

June 10, 2024

Mr. Doug Anderson, Executive Director Public Employees Retirement Association of Minnesota 60 Empire Drive, Suite 300 Saint Paul, Minnesota 55103

Re: Proposed Assumption Changes – PERA LGCSRP

Dear Mr. Anderson:

Enclosed is a supplemental actuarial valuation showing the estimated impact of changing the actuarial assumptions of the Local Government Correctional Service Retirement Plan of the Public Employees Retirement Association (PERA LGCSRP). Unless noted otherwise and to the best of our knowledge and belief, the calculations were completed in accordance with the requirements of Minnesota Statutes, Section 356.215, and the requirements of the Standards for Actuarial Work established by the Legislative Commission on Pensions and Retirement (LCPR).

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Due to the limited scope of the actuary's assignment, the actuary did not perform an analysis of the potential range of such future measurements.

This report should not be relied on for any purpose other than the purpose described in the primary communication. This report is intended for use by the PERA Board and staff and may be provided to other parties only in its entirety and only with permission of the Board. GRS is not responsible for unauthorized use of this report. Determinations of the financial results associated with the benefits described in this report in a manner other than the intended purpose may produce significantly different results.

The valuation was based upon information furnished by PERA, concerning Retirement System benefits, financial transactions, plan provisions and active members, terminated members, retirees and beneficiaries. The signing actuaries are independent of the plan sponsor.

Mr. Doug Anderson, Executive Director Public Employees Retirement Association Page 2

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 and has no material limitations or known weaknesses. We performed tests to ensure that the model reasonably represents that which is intended to be modeled.

Please call if you have any questions regarding the calculations enclosed.

Sincerely,

Gabriel, Roeder, Smith & Company

Bonita J. Wurst, ASA, EA, FCA, MAAA

Bonita J. Wurst

FCA, MAAA Sheryl L. Christensen, FSA, EA, FCA, MAAA

BJW/SLC:sc Enclosures



PERA Local Government Correctional Service Retirement Plan Executive Summary

Requested By: Mr. Doug Anderson, Executive Director

Public Employees Retirement Association

Date: June 10, 2024

Submitted By: Bonita J. Wurst, ASA, EA, FCA, MAAA

Sheryl L. Christensen, FSA, EA, FCA, MAAA

Gabriel, Roeder, Smith & Company

The purpose of this report is to evaluate the impact of proposed changes in actuarial assumptions for the Local Government Correctional Service Retirement Plan. Please see our draft report, Local Government Correctional Service Retirement Plan of Minnesota Fund 4-Year Experience Study, dated June 10, 2024, for a full description of the proposed changes.

Bonita J. Wurst and Sheryl L. Christensen are Members of the American Academy of Actuaries (MAAA) and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein. In addition, GRS meets the requirements of "approved actuary" under Minnesota Statutes 356.215, Subdivision 1, Paragraph (c).

The date of the valuation was June 30, 2023. This means that the results of the supplemental valuations indicate what the June 30, 2023 valuation would have shown if the proposed assumptions had been in effect on that date. Supplemental valuations do **not** predict the result of future actuarial valuations. Rather, supplemental valuations give an indication of the probable long-term cost of the **assumption change only** without comment on the complete end result of the future valuations.

Unless noted otherwise, actuarial assumptions and methods were consistent with those used in the regular actuarial valuation of the PERA LGCSRP on the valuation date as prescribed by Minnesota Statutes Section 356.215, the requirements of the Standards for Actuarial Work established by the Legislative Commission on Pensions and Retirement (LCPR) and the Board of Trustees for the June 30, 2023 PERA LGCSRP Valuation.

Results in this report are shown on an Actuarial Value of Assets (AVA) basis.



PERA Local Government Correctional Service Retirement Plan Calculations as of June 30, 2023

A brief summary of the data, as of June 30, 2023, used in this valuation is presented below:

Active Members				
	Projected Annual	Average in Years		
Number	Earnings	Age	Service	
3,786	\$253,980,000*	38.3	7.2	

^{*} Prior to assumption changes.

Retired Members		Deferred Vested Members Non-Vested Members			
Number	Average Annual Benefits	Number	Average Annual Benefits**	Number	Average Member Contributions**
1,843	\$15,291	4,378	\$7,036	2,604	\$1,884

^{**} Reflects 35% Combined Service Annuity load for Deferred Vested members and 1% Combined Service Annuity load for Non-Vested members.



PERA Local Government Correctional Service Retirement Plan Calculations as of June 30, 2023

Our draft report, the *PERA Local Government Correctional Service Retirement Plan of Minnesota 4-Year Experience Study*, dated June 10, 2024, contained several recommended changes to demographic assumptions, including changes to retirement, withdrawal and disability rates, the assumed age difference for retirees and their spouse and form of payment elections.

Present Demographic Assumptions: See the *Local Government Correctional Service Retirement Plan Actuarial Valuation Report as of July 1, 2023*, dated December 7, 2023, for a complete description of the present demographic assumptions.

Proposed Demographic Assumptions: Please see our experience study report noted above for a full description of the proposed assumptions:

Merit and Seniority:

 Adjust rates of merit and seniority, with proposed rates approximately 14 basis points lower, in total, than that anticipated by the current rates.

Retirement:

- Increase the rate of assumed unreduced retirements (i.e., Normal Retirement) prior to age 63 and at age 65, 67 and 68; reduce rates at ages 62 and 66; overall results predict more unreduced retirements.
- Increase the rate of assumed reduced retirements at ages 50, 52 and 54, resulting in more predicted early retirements.

Withdrawal:

 Change the assumed rates of withdrawal (termination of membership before eligible to retire). The overall impact is an increase in assumed terminations for males and females, with larger increases in termination assumed earlier in the member's career.

Disability:

Adjust rates of disability to better fit actual experience. For male members, proposed rates are slightly higher mid-career and also for ages 50 to 54, and lower at ages 60+. For female members, proposed rates are primarily unchanged prior to age 55 and lower for ages 55+.

Mortality:

 Continued use of the Pub-2010 General mortality table, with future improvement projected using Scale MP-2021.

Marriage:

 Lower percent married assumption for females from 75% to 65%; change the assumed age difference from three years younger/(older) for male/(female) retirees to two years.

Form of Payment:

Minor changes to form of payment assumptions.

Missing Participant Data:

 Minor changes to the assumptions made with respect to missing participant data.



PERA Local Government Correctional Service Retirement Plan Step 1 – Change Mortality Assumptions Calculations as of June 30, 2023

Actuarial Statement

The financial effect of the proposal is shown below:

	Valuation	Update	Change from
	Baseline	Mortality	Baseline
Normal Cost Rate, % of Pay	13.92%	13.92%	0.00%
Amortization of Unfunded Accrued Liability, % of Pay	0.83%	0.80%	-0.03%
Expenses, % of Pay	0.19%	0.19%	0.00%
Total Required Contribution, % of Pay	14.94%	14.91%	-0.03%
Actuarial Accrued Liability, 000s	\$1,112,405	\$1,111,086	\$(1,319)
Funded Ratio, AVA Basis	96.7%	96.8%	0.1%



PERA Local Government Correctional Service Retirement Plan Step 2 – Changes from Step 1 plus Changes to Rates of Retirement, Withdrawal and Disability, and Other Miscellaneous Assumptions* Calculations as of June 30, 2023

Actuarial Statement

The financial effect of the proposal is shown below:

Updates From Step 1 plus Changes to Rates of Retirement, Withdrawal and Disability, and Other Valuation Miscellaneous Change from Baseline Assumptions* **Baseline** Normal Cost Rate, % of Pay 13.92% 13.26% -0.66% Amortization of Unfunded Accrued Liability, % of Pay 0.83% 1.04% 0.21% Expenses, % of Pay 0.19% 0.19% 0.00% Total Required Contribution, % of Pay 14.94% -0.45% 14.49% Actuarial Accrued Liability, 000s \$1,112,405 \$1,122,016 \$9,611 Funded Ratio, AVA Basis 96.7% 95.9% (0.8%)



^{*} Includes percent married, spouse age difference, form of payment, and assumptions for missing data.

PERA Local Government Correctional Service Retirement Plan Step 3 – Change Merit and Seniority Assumptions Calculations as of June 30, 2023

Actuarial Statement

The financial effect of the proposal is shown below:

		Updates From Step 2	Change from Baseline -0.94% -0.06% 0.00% -1.00%
	Valuation	plus Change Merit	Change from
	Baseline	and Seniority Rates	Baseline
Normal Cost Rate, % of Pay	13.92%	12.98%	-0.94%
Amortization of Unfunded Accrued Liability, % of Pay	0.83%	0.77%	-0.06%
Expenses, % of Pay	0.19%	0.19%	0.00%
Total Required Contribution, % of Pay	14.94%	13.94%	-1.00%
Actuarial Accrued Liability, 000s	\$1,112,405	\$1,109,569	\$(2,836)
Funded Ratio, AVA Basis	96.7%	96.9%	0.2%



PERA Local Government Correctional Service Retirement Plan Steps 1-3 – All Changes Calculations as of June 30, 2023

Update Retirement, Withdrawal and Disability Rates and

	Valuation	Update	Disability Rates and Other Miscellaneous	Update Merit and Seniority	
	Baseline	Mortality	Assumptions	Rates	
Normal Cost Rate, % of Pay	13.92%	13.92%	13.26%	12.98%	
Amortization of Unfunded Accrued Liability, % of Pay	0.83%	0.80%	1.04%	0.77%	
Expenses, % of Pay	0.19%	0.19%	0.19%	0.19%	
Total Required Contribution, % of Pay	14.94%	14.91%	14.49%	13.94%	
Actuarial Accrued Liability, 000s	\$1,112,405	\$1,111,086	\$1,122,016	\$1,109,569	
Funded Ratio, AVA Basis	96.7%	96.8%	95.9%	96.9%	



PERA Local Government Correctional Service Retirement Plan Calculations as of June 30, 2023

Comments

Comment 1 — The calculations are based upon assumptions regarding future events, which may or may not materialize. They are also based upon plan provisions that are outlined in this report. If you have reason to believe that the assumptions that were used are unreasonable, that the plan provisions are incorrectly described, that important plan provisions relevant to this proposal are not described, or that conditions have changed since the calculations were made, you should contact the author(s) of this report prior to relying on information in the report.

Comment 2 — If you have reason to believe that the information provided in this report is inaccurate, or is in any way incomplete, or if you need further information in order to make an informed decision on the subject matter of this report, please contact the author(s) of this report prior to making such decision.

Comment 3 — In the event that more than one change is being considered, it is very important to remember that the results of separate actuarial valuations cannot generally be added together to produce a correct estimate of the combined effect of all of the changes. The total can be considerably greater than the sum of the parts due to the interaction of various plan provisions with each other, and with the assumptions that must be used.

Comment 4 — The reader of this report should keep in mind that actuarial calculations are mathematical estimates based on current data and assumptions about future events (which may or may not materialize). Please note that actuarial calculations can and do vary from one valuation year to the next, sometimes significantly if the group valued is very small (less than 30 lives). As a result, the cost impact of a benefit change may fluctuate over time, as the demographics of the group changes.

Comment 5 — We have provided this analysis in the same format as that used when plan or assumption changes are considered by the Trustees. For any legislative proposals, it may be necessary to follow-up with a more in-depth analysis to comply with the Standards for Actuarial Work. We will provide the additional information upon request.

Comment 6 —The assumption changes may result in a change to the plan's actuarially equivalent factors. An update to these factors has not been reflected in this study.

Comment 7 — All calculations reflect an amortization date of June 30, 2053.

Comment 8 — PERA LGCSRP benefit recipients receive a future annual postretirement benefit increase equal to 100% of the Social Security Cost-of-Living Adjustment, not less than 1% and not more than 2.5%. For the July 1, 2023 valuation, the postretirement benefit increase was assumed to increase 2.0% each year in the future. We reviewed this assumption in the draft Local Government Correctional Service Retirement Plan of Minnesota 4-Year Experience Study, dated June 10, 2024, and found this assumption to be appropriate. See this report for a complete description of the analysis. This is only an assumption; actual increases will depend on actual experience.

