	County: ALL	Class : 2 😕
	Mun : PITTSBURGH	-
Harrisburg, PA 17105 - 1429 1997 ACT 205 ACTUARIAL VALUATION REPORT: NONUNIFORMED PENSION PLAN WITH DEFINED BENEFITS	Muncd : 02-261-2 RECEIPT PERC APR -	
FILING DE.ADLINE: March 31. 1998	FRMTYP REVIEW CODE C DT 5149	INPUT EDP LOG
Section I - Identification of Municipality INSTRUCTIONS: Print or type requested information in the space pr Note: In Part A, home rule municipalities should	ovided. I check the box and enter the number of their p	previous municipal classification.
 A. Type of Municipality		Item No. 2(1
$ \begin{array}{ c c } \hline County & (1) \\ \hline & Ciry & (2) \\ \hline & Borough & (3) \\ \hline & Town & (3) \end{array} $	 Township (1st) Township (2nd) Authority COG/Regional Entity 	 (4) (5) (6) (7)
 B. Name of MunicipalityPITTSBURGH C. Name of CountyALLEGHENY 		
Section II - Identification of Pension Plan and Specification of V INSTRUCTIONS: Print or type requested information in space provide		
A. Name of Pension Plan <u>CITY</u> OF PITTSBURGH M	UNICIPAL PENSION FUND	
B. Date on which pension plan was established		<u>05 / 28 / 1915</u> (5 Mo. Da. Yr.
C. Valuation date for demographic, financial and actuarial dat (Use 1/1/1997 unless otherwise specified in plan document prior t		<u>01 / 01 /1997</u> (6 Mo. Da. Yr.

1

Section III - General Information

INSTRUCTIONS:	Respond to each question	by entering "yes"	' or "no" in	the space provided.
---------------	--------------------------	-------------------	--------------	---------------------

A.	Is Social Security coverage provided for the active members of the pension plan identified in Section II?	YES	(8
В.	Do any active members of the pension plan identified in Section II participate in any other pension plan or plans that receive funding from the municipality?	NO	(9
C.	Do any of the active members of the pension plan identified in Section II work on average less than 35 hours per week?	NO	(10
D:	Does the pension plan identified in Section II include active members who are not employees of the municipality identified in Section I?	YES	(11
E.	Do retired members of the pension plan identified in Section II receive any benefit, such as insurance coverage, that is provided wholly or partially by the municipality and not funded through the pension plan identified in Section II?	NO	(12

JANUARY 1 _, 1997 (Valuation Date) Section IV - Demographic Data as of

INSTRUCTIONS: Enter valuation date specified in Section II, Part C, in the space provided above and on each page of Schedule A. Print or type information requested in Part A in the space provided. Enter zero, if applicable. Do not leave blanks or refer to the schedules or exhibits. Complete Schedule A. Then complete the certification in Part B below.

A.	Sur	nmary of Demographic Data			
	1.	Number of active members on valuation date		2,316	
	2.	Total annual payroll of active members on valuation date	\$_	70,504,271	_(14
	3.	Number of members terminated with vested or deferred benefit on valuation date			_(15
	4.	As of valuation date, number of persons receiving:			
		a. Retirement benefits		1,438	_(16
		b. Disability benefits	_	417	_(17
		c. Surviving spouse benefits		103	_(18
		d. Surviving child benefits		0	_(19
		e. Total $(a + b + c + d)$		1,958	_(20
	5.	As of valuation date, total annual benefits payable as:			
		a. Retirement benefits	\$	11,835,455	_(21
		b. Disability benefits	s	3,399,263	_(22
		c. Surviving spouse benefits	\$	304,546	_(23
		d. Surviving child benefits			_(24
		e. Total $(a + b + c + d)$	s	15,575,264	_(25

Β. Certification of Demographic Data

have prepared and reviewed the demographic data entered in Part A of this section and in Schedule A; and I further I hereby certify that certify that the information provided is to the best of my knowledge true and accurate.

(Signatuke)

Poul Hennigon (Name)

Director of Finance (Title)

<u>3/3//98</u> (Date)

(412 255-258 (Telephone)

Section V - Financial Data as of	JANUARY	. 1997	(Valuation Date)
Section V - Financial Data as up	JENCENT 1	, 1///	(allowed by and)

INSTRUCTIONS: Enter valuation date specified in Section II. Part C, in the space provided above and on each page of Schedule B. Print or type data requested in Part A, rounded to the nearest dollar, in the space provided. Enter zero, if applicable. Do not leave blanks c: to exhibits. Complete Schedule B. Then complete the certification in Part B below.

Note: The asset values provided in Part A of this section and in Schedule B must include all the assets of the pension plan regardless of custodial arrangements involving administrative agencies.

A. Summary of Financial Data			
1. MARKET VALUE OF ASSETS. excluding the cash surrender values of individual insurance and annuity contracts, on the above valuation date	S .	72,082,763	(1
2. CASH SURRENDER VALUE of individual insurance and annuity contracts on the above valuation date or nearest anniversary date	\$_	0	(21
 TOTAL FUND ASSETS (1 + 2) on the above valuation date 			
4. INVESTMENT INCOME, excluding individual insurance and annuity contract dividends, for the year ended on the above valuation date	\$_	6,355,28i	(29
5. REALIZED CAPITAL GAINS/LOSSES for the year ended on the above valuation date (+ or -)	\$_	0	_ (30
 DIVIDENDS ON INSURANCE/ANNUITY CONTRACTS for the year ended on the above valuation date 	\$	0	_ (31
 MEMBER CONTRIBUTIONS to plan for the year ended on the above valuation date (Include employee contributions treated as employer contributions pursuant to Section 414(h) of the Internal Revenue Code.) 	S	3,042,076	_ (32
 MUNICIPAL CONTRIBUTIONS to plan, excluding Supplemental State Assistance monies allocated under Act 205 Recovery Program, for the year ended on valuation date (8a + 8b) a. State Aid Portion S <u>2,429,724</u> b. Local Portion S <u>2,164,999</u> 	\$	4,594,723	_ (33
 9. ACTUAL MUNICIPAL DEPOSIT for the year ended on the valuation date (Item 33 ÷ 9a - 9b) a. Contributions Receivable b. Contributions Receivable at end of year \$ 	\$	4,594,723	_ (34
10. TOTAL MONTHLY BENEFIT PAYMENTS for the year ended on the above valuation date	\$	18,317,241	_ (35
11. ANNUAL INSURANCE OR ANNUITY PREMIUM PAYMENTS, excluding single premium annuity purchases, for the year ended on the above valuation date	\$	0	_ (36
12. ADMINISTRATIVE EXPENSES paid from the assets of the pension plan for the year ended on the above valuation date	S	729,979	(37b
13. MINIMUM MUNICIPAL OBLIGATION to the pension plan for the year ended on the valuation date (Enter amount reported in item 34 or item 41 on page 12.)	\$	6,009,522	. (38
B. Certification of Financial Data			
I hereby certify that I have prepared and reviewed the financial data entered in Part A of this section ar certify that the unconst tion provided is to the best of my knowledge true and accurate.	ıd in So (Da	chedule B; and I fi 	Irther
(Signature) (VIII) <u>Cont Henry</u> (Name) (Virch of Finance (Title)		(12) 253-252 ephone)	3

(b) Includes \$268,515 in expenses paid by the 3 Plan and \$461,464 in expenses paid by the Comprehensive Pension board and allocated to the Plan.

Section VI - Actuarial Data as of _____JANUARY 1______, 1997 (Valuation Date)

- INSTRUCTIONS: Enter valuation date specified in Section II, Part C, in the space provided above and on each page of Schedule C. Complete Part A and Part B below in accordance with the instructions provided. Complete Schedule C. Then complete the certification in Part C below.
 - Note: The asset values provided in Part A of this section must include all the assets of the pension plan regardless of custodial arrangements involving administrative agencies.

A. Summary of Actuarial Data

INSTRUCTIONS: Print or type the data requested, rounded to the nearest dollar, in the space provided. Enter zero or negative values, if applicable. Do not leave blanks or refer to exhibits.

	1.	. ACTUARIAL PRESENT VALUE OF FUTURE BENEFITS as of valuation date	\$.	213,903,719 (40
	2.	ACTUARIAL PRESENT VALUE OF FUTURE NORMAL COST as of valuation date	\$	26,879,166 (41
	3.	ACTUARIAL ACCRUED LIABILITY as of valuation date	\$ <u>.</u>	187,024,553 (42
	4.	ACTUARIAL VALUE OF ASSETS, including aggregate insurance/annuity cash surrender value, as of valuation date	\$_	72,082,763 (43
	5.	UNFUNDED ACTUARIAL ACCRUED LIABILITY as of valuation date (+ or -)	\$_	114,941,790 (44
	6.	NORMAL COST (employer & employee), excluding administrative expenses, payable as of valuation date for the plan year beginning on valuation date: a. As a dollar amount	£	3.326.036 (45
		b. As a percentage of total annual payroll	·····	<u> </u>
	7.	AVERAGE ADMINISTRATIVE EXPENSES payable from the assets of the pension plan in the prior plan year and the plan year beginning on valuation date '	\$	634,538 (47
ŝ	8.	ANNUAL COVERED PAYROLL of active members as of valuation date	\$	70,504,271 (48
ç	Э.	AMORTIZATION CONTRIBUTIONS		
		 a. For amortization of initial unfunded actuarial accrued liability established 1/1/85.² 1) Amortization period remaining (years) 		28(49
		 Amortization contribution calculated as a level dollar amount for the plan year beginning on valuation date 	\$	13,078,217 (50
		 Amortization contribution calculated as a level percentage of payroll for the plan year beginning on valuation date 3 	\$	8,998,427 (51
		 b. For amortization of all increases or decreases in unfunded actuarial accrued liability occurring after 1/1/85 or the initial UAL's establishment.² Aggregated amortization period (years) 	······	10 (52
		 Aggregated amortization contribution calculated as a level dollar amount for the plan year beginning on valuation date 	\$	(4,780,788) (53
	Ċ	c. Total Amortization Requirement (Item 50 + 53 or Item 51 + 53, whichever is applicable)	\$	4,217,639 (54
10	0. <i>1</i> 3	ACTUAL OR ESTIMATED MEMBER CONTRIBUTIONS to the pension plan for the year beginning on the valuation date	\$	3,042,076 (55

Section VI - Actuarial Data (Cont'd)

INSTRUCTIONS: If insurance/annuity contracts are maintained pre-retirement to fund a portion of the benefits provided by the pension plan at retirement, enter the information requested in items 11-20 below. <u>Otherwise, do not complete items 11-20</u>.

Note: For item 20, include "side fund" amortization contribution for the initial UAL established 1/1/85 and the aggregated "side fund" amortization contribution for increases and decreases in the UAL occurring after 1/1/85. Attach a facsimile of Schedule C, Section II, to support the entry for item 20.

A. Summary of Actuarial Data (Cont'd)

11	ACTUARIAL PRESENT VALUE OF INSURANCE/ANNUITY CONTRACT CASH VALUES AT RETIREMENT as of valuation date	\$	(56
12.	ADJUSTED ACTUARIAL PRESENT VALUE OF FUTURE BENEFITS as of valuation date (1 - 11)	\$	(57
13.	ADJUSTED ACTUARIAL PRESENT VALUE OF FUTURE NORMAL COST as of valuation date	\$	(58
14.	ADJUSTED ACTUARIAL ACCRUED LIABILITY as of valuation date	\$	(59
15.	ACTUARIAL VALUE OF ASSETS, excluding aggregate insurance/annuity cash surrender value, as of valuation date	\$	(60
16.	ADJUSTED UNFUNDED ACTUARIAL ACCRUED LIABILITY as of valuation date (+ or -)	\$	(61
17.	ADJUSTED NORMAL COST, excluding administrative expenses. payable as of valuation date for the plan year beginning on valuation date	. \$	(62
18.	ANNUAL INSURANCE/ANNUITY PREMIUM PAYMENTS for the plan year beginning on valuation date	. \$	(63
19.	GROSS ADJUSTED NORMAL COST for the plan year beginning on valuation date (17 + 18): a. As a dollar amount	. \$	(64
	b. As a percentage of payroll	•	% (65
20.	ADJUSTED AMORTIZATION CONTRIBUTION calculated as a level dollar amount for the plan year beginning on valuation date	. \$	(66

¹ The average of the prior year's administrative expenses and the estimated administrative expenses for the current year. If the amount entered exceeds the prior year's expenses (Section V, Part A, Item 12) by more than 10%, attach an exhibit detailing the administrative expenses for the year beginning on the valuation date.

² Initial unfunded actuarial accrued liability may be established later than 1/1/1985 if coincidental with establishment of pension plan.

³ Enter N/A unless municipality has been certified to use level percentage of payroll amortization pursuant to Section 607 of Act 205.

Section VI - Actuarial Data - (Cont'd)

B. Additional Information

INSTRUCTIONS: Print or type the information requested in the space provided. Enter "N/A", if applicable. Do not leave blanks or refer to exhibit:

1. MAJOR ECONOMIC ACTUARIAL ASSUMPTIONS	8 75
 a. Interest or investment earnings rate b. Salary projection 	
2. ADMINISTRATIVE ARRANGEMENT (Enter corresponding number. 🖛)	
1 - Self administered fund 4 - Insured deposit administration	ration contract
2 - Bank or other trust fund 5 - Immediate participation	guarantee contract
3 - Split-funded plan - Insurance plus side fund 6 - Pennsylvania Municipal 1	Retirement System
7 - Other (Describe)	
3. COST FOR ACTUARIAL SERVICES to be billed or charged for completing this reporting for	
and for preparing the associated actuarial valuation report	\$/,333
C. Certification of Actuarial Data	
I hereby certify that I have prepared and reviewed the actuarial data and information entered in Part A as Schedule C and that the data and information provided is to the best of my knowledge true and accurate	te.
I further certify that I have five years of actuarial experience with public pension plans and that I am ()	Initial appropriate box.)
X a member of the American Academy of Actuaries enrolled in 197	
an enrolled actuary pursuant to the Employee Retirement Income Security Act of 1974, No.	96-544
A. Harbert Form's	3/5/98
(Signature)	(Date)
G. HERBERT LOOMIS	(412) 394-9660 (71
	(Telephone) (72
MOCKENHAUPT ASSOCIATES (Name of Firm)	

Section VII - Certification of Report by the Chief Administrative Officer of the Municipality

Ensure that Schedule A, Schedule B and Schedule C are completed and attached to the reporting form. Review the information entered INSTRUCTIONS: in each section of the reporting form and the information provided in the schedules. Then complete the certification below and return the original reporting form to the Commission at the address indicated on page one of the reporting form. Retain a copy of the completed reporting form for audit compliance purposes.

so the best of my knowledge the information provided in this report is complete, true and accurate. I hereby certify th

(Signature of Chief Administrative Officer)

(Name of Chief Administrative Officer) (Print or type)

<u>3/3//58</u> (Date)

(Telephone)

To be completed by the person officially designated as the Chief Administrative Officer of the municipality under Note: Act 205 of 1984.

SCHEDULE A - Demographic Data as of	JANUARY 1	 PITTSBURGH	ALLEGHE
Page 1 of 2	(Valuation Date)	(Municipality)	(County

INSTRUCTIONS:

Print or type the requested information in the space provided. For totals, enter zero if applicable. Refer to attachments or exhibits only to explain or support data entered on the schedule.

AGE	NUMBER	ANNUAL PENSION PAYABLE
Under 30		
30-34	J	
35-39	6	60,187
40-14	17	186,186
45-49	24	240,311
50-54	78	596,617
55-59	137	1,245,199
60-64	264	2,685.720
65-69	386	3,225,336
70-74	398	3,110,139
75-79	320	2,221,183
80-84	203	1,286,605
Over 84	125	717,782
OTALS	1,958	15,575,264

PART II - DEMOGRAPHIC DATA FOR MEMBERS TERMINATED WITH VESTING AGE NUMBER ANNUAL PROJECTED PENSION Under 25 25-29 30-34 35-39 40-44 45-49 50-54 55-59 60-64 65-69 Over 69 TOTALS

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SCHEDULE A - Demographic Data as of _	JANUARY l	, 1997	PITTDBURGH	ALLEGHEN
Page 2 of 2	(Valuation Date)		(Municipality)	(County)

Part III - Distribution of Active Members by Age and Service

Ξ

			YEARS OF SERVICE								
AGE		1	2	3	4-5	6-10	11-1:	5 16-20) 21-25	26-30) 30+
Under	No. of Members				_	1					
20	Payroll (\$000)										
20-24	No. of Members	6	1								<u> </u>
	Payroll (\$000)	167	33								
25-29	No. of Members	37	20	5	16	12					
	Payroll (\$000)	943	596	135	535	346					
30-34	No. of Members	34	17	16	33	69	21		1		
	Payroll (\$000)	869	526	399	950	2271	679		38		
35-39	No. of Members	36	23	17	24	131	92	91	1		
	Payroll (\$000)	914	918	407	757	4042	2956	2865	29		
40-44	No. of Members	36	13	18	27	126	96	192	65	2	
	Payroll (\$000)	987	406	425	731	3583	β191	6542	2089	56	
45-49	No. of Members	20	7	9	21	94	66	107	99	21	
	Payroll (\$000)	545	233	277	552	2693	1865	3413	B240	651	
50-54	No. of Members	9	9	7	7	62	37	57	48	37	8
	Payroll (\$000)	185	375	145	198	1514	1012	1504	1534	1150	274
55-59	No. of Members	8	5	3	5	39	24	32	26	27	10
	Payroll (\$000)	149	219	58	140	1042	618	810	773	801	334
60-64	No. of Members	3	1	2	3	28	16	5	15	7	9
	Payroll (\$000)	63	32	32	56	704	457	181	453	171	313
65 &	No. of Members	1	1			13	7	5	5	7	6
Over	Payroll (\$000)	20	21			232	120	144	138	188	190
TOTAL M	IEMBERS	190	97	77	136	574	359	489	260	101	33
TOTAL A	NNUAL PAYROLL	4842	3360	1878	3919	16426	10897	15460	8294	3017	1111

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CHEDULE B - Financial Data as of	JANUARY 1	, 1997	PITTSBURGH	ALLEGHE
ge of 3	(Valuation Date)		(Municipality)	(County)
ISTRUCTIONS: Print or type the requested or exhibits only to explain	information in the space provided. or support data entered on the sci		rest dollar. Enter zero, if a	oplicable. Refer to attachm
ction I - Statement of Net Assets Avai	lable for Benefits as of the Va	luation Date		
				Item N
A. Assets:				
1. Cash			S	(1
2. Accrued Interest and Dividen	ds Receivable		\$	(2
3. Other Receivables (Specify)				
		•••••	\$	(3
	····		\$	(4
			\$	(5
4. Investments at Market Value	(Specify)			
	IN AGGREGATE TRUST		\$	72,082,763 (6
	······			
	ender Value (Individual Policies)			
-	ander vanue (individual Poncies)		φ	(11
6. Other Assets (Specify)			ŕ	(12
			_	
· · · · · · · · · · · · · · · · · · ·	<u> </u>		-	
			\$	
Total Assets		••••••	\$	72,082,783 (15
B. Current Liabilities:				
1. Accounts Payable and Accrue	d Administrative Expenses		S	(16
 Other Current Liabilities (Spec 	•	*****	· ·	(10
			٩	(17
	····			
·	<u></u>	••••••		
Total Current Liabilities			٢	(20
			······································	

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SCHEDULE B - Financial Data as of	JANUARY I	, 1997	PITTSBURGH	ALLEGH
Page 2 of 3	(Valuation Date)		(Municipality)	(Count

Section II - Statement of Revenues, Expenses and Change in Fund Assets for the year ended on the Valuation Date

			Item
A. Net Assets at Beginning of Year (Market Value)	\$ <u>.</u>	39,783,509	
B. Revenues:			
Member Contributions	\$ _	3,042,076	'
Total Municipal Contributions	\$_	4,594,723	(
a. State Aid Portion \$ 2,429,724 b. Local Portion \$2,164,999	_	·	
Supplemental State Assistance Grant	\$ _	336,457	
Interest Earnings Allocated Investment Earnings	\$ _	6,355,281	(:
Dividend Income	\$ _	0	(r
Realized Capital Gains	\$ _	0	(*
Other Revenues or Credits (Specify)			
Pension Bond proceeds	\$	36,509,996	٤)
Pass through contributions	\$	1,438,578	(ç
Total Revenues	<u>s</u> _	52,277,111	(10

C. Expenses:

	Total Benefit Payments (Lump Sum)	\$_	0	_ (11
	Total Benefit Payments (Monthly)	\$ _	18,317,241	_ (12
	Annuity Purchases (Lump Sum)			
	Insurance Premiums	\$_	0	_ (14
	Refund of Member Contributions			
	Administrative Expenses	. \$	729,979	(16
	Realized Capital Losses	. \$ _	0	_ (17
	Other Expenses or Debits (Specify)			
		\$_		_ (18
		\$_		_ (19
	Total Expenses	\$_	19,977,857	_ (20
D.	Net Change in Market Value of Assets (Unrealized Capital Gains or Losses)	\$ _	0	_ (21
E.	Net Assets at End of Year (Market Value)	. s _	72,082,763	_ (22

SCHE	DU	ILE B - I	Financial Data as of	JANUARY I	, 1997	PITTSBURGH	PC ALLEGHE
Page 3	of 3	\$		(Valuation Date)		(Municipality)	(County)
Section	n II	I - Prese	ntation of the Determ	ination of the Minimum Mu	ınicipal Obligati	ion (MMO) for Year Ended	on Valuation Date
INSTRU	UCI	rions:	Enter data reflecting the [Section 302(C) of Act 2		developed in the fa	all of 1995 for the pian year begi	nning in 1996.
Δ				TUARIAL VALUATION RI	EPORT used to d	etermine funding	Item]
Ω,				used in 1995 or earlier year.)		01	<u>/ 01 / 199</u> 5 (23
B.	(E	Enter "N/A		M MUNICIPAL OBLIGATIC eded the present value of future b			Da. Yr.
	1.	TOTA	L ANNUAL PAYRO	LL projected for year ended o	n valuation date	\$ 72	<u>,410,597</u> (2-
	2.	TOTA derive	L NORMAL COST, e d from actuarial valuat	xpressed as a percentage of to ion report identified in item 2	otal annual payro 3	ll,	4.920 % (25
	3.	TOTA (Item 2	L PROJECTED NORI 4 x Item 25)	AAL COST for year ended or	n valuation date	\$ <u>3</u>	,562,601 (26
	4.	τοτα	L AMORTIZATION I	REQUIREMENT for year end	ed on valuation of	date\$5	,574,050 (27
	5.	TOTA	L ADMINISTRATIVE	E EXPENSES projected for ye	ear ended on valu	nation date\$	506,874 (28
	6.	TOTA	L FINANCIAL REQU	IREMENTS (Item 26 + 27 + 25	3)	\$ 9	,643,525 (29
	7.	MEME	BER CONTRIBUTION	S projected for year ended or	valuation date	\$3	,634,003 (30
	8.	FUND for year	ING ADJUSTMENT d r ended on valuation d	etermined pursuant to Section	n 302(c)(2) of Ac	t 205 of 1984 \$	0(31
	9.			LIGATION (MMO) for year			009,522 (32
	10.	DELIN	QUENT MMO PLUS	INTEREST from plan year b	eginning in 199	5\$	0(33
	11.	TOTAL	. MMO for year ended	on valuation date (Item 32 +	ltem 33)	\$ <u>6</u> ,	009,522 (34
C.	DE unc	VELOPI ler Sectio	MENT OF PRE-AUTH m 605 or 607 of Act 20	ORIZED ADJUSTMENT TO 95 of 1984. ²) MINIMUM M(JNICIPAL OBLIGATION	
	1.	TOTAL beginni	MUNICIPAL CONT ng in 1995 (Not less tha	RIBUTION to the pension pla n adjusted MMO for applicable	n for the plan ye year.)	ear	(35
	2.	AMOU	NT OF DIFFERENCE	(Item 32 - Item 35) (Must be po	sitive value.)	\$	(36
	3.	ADJUS	TMENT FACTOR AP	PLICABLE			% (37
4	4.	ADJUS	TMENT AMOUNT (It	em 36 x Item 37)		\$	(38
-	5.	ADJUS	TED MMO for the yea	r ended on valuation date (Iter	n 35 + Item 38)	\$	(39
(6.	DELING	QUENT MMO PLUS I	NTEREST from plan year be	ginning in 1995 .	\$	(40
	7.	TOTAL	ADJUSTED MMO fo	or year ended on valuation dat	e (ltem 39 + ltem	40) \$	(41

Funding adjustment is applicable where assets exceed actuarial accrued liability and is equal to 10% of the amount of the excess.

² Complete Part C only if municipality was certified under the Act 205 Distressed Municipal Pension System Recovery Program.

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SCHEDULE C - Actuarial Data as of	JANUARY 1	, 1997	PITTSBURGH	ALLEGHEN
Page 1 of 4	(Valuation Date)		(Municipality)	(County)

INSTRUCTIONS: Complete all items using the entry age normal actuarial cost method. Enter zero, if applicable, and round to the nearest dollar. Refer to attachments or exhibits only to explain or support data entered on the schedule.

Section I - Presentation of Actuarial Present Value of Future Benefits as of the Valuation Date

					Item No
A.	Ad	ctuarial Present Values for Active Members			
	(E	nter values for ancillary benefits only if valued using EAN.)			
	1.	Retirement Benefits		<u>58,222,852</u>	(1
	2.	Disability Benefits	4	17,886,644	(2
	3.	Survivor Benefits		;0	(3
	4.	Liability for the Refund of Member Contributions			
	5.	Others (Specify)			
		Subtotal for Active Members	\$	97,752,970	(6
В.	Ac 1. 2. 3. 4.	tuarial Present Values for Non-Active Members and Benefit Recipients Deferred Vested Benefits Retirement Benefits Disability Benefits Survivor Benefits	\$ \$	88,337,281 25,115,420	(9
	5.	Others (Specify)	\$	0	(11
		Subtotal for Non-Active Members and Benefit Recipients	\$	116,150,749	(12
C.	Tot	al Actuarial Present Value of Future Benefits (Without adjustments)	\$	213,903,719	(13
D.	Tot	al Adjustments for Ancillary Benefits Valued through Approximation Techniques '	\$	0	(14
E.	Tot	al Actuarial Present Value of Future Benefits (Item 13 + Item 14)	\$	213,903,719	(15

A signed statement and accompanying documentation, as specified in Section 203.5 of the Act 205 regulations, must be attached if adjustments are made.

SCHEDULE C - Actuarial Data as of	JANUARY I,	1997	PITTSBURGH	ALLEGHENY
Page 2 of 4	(Valuation Date)		(Municipality)	(County)

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Section II - Unfunded Actuarial Accrued Liability and Amortization Contributions as of Valuation Date

Part A - Initial Unfunded Actuarial Accrued Liability.

Amount of Initial Liability	Date Established	Target Date	Original Amortization Period	Remaining Balance	Level Dollar Amortization Costribution ¹
\$ 136,436,661	1985	2024	40	\$ 147,021,457	\$ 8,998,427 (16

Part B - Changes in Unfunded Actuarial Accrued Liability since the last actuarial valuation report prepared and submitted under Act 205.

Source	Amount of Liability	Date Established	Target Date	Amortization Period	Amortization Contribution
Benefit Plan Modification					
Actuarial Assumption Modification					
Actuarial Losses (+) or Gains (-) ²	2,201,525	1997	2011	15	247,-49
Post-Retirement Adjustments					
Total	\$ 2,201,525	XXXXX	xxxxx	XXXXX	\$ 247,≟49 (17

Part C - Aggregation of Changes in Unfunded Actuarial Accrued Liability Since Initially Established in 1985.

Description	Remaining Balance of Aggregated Liability	Date of Aggregation	Aggregated Target Date	Agg. Amortization Period	Aggregated Amostization Contribution
Aggregation of all prior changes (exclude changes in Section B)	\$ (34,281,192)	1996	2007	11	\$ (5,028,237) (18
Aggregation of all changes (include changes in Section B)	\$ (32,079,667)	Current Valuation Date	2006	10	\$ (4,780,788) (19

¹ Level percentage of future payroll amortization contribution should be entered where the municipality has previously implemented that amortization approach pursuant to Section 607 of Act 205.

² Attach exhibit of the actuarial valuation report showing development of expected unfunded actuarial accrued liability.

14

Section Four: Summary of Plan Provisions

Plan Year

Plan Established

Principal Definitions Employee

Retirement Benefit Commencement Date

Service Increment

Service

Normal Form of Payment

Participation Requirements Entry Date

Compensation

Average Compensation

Members hired after December 31, 1987

Normal Retirement

Eligibility

Monthly Benefit

Twelve-month period beginning January 1 and ending December 31

□May 28, 1915

Any full time employee of the City of Pittsburgh other than a firefighter and police officer and full-time employees of the Pittsburgh Water and Sewer Authority

- Assumed to be the first day of the month coincident with or next following eligibility for and election to retire
- An additional monthly benefit of 1 percent of average compensation for each completed year of service in excess of 20 years to a maximum of \$100
- Assumed to be completed years of service calculated from date of hire through date of retirement or severance
- ☐ Monthly pension benefit payable for life
- Generation Following completion of 90-day probationary period
- Base wages, plus "acting" or "in-grade" pay
- Averaged over the 3-year period prior to retirement or severance
- Averaged over the 4-year period prior to retirement or severance
- Later of age 60 *or* completion of 8 years of service
- Equal to 50% of average compensation and service increment, if any
- Prorated for service less than 20 years
- Upon reaching age 65 reduced by 50% of social security benefit; the reduction shall not exceed 50% of the monthly benefit

City of Pittsburgh Municipal Pension Fund 01/01/97

Members hired prior to January 1, 1975

Supplemental Medical

Early Retirement

Eligibility

Benefit Amount

Members hired prior to January 1, 1975

Disability

Eligibility

Benefit Amount

Members Hired After December 31, 1987

City of Pittsburgh Municipal Pension Fund 01/01/97

If pay is less than \$450:

Equal to 60% of 3-year average pay

□Not less than \$130

Plus service increment, if any OR

If pay is greater than \$450: 55% of first \$650 of 3-year average pay and 30% of excess

□Not less than \$270

- □Plus service increment, if any
- Eligible retired members and spouses will receive additional monthly payment equal to coverage premium

Employees hired after December 31, 1987 not eligible

□ Later of age 50 or □ Completion of 8 years of service

- Normal retirement benefit based upon average compensation at actual retirement
- May be deferred to age 60 or paid immediately in reduced amount
 Reduction will be 1/2 percent per month for each month that payment commences prior to age 60

□ If 25 years service, reduction applied only on benefits attributed to earnings in excess of \$7,800

 Permanent disablement in line of duty or
 Permanent disablement (not in line of duty) after completing 8 years of service

 Normal retirement benefit at date of disablement
 Not prorated for service less than 20 years

□ Normal retirement benefit if at least age 60 with 8 years of service Members Hired After December 31, 1987(Cont'd.)

Benefit Commencement Date

Vesting

Members hired prior to January 1, 1975

Vested Terminated Participants

Death Benefits Before Retirement

Death After Early Retirement Eligibility

Death Before Early Retirement Eligibility

Death Benefits After Retirement

Members Hired Prior to 1988

- Disabled before age 60 with at least 8 years of service calculated as of age 60 with service being greater of:
 - (a) Service at disablement or
 - (b) The lesser of 20 years and completed service (assuming work until age 60)
- Benefit is reduced so that the sum of the plan benefit and workers' compensation does not exceed member's regular salary at time of disablement
- Grist day of calendar month following determination of disablement and
- Continuing for the duration of disability prior to normal retirement date and life thereafter

Attainment of age 40 and Completion of 8 years of service

Completion of 15 years of service/no age requirement

 Normal retirement benefit if contributions continue to age 50
 Benefit deferred to age 60

 Surviving spouse entitled to 50% of pension that would have been payable if member retired at date of death
 Member's beneficiary receives amount

- equal to member's contributions
- equal to the excess, if any, of member's contributions over retirement benefit paid on member's behalf
- Married employee may deduct up to \$100 month from retirement benefit payable to surviving spouse for life thereafter until death or remarriage

Spouse Predeceases Retiree

Members Hired After December 31, 1987

Employee Contributions

Members hired prior to January 1, 1988

G Monthly benefit restored to full level for remainder of retiree's life

At no time shall total benefit payment on behalf of member be less than the member's contributions to the fund

- Married member may elect a reduced pension
- □ Spouse will receive 50% of the reduced pension

Generation Member's pension not restored to full level if spouse predeceases retiree

Total benefit payments on behalf of member will be no less than member's contribution to fund

□ 4% of pensionable wages □ 5% of pensionable wages

Section Seven: Actuarial Basis of Valuation

Actuarial Assumptions: January 1, 1997

Economic

- Interest Rate
- Salary Projection

Social Security Benefits

Medicare Premiums

Employee Characteristics

• Mortality

8.75 percent increase per annum

4.5 percent increase per annum

1996 Replacement Ratios remain constant to retirement.

For 1997, \$43.80 per month. The premium for years thereafter is assumed to increase at a rate of 6.5 percent per annum.

Healthy: UP-1984 Table, with female ages set back five years

Disabled: UP-1984 Table, with male ages set forward seven years and female ages set forward two years

• Withdrawal

Sample rates:

Age	Rate
20	7.45%
25	7.26%
30	6.98%
35	6.53%
40	5.82%
45	4.77%
50	3.17%
55	1.16%
60	0.11%

• Disablement

Sample rates:

Age	Male	Female
30	0.09%	0.11%
40	0.21%	0.41%
50	0.65%	0.82%
60	1.93%	1.48%

Active members are assumed to retire one year earlier than one-third of the way between: (a) age 60 with 8 years of service (or current age, if later); and (b) age 65 with 8 years of service (or current age, if later)

Non-participants

Active: Eighty percent of male participants and 65 percent of female participants

Female spouse assumed to be two years younger than male spouse.

0.7 percent of payroll

One-third of original pension amount.

• Retirement Age

- Exclusions
- Percentage Married
- Spouse Age

Other

- Administrative Expenses
- Future Social Security Offsets at age 65 for retired lives hired after December 31, 1974

CITY OF PITTSBURGH MUNICIPAL PENSION FUND

ATTACHMENT TO SCHEDULE C, SECTION III, ACT 205 FORM FOR 1997

Documentation required for certain actuarial assumptions by Section 203.3 of the ACT 205 regulations regardir the Range of Economic Actuarial Assumptions.

This actuarial report utilizes assumptions regarding salary projections and interest which taken together, fall outside of the range prescribed in paragraph (b)(3) of Section 203.3 of the regulations. The guidelines provide that the salary projection rate should be not more than 3 percent less than the actuarial assumption as to interest. For this Plan, the interest rate assumed is 8.75 percent per annum and the salary increase assumption is 4.50 percent per annum, a difference of 4.25 percent.

This difference was first established for the 1992 actuarial valuation upon recommendation of the prior actuary. We reviewed the evidence which had been used to establish these assumptions and concluded that it was appropriate to continue these two assumptions for 1997. For 1997, we believe that using an interest rate and salary increase assumption within the guidelines would have been inappropriate, and that using our particular choice of actuarial assumptions was appropriate because of the reasons described below:

- 1. The 1993 experience investigation concluded that for the prior eight years the average annual increase in salaries to continuing participants of 3.7 percent per annum. During the first four years under consideration, the increases averaged 4.5 percent per annum. As of the valuation date, the outlook appeared to indicate that it was reasonable for increases to continue at this magnitude for at least the near term.
- 2. The average investment return for the period from January 1, 1985 through December 31, 1994 slightly exceeded 8.75 percent. Thus, on average, the fund achieved the valuation rate of return over a 10 years period, even though that period included some years (such as 1994) in which the markets were down. Reducing the assumption to 7.50 percent (which could put the difference with the salary scale at 3 percent, and not require specific documentation) would have understated long-term expectations of interest earnings. The City's investment policies appear to support the reasonableness of the 8.75 percent assumption.

Because this difference is greater than both the regulation and the differences most commonly found in pension valuations the situation is being carefully and regularly monitored to assure the differential continues to be justified.

Certified By: D. Herbert Formin

G. Herbert Loomis F.S.A., E.A., M.A.A.A.

GHL:blv:i:/act205/98_forms:pp11353

Exhibit I - Actua	rial Data as of_	JANUARY 1	, 1997.	For: MUNIC.	PLAN of	CITY OF PI	TTSBURGH	in <u>ALLEGHENY</u>
Page 1 of 4		(Valuation Date)		(Pension]	Plan)	(Munici	pality)	(County)
NSTRUCTIONS	accrued liabilit amortization co to reflect the fu to the pension p	ties under section ontributions alloca inded status of the	404 of A ted under pension j the data	ct 205 of 1984 r section 202(b plan that would requested, rour	. The borrow)(4) of Act l exist had the ded to the r	wing proceeds of 205. The data ro he proceeds of t nearest dollar, in	contributed equested in he borrowi	o fund unfunded actuarial I to the pension plan are this exhibit is modified ing not been contributed provided. Enter zero or
NOTE	borrowed asset	prrowed funds cont s to total assets at orrowed assets we	market v	alue as of the v	und are to b valuation da	e calculated pro te occurring on	oportionate or immedi	ly, based on the ratio of ately following the date
. Summary of N	Iodified Actuaria	al Data						
1. ACTU (Enter	ARIAL ACCRU amount reported	JED LIABILITY a 1 in item 42 on pag	as of valu ge 4 of th	ation date e reporting for	m.)		\$	187,024,553 (E1
	L FUND ASSET Market Value of (Excluding proce on such contribu	f Assets	es contrib	uted and earning	\$s	32,353,810	(E2	3
b.	Actuarial Value (Excluding proce on such contribu	eds of bonds or note	es contrib	ated and earning	S		\$	32,8 5 3,810 (E3
3. UNFU date (NDED ACTUAL + or -) (Item 1	RIAL ACCRUED minus Item 2b).	LIABIL	ITY as of valua	ation		\$_	<u>154,670,743</u> (E4
4. AMC	ORTIZATION CO	ONTRIBUTIONS						
a. I	For amortization 1) Amortizatior	of initial unfunded a period remaining	d actuaria g (years)	al accrued liabi	lity establis	hed 1/1/85.1	·····	28(E5
2	 Amortization plan year beg 	n contribution calc ginning on valuation	ulated as	a level dollar	amount for	the	\$	<u>15,020,862</u> (E6
3	 Amortization plan year beg 	n contribution calc ginning on valuation	ulated as on date ²	a level percent	tage of payı	oll for the	\$	12,060,431 (E7
1	inhility anourring	of all increases or g after 1/1/85 or th amortization perio	a initial 1	TAT la patalelial			······	(E8
2	 Aggregated a plan year be 	amortization contr ginning on valuati	ibution ca	alculated as a l	evel dollar a	amount for the	\$	<u>(6,338,336)</u> (E9
с. Т		_ .						5,722,095 (E10

¹ Initial unfunded actuarial accrued liability may be established later than 1/1/85 if coincidental with establishment of pension plan.

² Enter N/A unless municipality has been certified to use level percentage of payroll amortization pursuant to Section 607 of Act 205.

Mark a Ken 96-4258

Exhibit I - Actuarial Data as of	JANUARY 1, 1997. For:	MUNIC. PLANof	CITY OF PITTSBURGH	in _	ALLEGHENY
Page 2 of 4		(Pension Plan)	(Municipality)		(County)

INSTRUCTIONS: A modified aggregated amortization period must be developed for each contribution to the pension fund comprised of proceeds of bonds or notes. The modified aggregated amortization period will not change once it is calculated and reported in this exhibit. The modified aggregated amortization period is not used for funding purposes.

B. Development of Modified Aggregated Amortization Period

Contribution Comprised Of Proceeds Of Bonds Or Notes ¹	Date Of Contribution	Modified Aggregated AmortizationContribution TargetDate ² (MO/DA/YR)	Modified Aggregated Amortization Period Initially Established ² (years)	Modified Aggregated Amortization Period Remaining (years)
\$36,509,996	12/15/96	12/15/2035	48 30	48 30
\$ \$	· · · · · · · · · · · · · · · · · · ·			
\$ \$ \$				
\$\$				· · · · · · · · · · · · · · · · · · ·
\$\$				-

¹ Contributions to the pension plan shall consist of original borrowings to fund unfunded actuarial accrued liability and shall not include refinancing of an amount previously borrowed.

² Determined under section 404 of Act 205 using the unfunded accrued liability and total amortization requirement shown in Part A of this exhibit and the plan's assumed rate of investment earnings. In the event that the period calculated is indeterminate or is in excess of 40 years, the amortization period initially established shall not exceed 40 years.

Commi	issio	n U	se	Onl	y

INt PYINID lota Total \$

Exhibit I - Actuarial Data as of_	<u>JANUARY 1</u> , 1997. For:	MUNIC. PLANof CIT	Y OF PITTSBURGH in	ALLEGHENY
Page 3 of 4	(Valuation Date)	(Pension Plan)	(Municipality)	(County)

INSTRUCTIONS: Provide unfunded actuarial accrued liability and amortization contributions as of valuation date developed under section 404 of Act 205. Proceeds of bonds and notes issued to fund unfunded actuarial accrued liabilities are not reflected in the data provided. Submission of the exhibits prepared in compliance with section 202(b)(3) of Act 205 may be required.

Part C - Modified Unfunded Actuarial Accrued Liability and Amortization Contributions

Initial Unfunded Actuarial Accrued Liability						
Amount of Initial Liability	Date Established	Target Date	Original Amortization Period	Remaining Balance	Level Dollar Amortization Contribution	
\$ 136,436,661	1985	2024	40	\$ 197,050,235	\$ 12,060,431 (E11	

Changes in Unfunded Actuarial Accrued Liability Since the Last Actuarial Valuation Report Prepared and Submitted under Act 205.						
Source	Amount of Liability	Date Established	Target Date	Amortization Period	Amortization Contribution	
Benefit Plan Modification						
Actuarial Assumption Modification						
Actuarial Losses (+) or Gains (-)	3,566,975	1997	2011	15	400,924	
Post-Retirement Adjustments						
Total	\$ 3,566,975	xxxxx	xxxxx	xxxxx	\$400,924 (E12	

Aggregation of	of Changes in Unfunded Ac	tuarial Accrued I	iability Since	Initially Established i	n 1985.
Description	Remaining Balance of Aggregated Liability	Date of Aggregation	Aggregated Target Date	Agg. Amortization Period	Aggregated Amortization Contribution
Aggregation of all prior changes (exclude changes in Section B)	^{\$} (45,946,467)	1996	2007	10	(6,739,260) (E13
Aggregation of all changes (include changes in Section B)	\$ (42,379,492)	Current Valuation Date	2006	10	\$(6,338,336) (E14

¹ The sum of this item (Aggregated balance of all changes in UAL) and the remaining balance of the initial liability must equal the amount in Item 3, Exhibit I. $ML = \frac{3}{31}\frac{31}{98}$ $Mach A L = \frac{3}{21}-4258$

Exhibit I - Actuarial Data as of	JANUARY 1 , 1997. For	MUNIC. PLANof (CITY OF PITTSBURGH	in <u>ALLEGHENY</u>
Page 4 of 4	(Valuation Date)	(Pension Plan)	(Municipality)	(County)

INSTRUCTIONS: A separate Part D for debt service requirements is required for each instance where bond or note proceeds are contributed to the pension plan and for each instance where the remaining unpaid principal of such debt is refinanced. If more than one Part D is required, please submit color coded copies or request additional originals from the Commission's office.

NOTE: If the borrowing proceeds contributed to an individual pension plan were less than 100% of the total borrowing proceeds contributed, the total debt service requirements must be proportionately allocated among the individual pension plans based on the ratio of the borrowing proceeds contributed to each individual pension plan to the total borrowing proceeds contributed. In the event of refinancing, Part D is to reflect the revised debt service requirements.

D. Identification and Allocation of Total Debt Service Requirements for Debt Issued to Finance Pension Plan Contributions

	Date of Original Borrowin	Total Principal Amount Borrowed and Contributed to pg Pension Plans	Amount of Total Principal Contributed to this Pension Plan	Percentage of Total Debt Service Allocated to this Pension Plan	Date of Refinancing
	12-1	<u>15-96</u> \$ <u>37,710,000.0</u> (A)	0 \$ <u>37,710,000,00</u> (B)	<u> 100 %</u> (B÷A)	N/A
	Plan Year	Required Principal Payment	Required Interest Payment	Premium or Discount Amortized	Principal Balance at Valuation Date
1.	1997		\$ 1,834,529.78		\$ 37,710,000.00
2.	1998	\$ 525,000.00	2,564,976.25		37,710,000.00
3.	1999	560,000.00	2,533,905.00		37,185,000.00
4.	2000	590,000.00	2,499,965.00		36,625,000.00
5.	2001	630,000.00	2,463,050.00		36,035,000.00
<i>.</i>	2002	670,000.00	2,423,065.00		34,405,000.00
'. I	2003	715,000.00	2,379,772.50	· · · · · · · · · · · · · · · · · · ·	34,735,000.00
	2004	760,000.00	2,332,930.00		34,020,000.00
	2005	810,000.00	2,282,285.00		33,260,000.00
0.	2006	865,000.00	2,227,631.25		32,450,000.00
1.	2007	925,000.00	2,169,008.75		31,585,000.00
2.	2008	985,000.00	2,106,210.00	·	30,660,000.00
3.	2009	1,055,000.00	2,038,890.00		29,675,000.00
1.	2010	1,125,000.00	1,966,950.00		28,620,000.00
5.	2011	1,200,000.00	1,890,225.00		27,495,000.00
6.	2012	1,285,000.00	1,808,220.00		26,295,000.00
7.	2013	1,375,000.00	1,717,690.00		25,010,000.00
8.	2014	1,475,000.00	1,617,940.00		23,635,000.00
9.	2015	1,580,000.00	1,511,015.00		22,160,000.00
0.	2016	1,695,000.00	1,396,390.00		20,580,000.00
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(Continue on additional pages, if necessary)

- Exhibit I - Actuarial Data as of	JANUARY 1 , 1997. For:	MUNIC. PLANof CI	TY OF PITTSBURGH	inALLEGHENY
Page 4 of 4	(Valuation Date)	(Pension Plan)	(Municipality)	(County)

INSTRUCTIONS: A separate Part D for debt service requirements is required for each instance where bond or note proceeds are contributed to the pension plan and for each instance where the remaining unpaid principal of such debt is refinanced. If more than one Part D is required, please submit color coded copies or request additional originals from the Commission's office.

NOTE: If the borrowing proceeds contributed to an individual pension plan were less than 100% of the total borrowing proceeds contributed, the total debt service requirements must be proportionately allocated among the individual pension plans based on the ratio of the borrowing proceeds contributed to each individual pension plan to the total borrowing proceeds contributed. In the event of refinancing, Part D is to reflect the revised debt service requirements.

D. Identification and Allocation of Total Debt Service Requirements for Debt Issued to Finance Pension Plan Contributions

Date of Original Borrowi	and Contributed to	Amount of Total Principal Contributed to this Pension Plan	Percentage of Total Debt Service Allocated to this Pension Plan	Date of Refinancing
12-1	5-96 \$ <u>37,710,000.00</u> (A)	\$ <u>37,710,000.00</u> (B)	<u>100</u> % (B÷A)	<u>N/A</u>
Plan Year	Required Principal Payment	Required Interest Payment	Premium or Discount Amortized	Principal Balance at Valuation Date
2017	\$ 1,820,000.00	\$ 1,273,365.00		\$ 18,885,000.00
2018	1,950,000.00	1,141,415.00		17,065,000.00
2019	2,095,000.00	998,792.50		15,115,000.00
2020	2,250,000.00	844,545.00		13,020,000.00
2021	2,415,000.00	678,937.50		10,770,000.00
2022	2,590,000.00	501,260.00		8,355,000.00
2023	2,780,000.00	310,625.00		5,765,000.00
2024	2,985,000.00	105,967.50		2,985,000.00
		·		
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(Continue on additional pages, if necessary)