

1999

**ACT 205 ACTUARIAL VALUATION REPORT:
 FIRE PENSION PLAN
 WITH DEFINED BENEFITS**

FILING DEADLINE: March 31, 2000

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Section I - Identification of Municipality

INSTRUCTIONS: Print or type requested information in the space provided.

Note: In Part A, home rule municipalities should check the box and enter the number of their previous municipal classification.

A. Type of Municipality 2 Item No. (1)
 (Check appropriate box below and enter corresponding number.)

- | | |
|--|--|
| <input type="checkbox"/> County (1) | <input type="checkbox"/> Township (1st) (4) |
| <input checked="" type="checkbox"/> City (2) | <input type="checkbox"/> Township (2nd) (5) |
| <input type="checkbox"/> Borough (3) | <input type="checkbox"/> Authority (6) |
| <input type="checkbox"/> Town (3) | <input type="checkbox"/> COG/Regional Entity (7) |

B. Name of Municipality CITY OF PITTSBURGH (2)

C. Name of County ALLEGHENY (3)

Section II - Identification of Pension Plan and Specification of Valuation Date

INSTRUCTIONS: Print or type requested information in space provided.

A. Name of Pension Plan CITY OF PITTSBURGH FIREMEN'S RELIEF AND PENSION FUND (4)

B. Date on which pension plan was established 05 / 25 / 1933 (5)
 Mo. Da. Yr.

C. Valuation date for demographic, financial and actuarial data 01 / 01 / 1999 (6)
 (Use 1/1/1999 unless otherwise specified in plan document prior to 12/31/1982.)
 Mo. Da. Yr.

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? NO (8)
- B. 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? NO (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? YES (12)

Section IV - Demographic Data as of JANUARY 1, 1999 (Valuation Date)

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. Summary of Demographic Data

- 1. Number of active members on valuation date 844 (13)
- 2. Total annual payroll of active members on valuation date \$ 45,720,632 (14)
- 3. Number of members terminated with vested or deferred benefit on valuation date 1 (15)
- 4. As of valuation date, number of persons receiving:
 - a. Retirement benefits 430 (16)
 - b. Disability benefits 217 (17)
 - c. Surviving spouse benefits 371 (18)
 - d. Surviving child benefits 0 (19)
 - e. Total (a + b + c + d) 1,018 (20)
- 5. As of valuation date, total annual benefits payable as:
 - a. Retirement benefits \$ 7,453,662 (21)
 - b. Disability benefits \$ 3,224,450 (22)
 - c. Surviving spouse benefits \$ 1,950,244 (23)
 - d. Surviving child benefits \$ 5,507 (24)
 - e. Total (a + b + c + d) \$ 12,633,863 (25)

B. Certification of Demographic Data

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

Ellen M. McLean March 24, 2000
 (Signature) (Date)

ELLEN M. McLEAN FINANCE DIRECTOR 417 255-2582
 (Name) (Title) (Telephone)

Section V - Financial Data as of JANUARY 1, 1999 (Valuation Date)

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 the data requested in Part A, rounded to the nearest dollar, in the space provided. Enter zero, if applicable. Do not leave blanks or refer to exhibits. Complete Schedule B. Then complete the certification in Part B below.

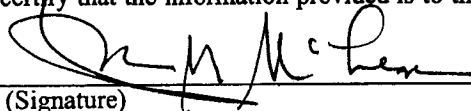
Note: The asset values provided in Part A of this section and in Schedule B must include all the assets of the pension plan regardless of custodial arrangements involving administrative agencies.

A. Summary of Financial Data

1. MARKET VALUE OF ASSETS; <i>excluding the cash surrender values of individual insurance and annuity contracts</i> , on the above valuation date	\$ 142,940,022	(26)
2. CASH SURRENDER VALUE of individual insurance and annuity contracts on the above valuation date or nearest anniversary date	\$ 0	(27)
3. TOTAL FUND ASSETS (1 + 2) on the above valuation date	\$ 142,940,022	(28)
4. INVESTMENT INCOME, <i>excluding individual insurance and annuity contract dividends</i> , for the year ended on the above valuation date	\$ 12,390,225	(29)
5. REALIZED CAPITAL GAINS/LOSSES for the year ended on the above valuation date (+ or -)	\$ 0	(30)
6. DIVIDENDS ON INSURANCE/ANNUITY CONTRACTS for the year ended on the above valuation date	\$ 0	(31)
7. 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.)	\$ 2,968,080	(32)
8. MUNICIPAL CONTRIBUTIONS to plan, <i>excluding Supplemental State Assistance monies allocated under Act 205 Recovery Program</i> , for the year ended on valuation date (8a + 8b)	\$ 6,391,377	(33)
a. State Aid Portion \$ 5,260,857 b. Local Portion \$ 1,130,520		
9. ACTUAL MUNICIPAL DEPOSIT for the year ended on the valuation date (Item 33 + 9a - 9b)	\$ 6,391,377	(34)
a. Contributions Receivable at beginning of year \$ 0 b. Contributions Receivable at end of year \$ 0		
10. TOTAL MONTHLY BENEFIT PAYMENTS for the year ended on the above valuation date	\$ 13,305,183	(35)
11. ANNUAL INSURANCE OR ANNUITY PREMIUM PAYMENTS, <i>excluding single premium annuity purchases</i> , 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	\$ 652,904	(37)
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.)	\$ 6,391,377	(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 and in Schedule B; and I further certify that the information provided is to the best of my knowledge true and accurate.


(Signature)

March 24, 2000
(Date)

EILEEN M. McLEAN
(Name)

FINANCE DIRECTOR
(Title)

(412) 255-7582
(Telephone)

Section VI - Actuarial Data as of JANUARY 1, 1999 (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	\$ 249,312,821	(40)
2. ACTUARIAL PRESENT VALUE OF FUTURE NORMAL COST as of valuation date	\$ 41,038,413	(41)
3. ACTUARIAL ACCRUED LIABILITY as of valuation date	\$ 208,274,408	(42)
4. ACTUARIAL VALUE OF ASSETS, including aggregate insurance/annuity cash surrender value, as of valuation date	\$ 142,940,022	(43)
5. UNFUNDED ACTUARIAL ACCRUED LIABILITY as of valuation date (+ or -)	\$ 65,334,386	(44)
6. NORMAL COST (employer & employee), <i>excluding administrative expenses</i> , payable as of valuation date for the plan year beginning on valuation date:		
a. As a dollar amount	\$ 4,578,764	(45)
b. As a percentage of total annual payroll	10.015 %	(46)
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 ¹	\$ 594,368	(47)
8. ANNUAL COVERED PAYROLL of active members as of valuation date	\$ 45,720,632	(48)
9. AMORTIZATION CONTRIBUTIONS		
a. For amortization of initial unfunded actuarial accrued liability established 1/1/85. ²		
1) Amortization period remaining (years)	39	(49)
2) Amortization contribution calculated as a level dollar amount for the plan year beginning on valuation date	\$ 4,333,255	(50)
3) Amortization contribution calculated as a level percentage of payroll for the plan year beginning on valuation date ³	\$ N/A	(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		
1) Aggregated amortization period (years)	16	(52)
2) Aggregated amortization contribution calculated as a level dollar amount for the plan year beginning on valuation date	\$ -1,104,551	(53)
c. Modified Total Amortization Requirement ⁴	\$ N/A	(54)
d. Total Amortization Requirement (Item 50 + 53 or Item 51 + 53 or Item 54, whichever is applicable)	\$ 3,228,704	(55)
10. ACTUAL OR ESTIMATED MEMBER CONTRIBUTIONS to the pension plan for the year beginning on the valuation date	\$ 2,753,366	(56)

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. Otherwise, do not complete items 11-20.

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	\$ _____	(57)
12. ADJUSTED ACTUARIAL PRESENT VALUE OF FUTURE BENEFITS as of valuation date (1 - 11)	\$ _____	(58)
13. ADJUSTED ACTUARIAL PRESENT VALUE OF FUTURE NORMAL COST as of valuation date	\$ _____	(59)
14. ADJUSTED ACTUARIAL ACCRUED LIABILITY as of valuation date	\$ _____	(60)
15. ACTUARIAL VALUE OF ASSETS, excluding aggregate insurance/annuity cash surrender value, as of valuation date	\$ _____	(61)
16. ADJUSTED UNFUNDED ACTUARIAL ACCRUED LIABILITY as of valuation date (+ or -)	\$ _____	(62)
17. ADJUSTED NORMAL COST, excluding administrative expenses, payable as of valuation date for the plan year beginning on valuation date	\$ _____	(63)
18. ANNUAL INSURANCE/ANNUITY PREMIUM PAYMENTS for the plan year beginning on valuation date	\$ _____	(64)
19. GROSS ADJUSTED NORMAL COST for the plan year beginning on valuation date (17 + 18):		
a. As a dollar amount	\$ _____	(65)
b. As a percentage of payroll	_____ %	(66)
20. ADJUSTED AMORTIZATION CONTRIBUTION calculated as a level dollar amount for the plan year beginning on valuation date	\$ _____	(67)

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 the establishment of the pension plan or with the initiation of a new amortization schedule authorized by Act 82 of 1998.

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

⁴ If the municipality has formally elected to apply the limit on the amortization contribution under section 202(b)(4), enter the modified total amortization requirement calculated as the amount required to amortize the unfunded actuarial accrued liability over ten years. Otherwise, enter N/A.

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 exhibits.

1. MAJOR ECONOMIC ACTUARIAL ASSUMPTIONS

- a. Interest or investment earnings rate 9.00 % (68)
- b. Salary projection 6.00 % (69)

2. ADMINISTRATIVE ARRANGEMENT (Enter corresponding number. ➡) 1 (70)

- | | | | |
|----------------------------|--|----------------------------|--|
| <input type="checkbox"/> 1 | - Self administered fund | <input type="checkbox"/> 4 | - Insured deposit administration contract |
| <input type="checkbox"/> 2 | - Bank or other trust fund | <input type="checkbox"/> 5 | - Immediate participation guarantee contract |
| <input type="checkbox"/> 3 | - Split-funded plan - Insurance plus side fund | <input type="checkbox"/> 6 | - Pennsylvania Municipal Retirement System |
| <input type="checkbox"/> 7 | - Other (Describe) _____ | | |

3. COST FOR ACTUARIAL SERVICES to be billed or charged for completing this reporting form and for preparing the associated actuarial valuation report \$ _____ (71)

C. Certification of Actuarial Data

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

I further certify that I have five years of actuarial experience with public pension plans and that I am (Initial appropriate box.)

a member of the American Academy of Actuaries enrolled in 19 _____

an enrolled actuary pursuant to the Employee Retirement Income Security Act of 1974, No. 99-3925

Kevin P. Counihan

(Signature)

03-23-00

(Date)

Kevin P. Counihan

(Name)

(412) 394-9660

(Telephone)

(72)

Mockenhaupt Associates

(Name of Firm)

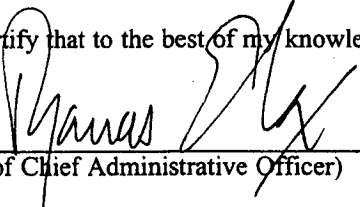
(73)

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

INSTRUCTIONS: Ensure that Schedule A, Schedule B and Schedule C are completed and attached to the reporting form. Review the information entered 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.**

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

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



(Signature of Chief Administrative Officer)

3-24-00

(Date)

Thomas Cox, Executive Secretary

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

(412) 255-2694

(Telephone)

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.

PART I - DEMOGRAPHIC DATA FOR RETIRED MEMBERS		
AGE	NUMBER	ANNUAL PENSION PAYABLE
Under 30	1	5,507
30-34	0	0
35-39	2	23,062
40-44	6	87,351
45-49	30	505,955
50-54	43	748,291
55-59	60	1,047,657
60-64	93	1,580,423
65-69	191	2,945,558
70-74	248	3,104,024
75-79	156	1,408,240
80-84	102	690,431
Over 84	86	487,363
TOTALS	1,018	12,633,864

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	1	16,855.44
55-59		
60-64		
65-69		
Over 69		
TOTALS		

SCHEDULE A - Demographic Data as of JANUARY 1, 1999 CITY OF PITTSBURGH ALLEGHENY
 Page 2 of 2 (Valuation Date) (Municipality) (County)

Part III - Distribution of Active Members by Age and Service

AGE		YEARS OF SERVICE										
		1	2	3	4-5	6-10	11-15	16-20	21-25	26-30	30+	
Under 20	No. of Members											
	Payroll (\$000)											
20-24	No. of Members											
	Payroll (\$000)											
25-29	No. of Members	18		8	9							
	Payroll (\$000)	629		383	438							
30-34	No. of Members	23		8	21	5	4					
	Payroll (\$000)	783		379	1033	231	188					
35-39	No. of Members	9		5	21	7	30	13				
	Payroll (\$000)	312		241	1017	348	1558	730				
40-44	No. of Members	8			16	16	54	69	6			
	Payroll (\$000)	241			809	806	2784	3742	294			
45-49	No. of Members	2			3	11	36	68	89	8		
	Payroll (\$000)	31			144	552	1854	3477	5044	556		
50-54	No. of Members	1			6	5	29	27	72	26	2	
	Payroll (\$000)	39			289	250	1494	1342	3978	1578	114	
55-59	No. of Members				1		4	7	22	18	17	
	Payroll (\$000)				51		164	329	1272	1083	1046	
60-64	No. of Members						1		9	3	23	
	Payroll (\$000)						46		502	140	1407	
65 & Over	No. of Members										4	
	Payroll (\$000)										240	
TOTAL MEMBERS		61		21	77	44	158	184	198	55	46	
TOTAL ANNUAL PAYROLL		2035		1002	3780	2188	8086	9621	11090	3357	2807	

SCHEDULE B - Financial Data as of JANUARY 1, **1999** CITY OF PITTSBURGH ALLEGHENY
 Page 1 of 3 (Valuation Date) (Municipality) (County)

INSTRUCTIONS: Print or type the requested information in the space provided. Round to the nearest dollar. Enter zero, if applicable. Refer to attachments or exhibits only to explain or support data entered on the schedule.

Section I - Statement of Net Assets Available for Benefits as of the Valuation Date

	\$		Item No.
A. Assets:			
1. Cash	0		(1)
2. Accrued Interest and Dividends Receivable	0		(2)
3. Other Receivables (Specify)			
_____	0		(3)
_____	0		(4)
_____	0		(5)
4. Investments at Market Value (Specify)			
<u>PARTICIPATION IN AGGREGATE TRUST</u>	142,940,022		(6)
_____	0		(7)
_____	0		(8)
_____	0		(9)
_____	0		(10)
5. Insurance/Annuity Cash Surrender Value (Individual Policies)	0		(11)
6. Other Assets (Specify)			
_____	0		(12)
_____	0		(13)
_____	0		(14)
Total Assets	142,940,022		(15)
B. Current Liabilities:			
1. Accounts Payable and Accrued Administrative Expenses	0		(16)
2. Other Current Liabilities (Specify)			
_____	0		(17)
_____	0		(18)
_____	0		(19)
Total Current Liabilities	0		(20)
C. Net Assets Available for Benefits (Market Value) as of valuation date	142,940,022		(21)

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

	Item No.	
A. Net Assets at Beginning of Year (Market Value)	(1)	\$ <u>57,903,509</u>
B. Revenues:		
Member Contributions	(2)	\$ <u>2,968,080</u>
Total Municipal Contributions	(3)	\$ <u>6,391,377</u>
a. State Aid Portion \$ <u>5,260,857</u> b. Local Portion \$ <u>1,130,520</u>		
Supplemental State Assistance Grant	(4)	\$ <u>0</u>
Interest Earnings (ALLOCATED INVESTMENT EARNINGS AND MISC. INCOME)	(5)	\$ <u>12,391,204</u>
Dividend Income	(6)	\$ <u>0</u>
Realized Capital Gains	(7)	\$ <u>0</u>
Other Revenues or Credits (Specify)		
<u>PENSION BOND PROCEEDS</u>	(8)	\$ <u>77,069,961</u>
<u>PASS THROUGH CONTRIBUTIONS</u>	(9)	\$ <u>340,049</u>
Total Revenues	(10)	\$ <u>99,160,671</u>
C. Expenses:		
Total Benefit Payments (Lump Sum)	(11)	\$ <u>0</u>
Total Benefit Payments (Monthly)	(12)	\$ <u>13,305,183</u>
Annuity Purchases (Lump Sum)	(13)	\$ <u>0</u>
Insurance Premiums	(14)	\$ <u>0</u>
Refund of Member Contributions	(15)	\$ <u>166,071</u>
Administrative Expenses	(16)	\$ <u>652,904</u>
Realized Capital Losses	(17)	\$ <u>0</u>
Other Expenses or Debits (Specify)		
.....	(18)	\$ <u>0</u>
.....	(19)	\$ <u>0</u>
Total Expenses	(20)	\$ <u>14,124,158</u>
D. Net Change in Market Value of Assets (Unrealized Capital Gains or Losses)	(21)	\$ <u>0</u>
E. Net Assets at End of Year (Market Value)	(22)	\$ <u>142,940,022</u>

Section III - Presentation of the Determination of the Minimum Municipal Obligation (MMO) for Year Ended on Valuation Date

INSTRUCTIONS: Enter data reflecting the minimum municipal obligation developed in the fall of 1997 for the plan year beginning in 1998. [Section 302(C) of Act 205 of 1984.]

Table with columns for Item No., Description, Amount, and Percentage. Includes sections A (Identification of Actuarial Valuation Report), B (Development of Minimum Municipal Obligation), and C (Development of Pre-authorized Adjustment to Minimum Municipal Obligation).

1 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.

SCHEDULE C - Actuarial Data as of JANUARY 1, **1999** CITY OF PITTSBURGH ALLEGHENY
 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. Actuarial Present Values for Active Members	
(Enter values for ancillary benefits only if valued using EAN.)	
1. Retirement Benefits	\$ <u>121,315,457</u> (1)
2. Disability Benefits	\$ <u>23,714,490</u> (2)
3. Survivor Benefits	\$ <u>0</u> (3)
4. Liability for the Refund of Member Contributions	\$ <u>922,824</u> (4)
5. Others (Specify) <u>VESTING; PRERETIREMENT & POSTRETIREMENT DEATH BENEFIT</u>	\$ <u>4,719,441</u> (5)
Subtotal for Active Members	\$ <u>150,672,212</u> (6)
B. Actuarial Present Values for Non-Active Members and Benefit Recipients	
1. Deferred Vested Benefits	\$ <u>145,231</u> (7)
2. Retirement Benefits	\$ <u>59,160,175</u> (8)
3. Disability Benefits	\$ <u>24,899,803</u> (9)
4. Survivor Benefits	\$ <u>14,435,400</u> (10)
5. Others (Specify) _____	\$ <u>0</u> (11)
Subtotal for Non-Active Members and Benefit Recipients	\$ <u>98,640,609</u> (12)
C. Total Actuarial Present Value of Future Benefits (Without adjustments)	\$ <u>249,312,821</u> (13)
D. Total Adjustments for Ancillary Benefits Valued through Approximation Techniques ¹	\$ <u>0</u> (14)
E. Total Actuarial Present Value of Future Benefits (Item 13 + Item 14)	\$ <u>249,312,821</u> (15)

¹ A signed statement and accompanying documentation, as specified in Section 203.5 of the Act 205 regulations, must be attached if adjustments are made.