation multiplied by his years credited service, subject to a maximur of 100% of average final compensation

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- 82 -

		967 PLAN
	MUNICIPAL (PLAN J)	UNIFORMED (PLANS D AND X)
Deferred Vested Retirement		
Eligibility	A terminating employee who has completed 10 or more years credited service is eligible for a deterred vested retirement benefit.	Same as municipal.
Benefit Amount	The annual deferred vested benefit is determined the same as service pensions, based on average final compensation and credited service at termination. This benefit begins at his service retirement date. If the member dies before beginning his deferred vested benefit, an ordinary death benefit is payable (see Ordinary Death below).	
	Alternatively, the terminating employee may request any time before benefit commencement to receive a return of employee contributions (without interest) In lieu of the deferred vested benefit.	
Withdrawai Benefit	Each terminating employee who has completed less than 10 years credited service will receive a withdrawal benefit equal to his employee contributions (without interest).	Same as municipal.
Service-Connected Death		
	The beneficiary of each active employee who dies solely form the performance of duties of the employee's position with the City is eligible for an immediate death benefit.	Same as municipal .
Benefit Amount	The death benefit equals the sum of the total employee contributions paid to the Retirement System, plus a yearly payment of 60% of the employee's final compensation reduced by any death benefits payable under the Workers' Compensation Act.	Same as municipal.
	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.	

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- 83 -

<u> </u>	MUNICIPAL (PLAN J)	UNIFORMED (PLANS D AND X)
	MUNICIPAL (PD443)	
	If there is no spouse, or if the spouse dies or remarries, each dependent child (up to three children) is eligible for a 25% of final compensation yearly payment until the child reaches age 18. If there is no spouse or dependent children, each dependent parent is entitled to a 15% of final compensation yearly payment for the remainder of his lifetime.	
Ordinary Death		
Eligibility	The beneficiary of an active employee (or a terminated vested employee who did not withdraw his employee contributions) who dies after completing 10 years credited service or reached age 55 is eligible for an immediate death benefit equal to a yearly 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 a yearly pension or a sump sum payment, whichever the beneficiary chooses.
	The beneficiary of an active employee who dies before completing 10 years credited service and reaching age 55 is eligible for a lump sum payment.	The beneficiary may be any relative b blood or marriage.
	The beneficiary may be any relative by blood or marriage.	
Annyal 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 Survival Benefits below).	The annual ordinary death pension. payable for life, is equal to the regular service pension the employee would have received (based upon a minimul of 10 years service) had he been eligible to retire on the day before he died and had elected option 2, joint and 100% contingent annuitant (see survival Benefits below).
Lump Sum Payment	The lump sum payment is equal to 10% of the deceased employee's average final compensation multiplied by his years credited service to a maximum of 10, plus the deceased employee's contributions to the Retirement System, minus the total amount of the deceased employee's city-paid life insurance	Same as municipal.

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- 84 -

· · · · · · · · · · · · · · · · · · ·	1967 PLAN		
	MUNICIPAL (PLAN J)	UNIFORMED (PLANS D AND X)	
Service-Connected Disability			
Eligibility	An active employee found by the Board of Pensions and Retirement to be mentally or physically permanently incapacitated from any further performance of duties due solely to the result of the performance of duties is eligible for an immediate service- connected disability pension.	Same as municipal.	
Benefit Amount	The service-connected disability benefit is equal to the employee's Retirement System contributions, plus a yearly benefit of 70% of the employee's final compensation, reduced by any disability benefits payable under the Workers' Compensation Act.	Same as municipal.	
	If the employee leaves his employee contributions with the Retirement System, he may choose a survivor benefit option (see Survival Benefits below) to continue benefit payments after his death. If he elects to receive his employee contributions, the benefit is payable for his lifetime only.		
Ordinary Disability			
Eligibility	An active employee found by the Board to be mentally or physically permanently incapacitated from the further performance of duties due to an accident or illness not caused by the performance of duties is eligible for an immediate ordinary disability benefit provided he has completed at least 10 years credited service.	An active employee found by the Board to be mentally or physically <u>permanently incapacitated form the</u> further performance of duties due to a accident or illness not caused by the performance of duties is eligible for ar immediate ordinary disability benefit provided he has completed at least 5 years credited service and is a firemar If the disability is permanent and partial and the employee is a policemen, he must have completed at least 10 years credited service. If the disability is permanent and total and the employee is a policeman, there is no service requirement.	
Benefit Amount	The annual ordinary disability benefit is equal to the benefit determined under the service pension formula using average final compensation and credited service as of the date of disablement.	Same as municipal, except each eligible employee is automatically credited with a minimum of 10 years service for purposes of calculating the annual benefit.	

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- 85 -

	19	1967 PLAN		
	MUNICIPAL (PLAN J)	UNIFORMED (PLANS D AND X		
Survivor Benefit	Service pensions, deferred vested benefits, service-connected disability benefits (if employee contributions are left on deposit), and ordinary disability benefits are payable under 4 optional forms. Options 1, 2, and 3 provide benefits actuarilally equivalent to a lifetime only pension while option 4 has no reduction.	Same as municipal.		
	Option $1 \doteq$ 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 – a reduced benefit payable to the employee with the provision that 100% of the reduced benefit will be paid to the designated beneficiary for life after the death of the employee.			
	Option 3 – Same as option 2 except only 50% of the reduced benefit is continued to the designated beneficiary.			
	Option 4 – Upon the employee's death, 50% of the benefit will continue to be paid to the surviving spouse for the remainder of her lifetime, provided			
	that the employee and his spouse were married for 2 years before retirement. If there is no eligible spouse at the time the employee dies, or the spouse dies before the full amount of the contributions have been returned, 50% of the benefit is continued to dependent children until age 18, or if an advantage of the benefit of the be			
	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.			
Minlmum Pension	The monthly minimum pension to a pensioner is equal to \$25 multiplied by the number of the pensioner's completed years of credited service, to a 10 year maximum.	The monthly minimum pension to pensioners receiving is equal to \$500 The monthly minimum pension to all other pensioners is equal to \$440 providing such pension will increase \$500 at the time the pensioner reach age 60.		

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Foster Higgins

- 86 -

	1967 PLAN		
	MUNICIPAL (PLAN J)	UNIFORMED (PLANS D AND X)	
Waiver of Benefit	Any employee at service retirement age with less than 3 but more than 1 year 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.	
Service-Connected Health Care Benefit	Not applicable.	If a uniformed employee dies from the performance of his duties, a service- connected health care benefit may be payable to the surviving spouse and dependent children. Regular payment 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).	

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	Plan 87	
	MUNICIPAL (PLAN M)	UNIFORMED (PLANS A AND J)
Participation	Full-time employees participate on their date of employment. Temporary employees participate after completing 6 months 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 the Plan 87. District Council 33 members do not participate in this Plan.	Same as municipal.
Credited Service	Credited service means the period of employment with the City during which the employee makes contributions to the Retirement System. Certain leaves of absence may also be credited.	Same as municipal.
Total Compensation	Total compensation means the base rate of pay and longevity payments received during a 12-month period.	Same as municipal.
Final Compensation	Final compensation means the annual base rate of pay at the time of termination, including supplementary compensation received under Civil Service Regulation No. 32.	Same as municípal.
Average Final Compensation	Average final compensation means the arithmetic average of the total compensation received during the three calendar or anniversary years producing the highest average.	Average final compensation means th arithmetic average of the total compensation received during the two calendar or anniversary years producing the highest average.
Employee Contributions	Total employee contributions equal 30% of the gross normal cost for all members in the municipal division.	Total employee contributions equal 5 of total compensation, but not less than 30% or greater than 50% of total normal costs for members in the uniformed division.
Service Retirement		
Eligibility	Each municipal employee is eligible to retire and receive a service pension at age 60 and if he has 10 or more years credited service.	Each uniformed employee is eligible tratine and receive a service pension upon the attainment of age 50 and hand to more years of credited service.
Benefit Amount	The service pension equals the sum of 2% of the employee's average final compensation multiplied by his years credited service.	The service pension equals 2.2% of the employee's average final compensation multiplied by his years credited service to a maximum of 20 years, plus 2% of the employee's average final compensation multiplied by his years credited service over 20.

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Plan 87 MUNICIPAL (PLAN M)

Early Retirement

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Early Retirement		
Eligibility	Each municipal employee is eligible to retire and receive a reduced service pension at age 52 and if he has 10 or more years credited service. Atternatively, a member is eligible if he has 33 years credited service regardless of age.	Each uniformed employee is eligible to retire and receive a reduced service pension at age 40. Alternatively, a member is eligible if he has 25 years credited service, regardless of age.
Benefit Amount	The annual amount is calculated the same as service retirement, reduced by ½ of 1% for each month the employee is younger than his minimum retirement age. Benefits are not reduced if the employee has 33 or more years of credited service.	The annual amount is calculated the same as service retirement, reduced by ½ of 1% for each month the employee is younger than his minimum retirement age. Benefits are not reduced if the employee has 25 or more years of credited service.
Deferred Vested Retirement		
Eligibility	A terminating employee who completed 10 or more years credited service is eligible for a deferred vested retirement benefit provided he has not withdrawn his contributions.	Same as municipal.
Benefit Amount	The annual deferred vested banefit is determined the same as service pensions, based on average final compensation and credited service at termination. This benefit begins at his service retirement date. If the member dies before his deferred vested benefit	
	begins, an ordinary death benefit is payable (see Ordinary Death below).	
	Alternatively, the terminating employee may request at any time before benefits begin a return of employee contributions (without interest) in lieu of the deferred vested benefit.	·
Withdrawai Benefit	Each terminating employee who has completed less than 10 years credited service will receive a withdrawal benefit equal to his employee contributions (without interest).	Same as municipal.
Service-Connected Death		
Eligibility	The beneficiary of each active employee who dies solely from the performance of duties of the employee's position with the City is eligible for an immediate death benefit.	Same as municipal.

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

- 90 -

Plan 87		
	MUNICIPAL (PLAN M)	UNIFORMED (PLANS A AND J)
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 Ordinary Disability below).	The annual ordinary death pension, payable for life, is equal to the regular service pension the employee would have received (based on a minimum of 10 years service) had he been eligible to retire on the day before he died and had elected option 2, joint and 100% contingent annuitant (see Ordinary Disability below).
Lump Sum Payment	The tump sum payment is equal to 10% of the deceased employee's average final compensation multiplied by his years credited service to a maximum of 10, plus the deceased employee's contributions to the Retirement System (without interest), minus the total amount of the deceased employee's life insurance which was paid by the City.	Same as municipal.
ervice-Connected Disability		
Eligibility	An active employee found by the Board of Pensions and Retirement to be mentally or physically permanently incapacitated form any further performance of duties due solely to the result of the performance of duties is eligible for an immediate service- connected disability pension. The application for benefit must be made within one-year after termination of employment.	Same as municipal.
Benefit Amount	The service-connected disability benefit is equal to the employee's contribu- tions to the Retirement System; plus a yearly benefit of 70% of the employ- ee's final compensation; reduced by any disability benefits payable under the Workers' Compensation Act.	Same as municipal.

Foster Higgins

- 91 -

Plan 87

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<u></u>	MUNICIPAL (PLAN M)	UNIFORMED (PLANS A AND J)
Ordinary Disability		
Eligibility	An active employee found by the board to be mentally or physically permanently incapacitated from the further performance of duties due to an accident 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 credited service. The application for benefits must be made within one year after termination.	An active employee found by the Board to be mentally or physically permanently incapacitated from the further performance of duties due to ar 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 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 credited service. If the disability is permanent and total and the employee is a policeman, there is no service requirement. The application for benefits must be made within one year after termination.
Benefit Amount	The annual ordinary disability benefit is equal to the benefit determined under the service pension formula using average final compensation and credited service as of the date of disablement.	Same as municipal, except each eligible employee is automatically credited with a minimum of 10 years service to calculate the annual benefit
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	Same as municipal.
	benefits actuarially equivalent to a lifetime only pension while option 1 has no reduction.	
	Option $1 - a$ benefit is payable to the employee providing on his death, the beneficiary will receive a lump sum equal to the excess, if any, of the employee's contributions over the sum of the payments received.	
	Option 2 – a reduced benefit payable to the employee providing 100% of the reduced benefit will continue to be paid to the designated beneficiary for life after the death of the employee.	
	Option 3 – the same as option 2 except only 50% of the reduced benefit is continued to the designated beneficiary.	

Plan	87
MUNICIPAL	(PLAN M)

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 serviceconnected heaith care benefit may be payable to the surviving spouse and dependent children. Regular payments will be made of the appropriate cost of maintaining medical, dental, optical and pharmaceutical prescription benefits in force at the time of the employee's death, payments to the spouse cease upon remarriage and to dependent children at age 18 (age 22 if full-time student).

- 93 -

	Elected Plan
Participation	Full-time employees participate on their date of employment. Temporary employees participate after completing 6 months employment. Participation is limited to employees hired on or after January 8, 1987. Any members of the 1967 Plan may elect to irrevocably participate in Plan 87. District Council 33 members do not participate in this Plan.
Credited Service	Credited service means the period of employment with the City during which the employee makes contributions to the Retirement Systems. Certain leaves of absence may also to credited.
Total Compensation	Total compensation means the base rate of pay and longevity payments received during a 12-month period.
Final Compensation	Final compensation means the annual base rate of pay at the time of termination, including supplementary compensation received under Civil Service Regulation No. 32.
Average Final Compensation	Average final compensation means the arithmetic average of the total compensation received during the three calendar of anniversary years that produce the highest average.
Employee Contributions	Total employee contributions equal 30% of the gross normal cost for all members in the elected division calculated under the municipal plan plus 100% of the gross normal cost that exceeds the cost for the municipal plan.
Service Ratirement	
Eligibility	Each elected official is eligible to ratire and receive a servic pension at age 55 if he has 10 or more years credited service.
Benefit Amount	The service pension equals 3.5% of the employee's average final compensation multiplied by his years credited service.
Early Actirement	
Eligibility	Each elected official is eligible to retire if he has 33 years credited service, regardless of age.
Benefit Amount	Benefits are not reduced if the employee has 33 or more years credited service.
Deferred Vested Retirement	
Eligibility	A terminating employee who has completed 10 or more years credited service is eligible for a deferred vested retirement benefit provided he has not withdrawn his contributions.

·····	Elected Plan
Benefit Amount	The annual deferred vested benefit is determined in the same manner as service pensions, based on average final compensation and credited service at the time of termination. This benefit begins at this service retirement date. If the member dies before beginning his deferred vested benefit, an ordinary death benefit is payable (see Ordinary Death below).
	Alternatively, the terminating employee may request at any time before beginning benefit to receive a return of employee contributions (without interest) in lieu of the deferred vested benefit.
Withdrawal Benefit	Each terminating employee who completed less than 10 years credited service will receive a withdrawal benefit equal to his employee contributions (without interest).
Service-Connected Benefit	
Eligibility	The beneficiary of each active employee who dies solely from performing duties of the employee's position with the City is eligible for an immediate death benefit.
Benefit Amount	The death benefit equals the sum of the total employee contributions paid to the Retirement System (without interest), plus a yearly payment of 60% of the employee's final compensation reduced by any death benefits payable under the Workers' Compensation Act.
	This benefit is payable to the spouse until 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 25% of final compensation yearly payment until the child reaches age 18. If there is no spouse or dependent children, each dependent parent is entitled to a 15% of final compensation yearly payment for the remainder of his lifetime.
Ordinary Death	
Éligibility	The beneficiary of an active employee (or a terminated vested employee who did not withdraw his employee contributions) who dies after completing 10 years credited service or reaches age 55 is eligible for an immediate death benefit equal to an annual pension or a lump sum payment, whichever the beneficiary chooses.
	The beneficiary of an active employee who dies before completing 10 years credited service and reaches age 55 is eligible for a lump sum payment.
	The beneficiary may be any relative by blood or marriage.

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Foster Higgins

- 95 -

	Elected Plan
Annual Pension	The annual ordinary death pension, payable for life, is equal to the regular services pension the employee would have received had he been eligible to retire ont he day before he died and had elected option 2, joint and 100% contingent annuitant (see Ordinary Disability below).
Lump Sum Payment	The lump sum payment is equal to 10% of the deceased employee's average final compensation multiplied by his years credited service to a maximum of 10, plus the deceased employee's contributions to the Retirement System (without interest); minus the total amount of the deceased employee's life insurance which was paid by the City.
Service-Connected Disability	
Eligibility	An active employee found by the Board of Pensions and Retirement to be mentally or physically permanently incapacitated from any further performance of duties due solely to the result of the performance of duties is eligible fo an immediate service-connected disability pension.
Benefit Amount	The service-connected disability benefit is equal to the employee's contributions to the Retirement System, plus a yearly benefit of 70% of the employee's final compensation; reduced by any disability benefits payable under the Workers' Compensation Act.
Ordinary Disability	
Eligibility	An active employee found by the Board to be mentally or physically permanently incapacitated from the further performance of duties due to an accident or illness not caused by the performance of duties is eligible for an immediate ordinary disability benefit provided he has completed at least 10 years credited service.
Benefit Amount	The annual ordinary disability benefit is equal to the benefit determined under the service pension formula using averag final compensation and credited service as of the date of disablement.
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 – a benefit is payable to the employee providing upon his death, the beneficiary will receive a tump sum equal to the excess, if any, of the employee's contributions over the sum of the payments received.
	Option 2 – a reduced benefit payable to the employee providing 100% of the reduced benefit will continue to be paid to the designated beneficiary for life after the death of

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 Plan 87

 Elected Plan

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

Service-Connected Health Care Benefit

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Not applicable.

- 97 -

6. 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.

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

Valuation Date: July 1, 1990.

Actuarial Cost Method: The costs of the System have been determined according to 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 July 1, 1985 unfunded actuarial accrued liability is amortized over 40 years ending June 30, 2019 with payments increasing 6.0% per year. Changes in the actuarial accrued liability realized after July 1, 1985 are amortized in level dollar payments:

- 98 -

- Changes in actuarial assumptions 20 years
- Experience gains and losses 15 years
- Benefit modifications applicable to active members 20 years
- Benefit modifications applicable to non-active members 10 years

Annual Rate of Withdrawal Prior to Retirement: The assumed annual rates of withdrawal may best be illustrated by the probabilities at quinquennial ages in Table 59:

Table	59
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Withdrawal Probabilities at Quinquennial Ages

Attained		Municipal and Elected Officials	
Age	Males	Females	Unisex
20	.180033	.164561	.042000
25	.135489	.150758	.040600
30	.083265	.109685	.033088
35	.048320	.074256	.019696
40	.034625	.053585	.011184
45	.027264	.042840	.000000
50	.021953	.034613	.000000
55	.000000	.000000	.000000

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

Annual Rate of Disability Prior to Retirement: The assumed annual disability

rates may best be illustrated by the following probabilities at quinquennial ages:

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

Table 60 Disability Probabilities at Quinquennial Ages

In addition, it is assumed 85% of all disabilities among municipal and elected members are ordinary (15% are service-connected) and 65% of all disabilities among uniformed members are ordinary (35% are service-connected).

Annual Rate of Mortality Prior to Retirement: It is assumed deaths among active municipal and elected male members may be represented by 80% 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 80% of the UP-84 Mortality Table with ages set back four years. In addition, it is assumed 97.5% of all deaths among active municipal and elected members are ordinary (2.5% are service-connected).

It is assumed deaths among active uniformed male members may be represented by 80% of the UP-84 Mortality Table with ages set forward one year. Deaths among uniformed female members are assumed to be represented by 80% of the UP-84 Mortality Table with ages set back four years. In addition, it is assumed 95% of all deaths among active uniformed members are ordinary (5% are service-connected).

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Service Retirement: It is assumed active members in the 1967 Plan will retire according to the rates in Table 61.

- 101 -

Municipal and Elected Officials Uniform				
Age	Males -	Females	Unisex	
45	-		.160	
46			.110	
47			.110	
48			.120	
49			.120	
50			.120	
51			.125	
52			.145	
53			.160	
54	·	·	.160	
55	.190	.150	.170	
56	.120	.090	.200	
57	.120	.110	.200	
58	.100	.110	.200	
5 9	.110	.100	.240	
60	.110	.115	.240	
61	.130	.115	.240	
62	.300	.250	.280	
63	.180	.180	.280	
64	210	.180	.320	
65	.320	:280	.350	
66	.200	.230	.350	
67	.250	.230	.350	
68	.200	.230	.350	
69	.200	.250	.350	
70+	1.000	1.000	1.000	

1967 Plan Service Retirement Rates

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The corresponding rates for members under Plan 87 are in Table 62.

- 102 -

Plan 87 Service Retirement Rates

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	Municipal and Elected Officials			Uniformed		
Age		Full Benefits			Full Benefits	
	Reduced Benefits	First Year Eligible®	Subsequent Years	Reduced Benefits	First Year Eligible [®]	Subsequent Years
	-					<u> </u>
40	-	-	-	.040	.500	.12
41	-	. -	-	.040	.500	.12
12	-	-	-	.040	.500	.12
43	-	-	-	.040	.500	.12
4	, -	-	-	.040	.500	.12
5	-	_	-	.040	.500	.12
16	-	-	-	.040	.480	.12
7	-	-	-	.040	.460	.12
8	-	-	_	.040	.440	.12
19		-	-	.040	.420	.12
0	_	-	_	.040	.400	.12
i1	-		_	.040	.400	
2	.033	.450	.060	.040	.400	12
3	.033	.420	.060	.040	.400	.14
4	.033	.390	.060	.040	.400	.150
5	.033	.360	.060	.040	.400	
6	.033	.330	.060	.040		.190
7	.033	.300	.060	.040	.400	.215
8	.033	.300	.060	.040	.400	.225
9	.033	.300	.080	.040	.400 .400	.225
0	.033	.300	.100	.040		
1	.033	.350	.150	.040	.400	.230
2	.033	.430	.300		.400	.245
3	.033	.500	.187	.040	.400	.295
4	.033	.500	.199	.040 .040	.400	.265
				.040	.400	.260
5	.033	.600	.309	1.000	.400	1.000
5	.033	.600	.232	-		
7	.033	.600	.214	-	-	
3	.033	.600	.214	-	-	-
•	.033	.600	.238	-	-	-
)	1.000	.600	1.000	_	_	-

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

- 103 -

Annual Rate of Mortality After Retirement: Postretirement mortality has been assumed to follow 110% of the UP-84 Mortality Table with ages set forward one year for males and to follow 110% of the UP-84 Mortality Table with ages set back four years for females. Post-disablement mortality has been assumed to follow the abovementioned tables with the following adjustment factors applied at each age.

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Table (53
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<u>u</u>	Adjustment Factor		•	Adjustment Factor	
			4.00	Male	Female
Age	Male	Female	Age		
		e 00	62	1.57	2.00
17 and Earlier	5.40	6.90	63	1.51	1.93
48	4.59	5.87	64	1.46	1.86
49	4.10	5.24		1.40	1.79
50	0.70		4.83 65 4.42 66	1.35	1.73
51	3.46	3.46 4.42		1.50	
•			67	1.32	1.68
52	3.19	4.07	-	1.30	1.66
53	2.86	3.66	68	1.30	1.66
54	2.59	3.31	69	1.24	1.59
55	2.38	3.04	70		1.52
56	2.16	2.76	71	1.19	1.02
••			72	1.19	1.52
57	1.94	2.48		1.13	1.45
58	1.84	2.35	73	1.10	1.41
59	1.73	2.21	74	1.08	1.38
60	1.67	2.14	75 and Later	1.00	
61	1.62	2.07			

Mortality Adjustment Factors

Salary Scale: It is assumed salaries, including longevity and overtime, will increase at a compound annual rate of 6.0% per year.

Rate of Investment Return: It is assumed the assets of the fund will accumulate at a compound annual rate of 9% per year, 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.

- 104 -

Expenses: The administrative expenses of servicing the Retirement System are based on the estimated operating budget of the Board of Pensions and Retirement for fiscal year 1990 excluding the costs of the money managers contracted to invest the fund's assets.

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Value of Investments: Assets held by the fund are valued at market value as reported by the City. The difference between the market value of the assets reported and last year's assets projected forward at the rate of investment return is determined and four-fifths of this difference is deferred and recognized over the next four years one-fifth at a time.

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

Form of Annuity: It is assumed all members will elect Option 4 unless otherwise indicated in the participant's data.

Rate of Covered Payroll Growth: It is assumed the annual rate of growth of total covered payroll is 6% per year. This is supported by the actuarial experience study for the five year period ending July 1, 1990 that showed the adjusted growth rate of covered payroll averaged 5.8% for the period of the study.

Foster Higgins

~ 105 ~

7. 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 following generally accepted accounting principles (GAAP).

The disclosures required by GASB Statement No. 5 provide users with information 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, plan's funding status 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. 10-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.

- 106 -

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 nonvested liabilities.

Pension liabilities under GASB No. 5 are in Table 64.

Table 64

GASB Statement No. 5, Disclosure Information as of July 1, 1990 (Thousands)

Current Employees	
Employee Contributions	\$ 330,308
Employer-Financed Vested	991,954
Employer-Financed Non-Vested	300,756
Nonactive Participants	
Retirees and Beneficiaries Currently Receiving Benefits and Terminated Employees Not Yet Receiving Benefits	<u>_2.177.821</u>
Total Pension Benefit Obligation	\$3,800,839
Assets at Cost Value (Market Value = \$1,746,447)	1,637,219
Unfunded Pension Benefit Obligation	\$2,163,620

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- 107 -