

Changes in Actuarial Assumptions for Calculating Plan Costs—Effective January 1, 2021

Previous PMRS Practice

Every five years the Pennsylvania Municipal Retirement System charges its independent actuary with conducting an in-depth study to compare the system's economic and demographic assumptions against what really happened over that period of time and to assist the Board with developing assumptions to use for future valuations.

Economic assumptions include, but are not limited to, factors such as the rate of inflation or the rate that at which PMRS members' salaries will grow. Demographic assumptions include, but are not limited to, factors such as how many PMRS members are married vs. single; the proportion of PMRS members who are women vs. men; and what percentage of employees will retire, become disabled, or die—and at what ages—in any given year.

For the past several years, PMRS had applied actuarial factors resulting from information gleaned *for the period covering January 1, 2009 through December 31, 2013*.

Current PMRS Practice

At its July 2020 meeting, the Pennsylvania Municipal Retirement Board adopted new assumptions as a result of the experience study *for the period covering January 1, 2014 through December 31, 2018*.

Content for the following table is from page 3 of the "Pennsylvania Municipal Retirement System, Experience Study Results and Recommendations for the period covering January 1, 2014 – December 31, 2018" produced by Cheiron in September 2020.

You are encouraged to read the report, including its complete and detailed discussion, at www.PMRS.state.pa.us. Click on "Publications," then select "Actuarial Reports," then choose "2019 Experience Study."

Impact on Pension Plans

Assumptions are used to calculate the costs and liabilities of pension plans. Changes in assumptions can increase or decrease costs and liabilities. When assumptions change, they are applied prospectively.

Beginning January 1, 2021, key changes will include:

Limited Summary of Key Changes to Economic and Demographic Assumptions (All Non-Uniform and Uniformed Plans)		
	Previous Assumption	Assumption Applied as of Jan 1, 2021
Retirement Rates	1 st eligible rates for Municipal; rates vary by age for Municipal/Uniform plans	Remove 1 st eligible rates for Municipal if Age < 61; update rates to better fit experience. Accelerated DROP/in-service retirement rates
Termination Rates	Municipal rates split for plans with <25 / 25+ actives	Municipal rates continue split by plan size <25 / 25+; lower rates for less service
	Uniform rates split for plans with <25 / 25+ actives	Uniform rates for all plans regardless of size; lower rates for <4 years; update other rates
Disability Rates	40%/60% 1964 OASDI disability incidence table Municipal/Uniform Service disabilities 15%/40% for Municipal/Uniform	40% 2017 CalPERS Public Miscellaneous Group disability rate table blended 70%/30% male/female. Service disabilities 20%/70% for Municipal/Uniform
Mortality Rates - Healthy Actives	RP-2000 Employee Healthy table; Scale AA mortality improvements to 2015, 0/5 year setback males/females	PUB-2010 General Employee table; MP-2018 mortality improvements to 2023
Mortality Rates - Healthy Retirees	RP-2000 Retiree Healthy table; Scale AA mortality improvements to 2005/2010 males/females	RP-2006 Retiree Healthy table; MP-2018 mortality improvements to 2023
Mortality Rates - Disabled	RP-2000 Combined Healthy table set forward ten years	RP-2006 Retiree Disabled table; MP-2018 mortality improvements to 2023
Miscellaneous Demographic		
Marital Status	80% married; wives 3 years younger than spouses	85%/65% married males/females; no change for spousal age difference
Male/Female Percentage	70%/30% males/females	No change

Economic		
Inflation/Cost of Living Rate	2.8%	2.2% <i>May review again in fall of 2022</i>
Salary Increase Rate	Inflation plus merit/promotional	Inflation plus merit/promotion
	For the first 3 years of employment, additional 2% pay increases expected	Extend from first 3 years to first 6 years, additional increases grade down from 3% to 1%
	Age based merit/promotional salary scale	No merit/promotional for 2021 and 2022. For 2023+, lower rates when age < 27, increase when age > 27
	Prior to retirement, an additional 6% increase in salary	No change
Discount Rate*	5.25%	No change at this time – this assumption is reviewed annually by the Board

* Also referred to as the "Regular Interest Rate" or "Crediting Rate"

Rationale for Current Practice

In order to ensure that the system’s financial standing and funding streams remain sound and adequate into the future, it is crucial to revisit and realign assumptions to reality on a regular basis. The practice of completing these studies also meets the statutory requirements that PMRS review their assumptions every five years.

Cheiron currently serves as PMRS’ independent actuary. They prepared the experience study and recommendation in accordance with generally recognized and accepted actuarial principles and practices, the Code of Professional Conduct, Actuarial Standards of Practice as set forth by the Actuarial Standard board and other applicable laws and regulation. The firm meets the Qualification Standards of the American Academy of Actuaries. The Pennsylvania Municipal Retirement Board reviews the results from the experience study with the actuary and makes the final decision on the adoption of the new assumptions.

Cheiron followed the Actuarial Standard of Practice Number 27 (the Selection of Economic Assumptions for Measuring Pension Obligations) and Actuarial Standard of Practice Number 35 (the Selection of Demographic and Other Noneconomic Assumptions for Measuring Pension Obligations) as required by actuaries.