June 6, 2023 E-Mail

Mr. Jeff Pabst
Education and Outreach Coordinator
Missouri Local Government
Employees Retirement System
P.O. Box 1665
Jefferson City, Missouri 65102

Re: City of Columbia (#1775) – Police and Fire Departments

Dear Jeff:

As you requested, we have determined the initial computed employer contribution rate for the City of Columbia Police and Fire departments based upon the benefit provisions being considered by the subdivision (L-6 for Police and L-11 for Fire, 3 year FAC, 0% member contribution rate, and rule of 80 retirement). The cost to the employer is shown assuming that **only new members** would be covered under LAGERS.

	New Employees Only	
As of April 30, 2023	**Police (L-6)**	**Fire (L-11)**
Normal Cost Rate	13.6%	20.3%
Casualty Rate	0.8	1.2
Prior Service Cost Rate	0.0	0.0
Total Employer Contribution Rate	14.4%	21.5%
Increase in Unfunded Actuarial Accrued Liability	$0	$0

The results above are based upon a 30-year amortization of the increase in the unfunded actuarial accrued liability (UAAL). A summary of the active member data used for the initial valuation is shown below:

Active Members as of April 30, 2023

Division	Number	Payroll	Avg. Payroll	Avg. Age	Avg. Service
Police	147	$11,493,411	$78,186	36.9 years	8.9 years
Fire	151	$12,483,005	$82,669	39.1 years	10.2 years

Below are projections needed to comply with Missouri state disclosure requirements (Section 105.665 of the RSMo) regarding the adoption of LAGERS benefits by a political subdivision. The projections assume that **only new members** would be covered under LAGERS.

Police Division:

Valuation Year	Estimated Projected Payroll	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars	
2022	$ 11,493,411	14.4%	$1,655,051	$ -
2023	11,809,480	14.4	1,700,565	-
2024	12,134,241	14.4	1,747,331	-
2025	12,467,933	14.4	1,795,382	-
2026	12,810,801	14.4	1,844,755	-
2027	13,163,098	14.4	1,895,486	-
2028	13,525,083	14.4	1,947,612	-
2029	13,897,023	14.4	2,001,171	-
2030	14,279,191	14.4	2,056,204	-
2031	14,671,869	14.4	2,112,749	-

Fire Division:

Valuation Year	Estimated Projected Payroll	Estimated Employer Contribution		Unfunded Actuarial Accrued Liability
		As a % of Payroll	Annual Dollars	
2022	$ 12,483,005	21.5%	$2,683,846	$ -
2023	12,826,288	21.5	2,757,652	-
2024	13,179,011	21.5	2,833,487	-
2025	13,541,434	21.5	2,911,408	-
2026	13,913,823	21.5	2,991,472	-
2027	14,296,453	21.5	3,073,737	-
2028	14,689,605	21.5	3,158,265	-
2029	15,093,569	21.5	3,245,117	-
2030	15,508,642	21.5	3,334,358	-
2031	15,935,130	21.5	3,426,053	-

The long term cost (C) of providing retirement benefits depends only on the benefits (B) that are paid to participants, the expenses (E) of administering the plan, and the investment return (I) generated on invested assets: $C = B + E - I$. For a given level of benefits, the cost of providing those benefits is lowered if administrative expenses are lowered or investment income is increased.

The long-term costs are financed by a series of employer and member contributions. The series of contributions is flexible. If more is contributed in early years, less has to be contributed in later years, and vice versa. Over time the series of contributions has to have the same value as benefits and expenses. The actuary determines each year's contribution based on a funding method and a set of actuarial assumptions. The chosen funding method and assumptions do not affect the long term cost of providing retirement benefits, but have a strong impact on the series of contributions made to fund the benefits.

The methods and assumptions used in the initial valuation were the same as those used in the LAGERS annual actuarial valuations as of February 28, 2022. In particular, the assumed rate of investment return was 7.00% and the assumed rate of payroll growth was 2.75%.

If the City participates in LAGERS for the Police and Fire Departments, the actuarial valuations will be prepared using the LAGERS assumptions, as adopted by the LAGERS Retirement Board. If future experience follows the LAGERS assumptions, the contribution rates calculated in this report will remain approximately level. If future experience is worse than the LAGERS assumptions, the contribution rates will gradually increase over time.

This report was prepared using our proprietary valuation model and related software which in our professional judgment has the capability to provide results that are consistent with the purposes of the valuation. We performed tests to ensure that the model reasonably represents that which is intended to be modeled.
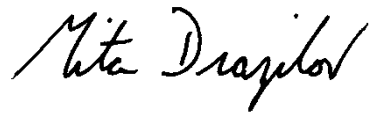
Mita Drazilov is a Member of the American Academy of Actuaries, and meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein. It was disclosed to both LAGERS and the City of Columbia that Mita is the actuary for both LAGERS and the City of Columbia Police and Firemen's Retirement Fund. Both parties indicated that they did not see a conflict of interest in this assignment. It is my opinion that my ability to act fairly in this assignment has not been impaired.

Please call if you have any questions.

Sincerely,
Gabriel, Roeder, Smith & Company

Mita D. Drazilov, ASA, FCA, MAAA

MDD:rmn

cc: Judith Kermans (GRS)
      Michael Gano (GRS)