

**CITY OF CHESTER
OFFICERS & EMPLOYEES
RETIREMENT SYSTEM**

**ACTUARIAL INFORMATION
AS OF
JANUARY 1, 2021**



1136 Hamilton Street, Suite 103
Allentown, PA 18101

Dated: February 9, 2022

February 9, 2022

City of Chester
c/o Mr. James Kennedy, President
Thomas J. Anderson & Associates, Inc.
115 Westtown Road
Suite 101
West Chester, PA 19382

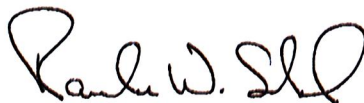
Re: City of Chester (Officers & Employees Retirement System)

In accordance with Act 205, we have prepared the January 1, 2021 Actuarial Valuation of the Plan. This valuation determines the amount of money (Minimum Municipal Obligation - MMO) that the municipality will have to contribute to the Plan for at least the following two years.

Act 205 requires that the assets used for the determination of State Aid and for funding purposes include the value of contributions that have not yet been made for prior plan years. Because the City has multiple years of contributions receivable, we have added an exhibit on page 1 that compares the funding of the plan with and without receivables. In the event that the City cannot pay past years receivables, this provides a more realistic funding status.

If you have any questions regarding the nature of this letter, please do not hesitate to contact our office.

Sincerely,



Randee W. Sekol, EA, MAAA, MSEA, FCA
Consulting Actuary

RWS/kdc

CITY OF CHESTER OFFICERS & EMPLOYEES RETIREMENT SYSTEM

IMPACT OF CONTRIBUTIONS RECEIVABLE

	Act 205 Funding Including <u>Receivable</u>	Actual Funding Does Not Include <u>Receivable</u>
Pension Plan Assets		
Market Value of Invested Assets	\$ 2,052,300	\$ 2,052,300
Contributions Receivable	<u>2,064,368</u>	<u>0</u>
Assets for Valuation Purposes	\$ 4,116,668	\$ 2,052,300

Unfunded Actuarial Accrued Liability

Actuarial Accrued Liability	\$ 8,715,193	\$ 8,715,193
Assets for Valuation Purposes	<u>4,116,668</u>	<u>2,052,300</u>
Unfunded Actuarial Accrued Liability	\$ 4,598,525	\$ 6,662,893
Funded Percentage	47.2%	23.5%

Analysis

Pennsylvania Act 205 requires the City to include the value of any contributions that were due for a prior plan year with interest for funding purposes. The rationale for this inclusion is so that the City is not eligible for State Aid in the current year that it already received in past years.

As of January 1, 2021 the City has not yet paid contributions for the past 2 plan years which, when accumulated with interest, totals \$2,064,368. The funded percentage decreases from 47.2% to 23.5% if receivables are not included.

202(B)(1)
202(B)(5)

CITY OF CHESTER OFFICERS & EMPLOYEES RETIREMENT SYSTEM

**NORMAL COST AND ADMINISTRATIVE EXPENSES
AS OF 1/1/2021**

A. NORMAL COST	
1. NORMAL COST OF PLAN BENEFITS	187,477
2. VALUATION COVERED PAYROLL	4,263,318
3. NORMAL COST AS A PERCENTAGE OF PAYROLL	4.40%
B. ADMINISTRATIVE EXPENSES	
1. TOTAL ADMINISTRATIVE COSTS FOR THE PRIOR YEAR	23,200
2. ESTIMATED ADMINISTRATIVE EXPENSES TO BE PAID FROM THE PLAN ASSETS FOR THE CURRENT PLAN YEAR	20,200
C. ESTIMATED ANNUAL BENEFIT PAYMENTS	
1. ACTUAL FOR THE PRIOR PLAN YEAR	627,462
2. ESTIMATED FOR THE CURRENT PLAN YEAR	642,533

CITY OF CHESTER OFFICERS & EMPLOYEES RETIREMENT SYSTEM

ACTUARIAL LIABILITY AS OF 1/1/2021

A.	ACTUARIAL PRESENT VALUE OF ALL PROJECTED BENEFITS	
1.	ACTIVE MEMBERS*	
	RETIREMENT BENEFITS	4,262,521
	DISABILITY BENEFITS	373,160
	SURVIVOR BENEFITS	118,022
	REFUND OF MEMBER CONTRIBUTIONS WITH INTEREST	88,879
	VESTED BENEFITS	198,561
	OTHER:	0
	SUB-TOTAL	5,041,143
2.	INACTIVE MEMBERS	
	FORMER MEMBERS WITH VESTED DEFERRED BENEFITS	239,257
	SERVICE RETIREMENT BENEFITS	5,146,313
	DISABILITY RETIREMENT BENEFITS	12,389
	SURVIVING SPOUSE BENEFITS	531,577
	SURVIVING CHILDREN BENEFITS	0
	TOTAL MONIES ACCUMULATED IN DROP ACCOUNTS	0
	OTHER: REFUND OF EMPLOYEE CONTRIBUTIONS DUE	23,776
	SUB-TOTAL	5,953,312
3.	TOTAL	10,994,455
B.	ACTUARIAL PRESENT VALUE OF ALL FUTURE NORMAL COSTS	2,279,262
C.	ACTUARIAL LIABILITY =(A - B)	8,715,193

* THE AMOUNT OF ACCUMULATED MEMBER CONTRIBUTIONS WITHOUT ACCRUED INTEREST IS \$798,087 FOR ALL ACTIVE MEMBERS.

CITY OF CHESTER OFFICERS & EMPLOYEES RETIREMENT SYSTEM

**UNFUNDED ACTUARIAL LIABILITY AT 1/1/2021
AND ACTUARIAL GAIN(LOSS) FOR YEAR ENDED 12/31/2020**

A. DETERMINATION OF ACTUAL UNFUNDED ACTUARIAL LIABILITY			
1.	ACTUARIAL LIABILITY	8,715,193	
2.	ACTUARIAL VALUE OF ASSETS	4,116,668	
3.	ACTUAL UNFUNDED ACTUARIAL LIABILITY = (1 - 2)	4,598,525	
 B. DETERMINATION OF EXPECTED UNFUNDED ACTUARIAL LIABILITY			
		<u>AMOUNT</u>	<u>INTEREST</u>
1.	UNFUNDED LIABILITY FROM PREVIOUS VALUATION	5,354,170	769,216
2.	NORMAL COST SINCE THE LAST VALUATION	385,845	28,938
3.	TOTAL CONTRIBUTIONS SINCE THE LAST VALUATION	2,173,702	81,514
4.	SUB-TOTAL = (1 + 2 - 3)	4,282,953	1,181,514
5.	INCREASE (DECREASE) FOR ASSUMPTION CHANGE		0
6.	INCREASE (DECREASE) FOR PLAN AMENDMENT		0
7.	CONTRIBUTION ABOVE OR BELOW TOTAL FINANCIAL REQUIREMENT		(134,822)
8.	TOTAL EXPECTED UNFUNDED ACTUARIAL LIABILITY (4 + 5 +6 + 7)		5,329,645
 C. ACTUARIAL GAIN (LOSS) = (B -A)			
			731,120

CITY OF CHESTER OFFICERS & EMPLOYEES RETIREMENT SYSTEM

ANALYSIS OF INCREASE (OR DECREASE) IN
UNFUNDED ACTUARIAL LIABILITY

		UNFUNDED ACTUARIAL LIABILITY
		5,354,170
A.	ACTUAL UNFUNDED FROM PRIOR VALUATION	
B.	COMPONENTS OF INCREASE (OR DECREASE) DURING YEAR	
1.	INCREASE FOR INTEREST	769,216
2.	APPLICATION OF ACTUAL CONTRIBUTIONS	
	A. NORMAL COST PLUS INTEREST	414,783
	B. CONTRIBUTIONS PAID PLUS INTEREST *	2,255,216
	C. SUB-TOTAL (2.B - 2.A)	1,840,433
3.	INCREASE (DECREASE) FOR ASSUMPTION CHANGE	1,181,514
4.	INCREASE (DECREASE) FOR PLAN AMENDMENT	0
5.	NET ACTUARIAL GAIN (LOSS) FOR YEAR	731,120
6.	CONTRIBUTION ABOVE OR BELOW TOTAL FINANCIAL REQUIREMENT	(134,822)
7.	CHANGE DURING YEAR (1 - 2 + 3 + 4 - 5 + 6)	(755,645)
C.	ACTUAL UNFUNDED FOR CURRENT PLAN YEAR (A + B.7)	4,598,525

* TOTAL CONTRIBUTIONS SINCE THE LAST VALUATION WERE \$2,173,702.
PLUS ASSUMED INTEREST EARNED THEREOF OF \$81,514.

202(B)(3)
202(B)(4)

CITY OF CHESTER OFFICERS & EMPLOYEES RETIREMENT SYSTEM

**SCHEDULE OF AMORTIZATION BASES FOR MINIMUM CONTRIBUTIONS
AS OF 1/1/2021**

<u>ESTABLISHED</u>	<u>SOURCE OF BASE</u>	<u>ORIGINAL AMOUNT</u>	<u>CURRENT UNAMORTIZED BALANCE</u>	<u>CURRENT AMORTIZ. YEARS</u>	<u>AMORTIZ. CONTRIB.</u>	<u>DATE FULLY AMORTIZED</u>
1/1/1985	INITIAL LIABILITY	5,632,292	3,905,428	4 ¹	1,011,416	12/31/2024
1/1/2002	INVESTMENT LOSS	569,135	358,487	12	41,257	12/31/2032
1/1/2003	INVESTMENT LOSS	512,320	335,560	12	38,619	12/31/2032
1/1/2007	ACTUARIAL GAIN	(276,644)	(29,147)	1	(29,147)	12/31/2021
1/1/2009	ASSUMPTION CHANGE	(391,649)	(225,032)	8	(34,703)	12/31/2028
1/1/2009	ACTUARIAL LOSS	594,173	341,394	8	52,648	12/31/2028
1/1/2011	ACTUARIAL GAIN	(146,765)	(93,999)	9	(13,260)	12/31/2029
1/1/2013	ASSUMPTION CHANGE	592,605	355,581	7	60,877	12/31/2027
1/1/2013	ACTUARIAL GAIN	(80,176)	(60,834)	12	(7,001)	12/31/2032
1/1/2015	ASSUMPTION CHANGE	258,129	186,533	9	26,314	12/31/2029
1/1/2015	ACTUARIAL GAIN	(9,125)	(7,596)	14	(791)	12/31/2034
1/1/2017	ASSUMPTION CHANGE	30,724	25,462	11	3,109	12/31/2031
1/1/2017	ACTUARIAL GAIN	(980,623)	(879,337)	16	(84,530)	12/31/2036
1/1/2019	ACTUARIAL GAIN	(67,608)	(64,369)	18	(5,793)	12/31/2038
1/1/2021	ASSUMPTION CHANGE	1,181,514	1,181,514	15	117,988	12/31/2035
1/1/2021	ACTUARIAL GAIN	(731,120)	(731,120)	20	(62,304)	12/31/2040
TOTAL			4,598,525		1,114,699	

¹ LEVEL PERCENTAGE OF FUTURE PAYROLL AMORTIZATION.

**CITY OF CHESTER
OFFICERS & EMPLOYEES RETIREMENT SYSTEM**

ACTUARIAL METHODS AND ASSUMPTIONS

A. ACTUARIAL METHODS

1. Liabilities - All plan benefits are valued using the entry age normal cost valuation method.
2. Amortization – Level percentage of future payroll amortization of the initial unfunded actuarial accrued liability is based upon a 4.0% annual increase in covered payroll assumption.
3. Assets - Plan assets are valued using market value of assets.

B. ACTUARIAL ASSUMPTIONS

1. Economic Assumptions

A. Investment Return – 6.5% per annum, net of investment expenses.

B. Salary Increases – 5.0% compounded annually.

2. Demographic Assumptions

A. Mortality –

Pre-Retirement Mortality: PubG-2010 Employee Mortality projected 5 years past the valuation date using Scale MP-2020.

Post-Retirement Mortality: PubG-2010 Healthy Retiree Mortality projected 5 years past the valuation date using Scale MP-2020.

Beneficiaries Mortality: PubG-2010 Contingent Survivor Mortality projected 5 years past the valuation date using Scale MP-2020.

Disabled Mortality: PubG-2010 Disabled Mortality projected 5 years past the valuation date using Scale MP-2020.

B. Termination – Table D-5: Rates of withdrawal at selected ages:

<u>Age</u>	<u>Rate</u>	<u>Age</u>	<u>Rate</u>	<u>Age</u>	<u>Rate</u>
20	8.0%	35	6.5%	50	2.5%
25	8.0%	40	5.0%	55	1.0%
30	7.0%	45	4.0%	60	0.0%

C. Disability – 1985 Pen Dis Table Class 1.

**CITY OF CHESTER
OFFICERS & EMPLOYEES RETIREMENT SYSTEM**

ACTUARIAL METHODS AND ASSUMPTIONS (Continued)

- D. Retirement Age -- Latest of age 65, age at the completion of 20 years of service if hired before January 1, 1988, age at the completion of 25 years of service if hired after December 31, 1987, or age on the valuation date, if greater.
- E. Marital Status – 100% of active members are assumed to be married. Female spouse is assumed to be the same age as male spouse.
- F. Form of Annuity – Joint & 50% Survivor.