

**CITY OF CHESTER
POLICE PENSION FUND**

ACTUARIAL INFORMATION
AS OF
JANUARY 1, 2021



1136 Hamilton Street, Suite 103
Allentown, PA 18101

Dated: January 28, 2022

January 28, 2022

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

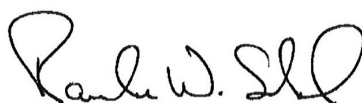
Re: City of Chester (Police Pension Fund)

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 POLICE PENSION FUND
IMPACT OF CONTRIBUTIONS RECEIVABLE**

Act 205 Funding Including <u>Receivable</u>	Actual Funding Does Not Include <u>Receivable</u>
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Pension Plan Assets

Market Value of Invested Assets	\$ 1,520,484	\$ 1,520,484
Contributions Receivable	<u>32,409,383</u>	<u>0</u>
Assets for Valuation Purposes	\$ 33,929,867	\$ 1,520,484

Unfunded Actuarial Accrued Liability

Actuarial Accrued Liability	\$ 98,405,971	\$ 98,405,971
Assets for Valuation Purposes	<u>33,929,867</u>	<u>1,520,484</u>
Unfunded Actuarial Accrued Liability	\$ 64,476,104	\$ 96,885,487

Funded Percentage	34.5%	1.5%
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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 6 plan years which, when accumulated with interest, totals \$32,409,383. The funded percentage decreases from 34.5% to 1.5% if receivables are not included.

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

CITY OF CHESTER POLICE PENSION FUND

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

A. NORMAL COST	
1. NORMAL COST OF PLAN BENEFITS	1,565,682
2. VALUATION COVERED PAYROLL	5,787,689
3. NORMAL COST AS A PERCENTAGE OF PAYROLL	27.05%
B. ADMINISTRATIVE EXPENSES	
1. TOTAL ADMINISTRATIVE COSTS FOR THE PRIOR YEAR	61,000
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	6,386,216
2. ESTIMATED FOR THE CURRENT PLAN YEAR	6,959,825

CITY OF CHESTER POLICE PENSION FUND

ACTUARIAL LIABILITY AS OF 1/1/2021

A.	ACTUARIAL PRESENT VALUE OF ALL PROJECTED BENEFITS	
1.	ACTIVE MEMBERS*	
	RETIREMENT BENEFITS	34,338,597
	DISABILITY BENEFITS	1,171,876
	SURVIVOR BENEFITS	77,615
	REFUND OF MEMBER CONTRIBUTIONS WITH INTEREST	184,787
	VESTED BENEFITS	210,324
	OTHER:	0
	SUB-TOTAL	35,983,199
2.	INACTIVE MEMBERS	
	FORMER MEMBERS WITH VESTED DEFERRED BENEFITS	0
	SERVICE RETIREMENT BENEFITS	48,502,656
	DISABILITY RETIREMENT BENEFITS	26,367,753
	SURVIVING SPOUSE BENEFITS	3,626,098
	SURVIVING CHILDREN BENEFITS	767,097
	TOTAL MONIES ACCUMULATED IN DROP ACCOUNTS	0
	OTHER:	0
	SUB-TOTAL	79,263,604
3.	TOTAL	115,246,803
B.	ACTUARIAL PRESENT VALUE OF ALL FUTURE NORMAL COSTS	16,840,832
C.	ACTUARIAL LIABILITY =(A - B)	98,405,971

* THE AMOUNT OF ACCUMULATED MEMBER CONTRIBUTIONS WITHOUT ACCRUED INTEREST IS \$2,981,132 FOR ALL ACTIVE MEMBERS.

CITY OF CHESTER POLICE PENSION FUND

**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	98,405,971
2. ACTUARIAL VALUE OF ASSETS	33,929,867
3. ACTUAL UNFUNDED ACTUARIAL LIABILITY = (1 - 2)	64,476,104

B. DETERMINATION OF EXPECTED UNFUNDED ACTUARIAL LIABILITY		
	<u>AMOUNT</u>	<u>INTEREST</u>
1. UNFUNDED LIABILITY FROM PREVIOUS VALUATION	55,203,054	8,069,115
2. NORMAL COST SINCE THE LAST VALUATION	2,933,708	220,028
3. TOTAL CONTRIBUTIONS SINCE THE LAST VALUATION	16,952,491	635,718
4. SUB-TOTAL = (1 + 2 - 3)		48,837,696
5. INCREASE (DECREASE) FOR ASSUMPTION CHANGE		16,958,178
6. INCREASE (DECREASE) FOR PLAN AMENDMENT		(605,829)
7. CONTRIBUTION ABOVE OR BELOW TOTAL FINANCIAL REQUIREMENT		(1,409,207)
8. TOTAL EXPECTED UNFUNDED ACTUARIAL LIABILITY (4 + 5 + 6 + 7)		63,780,838

C. ACTUARIAL GAIN (LOSS) = (B - A)	(695,266)
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CITY OF CHESTER POLICE PENSION FUND

**ANALYSIS OF INCREASE (OR DECREASE) IN
UNFUNDED ACTUARIAL LIABILITY**

UNFUNDED
ACTUARIAL
LIABILITY
55,203,054

A.	ACTUAL UNFUNDED FROM PRIOR VALUATION	
B.	COMPONENTS OF INCREASE (OR DECREASE) DURING YEAR	
	1. INCREASE FOR INTEREST	8,069,115
	2. APPLICATION OF ACTUAL CONTRIBUTIONS	
	A. NORMAL COST PLUS INTEREST	3,153,736
	B. CONTRIBUTIONS PAID PLUS INTEREST *	17,588,209 *
	C. SUB-TOTAL (2.B - 2.A)	14,434,473
	3. INCREASE (DECREASE) FOR ASSUMPTION CHANGE	16,958,178
	4. INCREASE (DECREASE) FOR PLAN AMENDMENT	(605,829)
	5. NET ACTUARIAL GAIN (LOSS) FOR YEAR	(695,266)
	6. CONTRIBUTION ABOVE OR BELOW TOTAL FINANCIAL REQUIREMENT	(1,409,207)
	7. CHANGE DURING YEAR (1 - 2 + 3 + 4 - 5 + 6)	9,273,050
C.	ACTUAL UNFUNDED FOR CURRENT PLAN YEAR (A +B.7)	64,476,104

* TOTAL CONTRIBUTIONS SINCE THE LAST VALUATION WERE \$16,952,491.
PLUS ASSUMED INTEREST EARNED THEREOF OF \$635,718.

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

CITY OF CHESTER POLICE PENSION FUND

**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	9,159,269	6,351,288	4 ¹	1,644,838	12/31/2024
1/1/2002	INVESTMENT LOSS	3,134,521	1,974,397	12	227,228	12/31/2032
1/1/2003	INVESTMENT LOSS	3,283,508	2,150,554	12	247,502	12/31/2032
1/1/2007	PLAN AMENDMENT	2,016,236	210,315	1	210,315	12/31/2021
1/1/2007	ACTUARIAL LOSS	799,205	83,364	1	83,364	12/31/2021
1/1/2009	ASSUMPTION CHANGE	(5,645,873)	(3,243,864)	8	(500,247)	12/31/2028
1/1/2009	ACTUARIAL LOSS	10,657,609	6,123,398	8	944,310	12/31/2028
1/1/2011	ACTUARIAL LOSS	8,371,019	1,064,469	1	1,064,469	12/31/2021
1/1/2013	ASSUMPTION CHANGE	2,334,656	1,400,882	7	239,835	12/31/2027
1/1/2013	ACTUARIAL LOSS	6,573,835	4,988,030	12	574,060	12/31/2032
1/1/2015	PLAN AMENDMENT	1,150,972	561,616	4	153,932	12/31/2024
1/1/2015	ASSUMPTION CHANGE	1,623,158	1,172,970	9	165,469	12/31/2029
1/1/2015	ACTUARIAL LOSS	14,777,126	12,305,207	14	1,281,827	12/31/2034
1/1/2017	PLAN AMENDMENT	31,342	21,430	6	4,157	12/31/2026
1/1/2017	ASSUMPTION CHANGE	224,829	186,327	11	22,754	12/31/2031
1/1/2017	ACTUARIAL LOSS	10,225,873	9,169,647	16	881,471	12/31/2036
1/1/2019	ACTUARIAL LOSS	3,054,835	2,908,459	18	261,774	12/31/2038
1/1/2021	PLAN AMENDMENT	(605,829)	(605,829)	10	(79,130)	12/31/2030
1/1/2021	ASSUMPTION CHANGE	16,958,178	16,958,178	15	1,693,474	12/31/2035
1/1/2021	ACTUARIAL LOSS	695,266	<u>695,266</u>	20	<u>59,249</u>	12/31/2040
TOTAL			64,476,104		9,180,651	

¹ LEVEL PERCENTAGE OF FUTURE PAYROLL AMORTIZATION.

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ACTUARIAL METHODS AND ASSUMPTIONS

A. ACTUARIAL METHODS

1. Liabilities - All plan benefits are valued using the entry age normal cost valuation method.
2. Assets - Plan assets are valued using market value of assets.
3. 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.

B. ACTUARIAL ASSUMPTIONS

1. Economic Assumptions
 - A. Investment Return – 6.5% per annum, net of investment expenses.
 - B. Salary Increases – 5.0% compounded annually.
 - C. Average Compensation at retirement is increased by 25.0% to reflect anticipated overtime.

2. Demographic Assumptions

A. Mortality –

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

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

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

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

**CITY OF CHESTER
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ACTUARIAL METHODS AND ASSUMPTIONS (Continued)

B. Termination – Table D-1: 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	5.50%	35	2.50%	50	0.00%
25	5.00%	40	1.00%	55	0.00%
30	4.00%	45	0.50%	60	0.00%

C. Disability – 1985 Pen Dis Table Class 1.

D. Retirement Age – It is assumed that members hired prior to 2/1/2017 will enter the Deferred Retirement Option Plan (DROP) upon the later of attainment of age 52 and completion of 20 years of service. It is assumed that members hired after 2/1/2017 will enter the DROP upon the later of attainment of age 50 and completion of 25 years of service.

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.