

March 27, 2023

Hon. Aftab Pureval Mayor  
City of Cincinnati  
801 Plum St., Suite 150  
Cincinnati, OH 45202

Members of City of Cincinnati City Council c/o Clerk of Council  
City of Cincinnati  
801 Plum St., Suite 308  
Cincinnati, OH 45202

Re: City Employer Contribution Rate (Update)

Dear Mayor Pureval and Members of the City Council,

This letter is a follow up to the letter of January 17, 2023, entitled City Employer Contribution Rate. Since then, the Cincinnati Retirement System (CRS) Board of Trustees has received the Experience Review from the actuary, Cheiron.

### **Experience Study Introduction**

Experience Reviews are generally performed every five years for pension systems and the purpose is to compare actual system experience to the actuarial assumptions used to value the system. For CRS, the actuary has proposed some changes to the actuarial demographic assumptions to more accurately reflect the CRS experience. Demographic assumptions include retirement rates, termination rates, disability rates, mortality rates salary rates, and family composition.

### **Experience Study Summary of Results – Estimated Actuarial Liability and Estimated Insolvency**

The demographic proposed changes result in the actuarial liability increases from \$2.560 billion to \$2.595 billion, a 1.4% increase. The CRS Board has approved the proposed demographic changes to the actuarial assumptions.

The Experience Review also noted that the CRS assumed rate of return of 7.5% is above the median rate of return of 7.0% for public pension systems. The actuary provided analyses of the impact of the demographic assumption changes; the estimated -10.0% investment return for 2022; and the forward assumed rates of return of 7.5%, 7.25%, and 7%. Insolvency is estimated in 2051, 2048, and 2046, respectively.

The Collaborative Settlement Agreement establishes a CRS 7.5% assumed rate of return on investments. The Experience Review notes that the 7.5% rate of return is above the median assumed rate of return of 7.0% for public pension systems. The CRS Board will continue to evaluate the rate of return assumption and provide analysis.

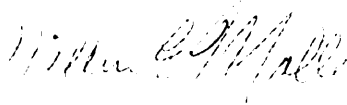
**CRS Board Recommendations**

As noted in the January 17, 2023 letter, CRS is governed by the Collaborative Settlement Agreement (CSA) which calls for 100% funding of the pension trust by December 31, 2045. CRS is a defined benefit plan as noted in the Cincinnati Municipal Code. Defined benefit plans offer guaranteed retirement benefits from the employer.

Based on the Experience Review the CRS Board has updated its recommendation for the City's employer contribution to increase by 1.50% each year until 2042 in order to achieve full funding by the end of 2045 (See attached 3/16/23 Cheiron Letter, Incremental Increases to City Contribution Rate to Reach Full Funding by 2045, Scenario A). The Board also continues to recommend an annually updated multi-year incremental funding methodology and that the City budget the employer contribution annually according to the Scenario A schedule.

We provide this information to be considered in the current budget development cycle and to stabilize CRS in the future.

Sincerely,



William E. Moller  
Chair, Cincinnati Retirement System Board

- c: CRS Board Members
- Sheryl M.M. Long City Manager
- William "Billy" Weber, Assistant City Manager
- Hon. Michael R. Barrett, Judge, U.S. District Ct., Southern District of Ohio
- Karen Alder, Interim CRS Executive Director

Attachment (Cheiron Letter)

*Via Electronic Mail*

March 16, 2023

Ms. Karen Alder  
Cincinnati Retirement System  
801 Plum Street, Suite 328  
Cincinnati, Ohio 45202

**Re: Incremental Increases to City Contribution Rate to Reach Full Funding by 2045**

Dear Karen:

As requested, we have calculated the incremental increases to the City contribution rate on full-time payroll (currently 16.25%) necessary for the System to be projected to reach full funding by December 31, 2045. Please refer to our March 15, 2023 letter to see the level contribution rate necessary. We have assumed that the first increase would be effective January 1, 2024. These projections are based on the model that accompanied the December 31, 2021 actuarial valuation but has been updated to reflect the proposed demographic assumptions from our experience study presented at the March 2, 2023 Board meeting.

The attachment shows the projected funded ratios through 2045 under three discount rate/investment return scenarios. The funded ratios reflect the actuarial liabilities divided by the actuarial value of assets projected as of each of the December 31 measurement dates shown below. All the scenarios assume that City will continue to contribute \$2.7 million annually through 2034 for the Early Retirement Incentive Program. The three requested scenarios are:


- Scenario A: 7.50% discount rate/investment return for all years after 2022 / Incremental 1.50% increases per year to City Contribution Rate until 44.75% of full-time payroll
- Scenario B: 7.25% discount rate/investment return for all years after 2022 / Incremental 1.75% increases per year to City Contribution Rate until 46.00% of full-time payroll
- Scenario C: 7.00% discount rate/investment return for all years after 2022 / Incremental 2.00% increases per year to City Contribution Rate until 48.25% of full-time payroll

The projected funded ratios in the attachment assume that all the assumptions are realized. As advised by the System, we have reflected an assumed investment return of -10% for 2022 and the assumed discount rates and investment returns above for all future years thereafter. Future projections may differ significantly from those presented in this letter due to such factors as the following: plan experience differing from that anticipated by the assumptions, changes in assumptions, and changes in plan provisions or applicable law.


In preparing these projections, we relied on the same census data, assumptions (unless stated otherwise) and methods used in performing the December 31, 2021 valuation. All the caveats in that report still apply.

If you have any questions, please let us know.

Sincerely,  
Cheiron



Kevin J. Woodrich, FSA, EA, MAAA  
Principal Consulting Actuary



Janet Cranna, FSA, EA, MAAA FCA  
Principal Consulting Actuary

ATTACHMENT

Year	Scenario A		Scenario B		Scenario C	
	City Contribution Rate (% of Full-Time Payroll)	Funded Ratio as of December 31,	City Contribution Rate (% of Full-Time Payroll)	Funded Ratio as of December 31,	City Contribution Rate (% of Full-Time Payroll)	Funded Ratio as of December 31,
2022	16.25%	68.6%	16.25%	66.8%	16.25%	65.1%
2023	16.25%	67.3%	16.25%	65.5%	16.25%	63.7%
2024	17.75%	65.0%	18.00%	63.1%	18.25%	61.3%
2025	19.25%	62.6%	19.75%	60.8%	20.25%	58.9%
2026	20.75%	59.1%	21.50%	57.2%	22.25%	55.4%
2027	22.25%	58.2%	23.25%	56.3%	24.25%	54.5%
2028	23.75%	57.5%	25.00%	55.6%	26.25%	53.7%
2029	25.25%	57.0%	26.75%	55.0%	28.25%	53.2%
2030	26.75%	56.6%	28.50%	54.7%	30.25%	52.8%
2031	28.25%	56.4%	30.25%	54.6%	32.25%	52.7%
2032	29.75%	56.5%	32.00%	54.7%	34.25%	53.0%
2033	31.25%	56.9%	33.75%	55.2%	36.25%	53.5%
2034	32.75%	57.5%	35.50%	56.0%	38.25%	54.5%
2035	34.25%	58.6%	37.25%	57.2%	40.25%	55.9%
2036	35.75%	59.9%	39.00%	58.8%	42.25%	57.7%
2037	37.25%	61.8%	40.75%	60.9%	44.25%	60.1%
2038	38.75%	64.2%	42.50%	63.6%	46.25%	63.1%
2039	40.25%	67.1%	44.25%	67.0%	48.25%	66.9%
2040	41.75%	70.8%	46.00%	71.2%	48.25%	71.2%
2041	43.25%	75.2%	46.00%	75.9%	48.25%	76.0%
2042	44.75%	80.5%	46.00%	81.1%	48.25%	81.4%
2043	44.75%	86.4%	46.00%	87.1%	48.25%	87.5%
2044	44.75%	92.9%	46.00%	93.6%	48.25%	94.2%
2045	44.75%	100.0%	46.00%	100.7%	48.25%	101.5%