

2021 Update on Financial Soundness of the Public Employees' Retirement System

CONCLUSION: Based on the most recent experience study and the recommendations from PERS's consulting actuary, Cavanaugh Macdonald Consulting, LLC, the PERS Board adopted changes to the plan's economic, demographic, and other actuarial assumptions. Additionally, the PERS Defined Contribution Committee created the Self-Directed Brokerage Account to provide the Mississippi Deferred Compensation Plan and Trust (MDC) participants with the option to create a supplemental account within their MDC account with the ability to invest in mutual funds that are not available under MDC.

Background:

The Public Employees' Retirement System of Mississippi (PERS) is a defined benefit retirement plan for a majority of the employees (and/or their beneficiaries) of state agencies, counties, cities, colleges and universities, public school districts, and other participating political subdivisions. State law requires PEER to report annually to the Legislature on the financial soundness of PERS.

In addition to the PERS plan, Mississippi's public retirement system consists of five other retirement allowances and other benefits to Mississippi public employees and their beneficiaries.

The System is under the administration of the 10-member PERS Board of Trustees, which has a primary responsibility of ensuring adequate funding of the plans it administers. One way the Board accomplishes this task is by setting contribution rates for employers participating in the plan. For assistance in setting these rates, the PERS Board receives actuarial reports annually and works with independent actuarial advisers to develop comprehensive models that are used to project the financial position of the various plans. These models include components such as investment return assumptions, wage inflation assumptions, retirement tables, and retiree mortality tables.

Each of these components must work in concert with the others for the PERS plan to maintain financial soundness. Underperformance in any one area can cause additional stress on other components and can lead to underperformance of the PERS plan as a whole.

In addition to annual actuarial valuations and projection reports, the PERS Board biennially reviews the actual experience of the various plans to expected experience for reasonableness, and adjust, as necessary, the assumptions used.

This report also includes information about MCD's Self-Directed Brokerage Account.

Actuarial Soundness

The PERS Board, in consultation with its actuaries, develops an actuarial model based on such assumptions as projected investment returns, payroll increases, inflation, retirement ages, mortality rates, marriage rates, and accrued leave to project the plan's future assets and liabilities. Although the PERS Board sets plan assumptions based on biennial experience studies, the plan's actual experience (e.g., investment returns or mortality rates) is a product of environmental and demographic factors.

As a result of the most recent four-year experience study ending June 30, 2020, and in consultation with its actuary, the PERS Board voted to change all three assumptions for the plan. The PERS Board reduced the price inflation assumption from 2.75% to 2.40% (a reduction of 0.35%). Reflecting this assumption change, among other factors, the Board reduced the wage inflation assumption from 3.00% to 2.65% (a reduction of 0.35%). The Board also reduced the investment return assumption from 7.75% to 7.55% (a reduction of 0.20%).

PERS Economic Assumptions as of June 30, 2021

Assumption	FY 2021 and Future Years	Rate Prior to FY 2021
Price Inflation	2.40%	2.75%
Wage Inflation	2.65%	3.00%
Investment Return	7.55%*	7.75%

* In accordance with the PERS Board's funding policy, the investment return assumption was lowered 0.20% due to the plan experiencing specific investment returns during FY 2021. As a result of the most recent experience study, the current target rate for investment return was lowered to 7.00%.

Wage Inflation Assumptions

Over the past 5- and 10-year periods, the PERS actual average annual payroll increase has continued to remain below the actuarial model's projected rate of wage increase (currently assumed at 2.65%). Although the PERS Board adopted changes based on its most recent experience studies (as of June 30, 2012; June 30, 2014; June 30, 2016; June 30, 2018; and June 30, 2020), which help PERS's actuarial assumptions align more closely with actual experience, continued analysis of variation between actual and assumed wage growth is warranted.

Active and Retired Member Assumptions

From FY 2010 through FY 2020, the ratio of active members to retired members decreased by approximately 32%, driven by the increasing number of retirees and the decreasing number of active members. As a result of the decrease, the payroll of fewer active members must fund future pension obligations.

Differences between the Actuarially Recommended and Board-Adopted Long-Term Assumed Investment Rate of Return

The investment return assumption is used in the actuarial model to project the long-term perspective of investments in combination with the long-term perspective of the liabilities.

Based on the plan's most recent analysis of these data points, PERS's consulting actuary recommended lowering the PERS plan's investment return assumption from the previously **targeted** rate of 7.50% to 7.00% (a reduction of 0.50%). The PERS Board adopted this recommendation.

However, while the plan's actuary makes recommendations to the Board regarding what rates should be used for the investment return assumption, it is ultimately the responsibility of the Board to set the rate utilized.

For the FY 2021 valuation, the PERS Board reduced the **utilized** investment return assumption rate from 7.75% to 7.55% (a reduction of 0.20%). According to the amended funding policy, the plan's **utilized** investment assumption rate will be reduced until it reaches the **target** rate recommended by the actuary in the most recent experience study.

Sustainability

The PERS plan's funding policy defines several goals and objectives, including the maintenance of an increasing trend in the plan's funded ratio (over the projection period) with the target of a 100% funding level by 2047.

Based on the results of the evaluation metrics in the funding policy as of June 30, 2021, the plan has two metrics at green signal-light status (funded ratio and cash flow as a percentage of assets) and one metric at red status (ADC/FCR ratio).

PERS Funding Policy Metric Results as of June 30, 2021

Metric	Result	Status
Funded Ratio (in FY 2047)	93.5%	Green
Cash Flow as a Percentage of Assets	-5.65%	Green
ADC/FCR Ratio	123.5%	Red

Risk Management

As of June 30, 2021, the PERS funded ratio was 61.3%, an increase from 60.5% as of June 30, 2020. Primarily due to the greater-than-expected investment returns, the PERS plan has a projected future funded ratio of 93.5% as of 2047, which passes the assessment metrics outlined in the plan's new funding policy with a green signal-light status.

Investment Management

For FY 2021, the PERS plan's combined investment portfolio experienced a return of 32.71%. For FY 2021, the PERS Board of Trustees continued to adhere to the overall asset allocation model adopted in June 2015. This model continues to set investment-level targets for the PERS investment portfolio and to mitigate investment risks through diversification.

Update on Changes to the Mississippi Deferred Compensation Plan

The Mississippi Government Employees' Deferred Compensation Plan and Trust (MDC) is a voluntary government employees' deferred compensation plan sponsored by the State of Mississippi.

State law charges PERS with the oversight and administration of MDC, which the PERS Board accomplishes through its Defined Contribution Committee. Under its authority as the administrator of MDC, and with the assistance of its investment consultants, the PERS Board selects the investment options available within MDC and monitors the performance of plan management offerings.

The PERS Defined Contribution Committee created the Self-Directed Brokerage Account (SDBA) to provide MDC participants with the option to create a supplemental account within their MDC account with the ability to invest in mutual funds that are not available under MDC. Participants in SDBAs assume the responsibility, management, and risks associated with investing in these supplemental investment options.

SDBA investment options will initially be limited to mutual funds; however, as PERS continues to monitor the participation in MDC core investments and the SDBA, the PERS Board may consider additional options at a later time.