Public Employees' Retirement System of Mississippi

State of the Plan

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Executive Summary

Today in Mississippi no simple solution exists for perfectly balancing the promise of a public pension benefit and managing the cost of keeping that promise. In addition, the multiple parties involved—including the pension board, legislative leadership, members, retirees, general public, and media—all have differing perspectives on funding, affordability, sustainability, rights, promises, the plan construct, and the benefits due.

This paper aims to provide a better understanding of the current status of the Public Employees' Retirement System of Mississippi (PERS, the Plan, or the System) and is being offered as a first step toward a discussion identifying available options for strengthening the funding of PERS. Presented alongside these options is the critical messaging that funding a public pension is a long-term endeavor and that any changes to the current plan structure should be evaluated and studied for all potential obstacles and challenges for the plan, its employers, its members, and its benefit recipients.

Where Responsibilities Rest for PERS' Funding Stability

Balancing affordability and sustainability with the need to honor promises made to the members of PERS is the responsibility of the state's Legislature. The role of the PERS Board of Trustees (Board) is to administer benefits set by the Legislature and, as fiduciaries, act solely in the best interest of its members, which includes ensuring the Plan is funded on an actuarial basis so that funds are available to pay those benefits promised by the Legislature. The Board, with the assistance of its actuaries, monitors the current and projected funded status with the objective of ensuring adequate assets will be available to pay all the benefits promised by the Legislature. Only the Legislature can make structural changes to PERS; this paper is not intended to make recommendations for change, but to provide a better understanding of PERS' current status.

PERS' Current Financial Status

Currently, PERS is 61 percent funded. This means that, as of June 30, 2017, we have 61 percent of what is needed to pay both the current benefits and projected future benefits. Our highest funded status ever was 88 percent in 2001. The primary reasons for the diminishment of PERS' funded status since then are the retroactive benefits granted in 1999, the Great Recession from 2007 to 2009, plan performance, and changes to plan assumptions, all of which led to increases of both the employer and member contribution rates from 2005 to 2013.

In 2012 the Board adopted a Funding Policy *(Appendix A – PERS Funding Policy and Objectives)* with a focus on a stable contribution rate while improving the financial status over time. The policy established a minimum funding level of 80 percent by 2042 (and an ultimate goal of 100 percent), with funding triggers that require Board action should the projection fall short of its 80 percent benchmark. Currently, due to lower-than-expected investment returns and changes to the Plan's actuarial assumptions since the policy's adoption, PERS is projected to be 70.1 percent funded in 2042 and the number of years to the future pay-off date has increased.

The basic equation for funding a pension plan is simple: contributions plus investments equals benefits plus expenses. PERS has averaged an 8.34 percent return on investments over the last 30 years and maintains a broadly diversified portfolio designed to minimize risk and maximize return over the long term. However, investments in today's low-interest-rate environment cannot be depended on to close the growing funding gap.

PERS, in conjunction with its 2014 economic experience study, reduced its expected return assumption from 8 percent to 7.75 percent. This action demonstrated a more conservative view on future investment returns but it also decreased the overall funding picture. On the other side of the pension equation, reducing plan expenses—at less than one-tenth of 1 percent of PERS' overall assets—is another area that offers little effect on funding. The only options left to affect change to the funding picture are increasing contributions or decreasing benefits. While adjustments to contributions or benefits can affect the overall long-term funding picture, neither option offers any immediate effect on funding. Adjustments to both contributions and benefits have been made since 2005. In response to the contribution rate increases from fiscal year 2005 to fiscal year 2013, the PERS Board's established its funding policy in 2012. Not only was this policy designed to improve plan funding over time; but, with its fixed contribution rate, it provides more predictability and stability in employers' budgeting processes. To help ensure the long-term viability of PERS, the Legislature decreased benefits for individuals hired on or after July 1, 2011; however, until those members replace current members and retirees, there will be little effect on PERS' financial picture.

Increasing Contribution Rates: The Hazards

Employers contribute 15.75 percent of payroll to PERS to help fund employee retirement benefits, which are a part of the overall compensation package offered to employees. Increasing the employer contribution rate could have an effect on the ability of the employer to increase salaries, hire employees, or effectively deliver government services. The question becomes: At what point does the contribution rate become unaffordable? The same question applies to the member contribution rate; today's members are paying 9 percent of their income for their pension benefit while the annual cost of their future benefit (i.e., the normal cost) is only 10.47 percent. This indicates that the employer is only paying 1.47 percent of the annual cost of providing retirement benefits for services performed by today's members.

Changing Plan Structure/Design: Evaluation

This paper examines the following options for plan design and the effect of each on the current plan:

1. Changing from a Defined Benefit Plan to a Defined Contribution Plan for new hires
2. Changing from a Defined Benefit Plan to a Hybrid Plan for new hires
3. Changing from a Defined Benefit Plan to a Cash Balance Plan for new hires
4. Adding Additional Retirement Tiers for new hires
5. Changing the Cost-of-Living Adjustment (COLA) for current members and retirees

Changes that apply only to new hires will have no effect on the legacy costs of today's plan until some point in the distant future. Consequently, none of the first three options listed above address the outstanding Unfunded Actuarial Accrued Liability (UAAL) or affect the overall funding of PERS. Option 4 potentially could address the UAAL, but only if members in this tier receive smaller benefits at retirement; pay the entire cost of their future reduced benefits; and make contributions toward the funding of the UAAL, which would result in a situation where the employer pays none of the annual cost of benefits for those members. As with the existing retirement tier that was added for individuals hired on or after July 1, 2011, adding an additional tier will take many years to see improvement. It also could have the unintended consequence of having new members contribute to the cost of

benefits of retirees and members in other tiers. While not analyzed in this paper, applying any of these changes to current members would have an effect on the overall funding; however, the likelihood of withstanding the potential legal challenges given the contractual nature of the benefits is debatable.

Changes to the current benefit structure for members and retirees is the only way to immediately address the overall funding through changes to the plan structure/design; however, those type changes also present the greatest possibility of legal challenges, particularly as it relates to benefits already accrued.

Along with changes to plan structure, PERS evaluates in this paper the financial effect of making changes to the COLA on a prospective basis to current members and retirees. The current COLA is a guaranteed 3 percent of the annual base retirement benefit multiplied by the number of full fiscal years in retirement up to age 55 and 3 percent compounded at age 55. For those hired on or after July 1, 2011, compounding begins at age 60. While any changes to the COLA would be at the discretion of the Legislature and could be done in different ways, this paper examines reducing the growth of the COLA in two ways:

1. Changing the COLA calculation on a prospective basis from a 3 percent compounded to a 3 percent simple for all full fiscal years in retirement. Based on actuarial projections, the 2042 projected UAAL would be reduced by approximately $9.4 billion and the 2042 projected funded status would be more than 84.5 percent.

2. Implement COLA holidays (i.e., maintaining each retiree's attained COLA payment amount for a specified number of years, instead of making adjustments annually). Maintaining currently attained COLA amounts for three years would reduce the 2042 projected UAAL by approximately $10.2 billion and the 2042 projected funding ratio would be more than 86.4 percent.

Modifying the COLA for all current and future members, including current retirees, has the most significant effect on the plan's financial status; but, it also presents the greatest challenge from both a political and legal perspective. Again, there is no easy solution to address PERS' current financial status.

Conclusion

In an ideal world, the benefits that have been promised to PERS members and retirees would be funded at 100 percent and the only cost from year to year would be that of providing the current year's benefit. Unfortunately, this is not an ideal world and PERS has only 61 percent of the funds needed to pay the current and projected future benefits. PERS is not projected to run out of funds to pay benefits at any point in the future; however, the financial status is a concern for many. Rather than waiting until a crisis occurs, a discussion about how to address the funding challenges of paying the promised benefits is prudent.

Pat Robertson
PERS Executive Director

PERS: An Overview

Brief History of PERS

In 1950, a bill was introduced to establish a retirement system for the employees of the Mississippi Highway Department (today the Mississippi Department of Transportation). The Legislature reviewed the bill and requested that the plan be resubmitted so that it could be expanded to cover all full-time state and state university employees. Also in 1950, Congress amended the 1935 Federal Social Security Act to allow states a mechanism to extend to employees of a state and its political subdivisions and instrumentalities protection by the old-age and survivors insurance system. As a result, Senate Bill 273 was signed into law April 15, 1952, providing employees of the state and its political subdivisions with two-part retirement coverage: Social Security and retirement and disability benefits. As the final push was being made for the creation of PERS, the Mississippi Association of Educators (MAE) recognized that the new plan would provide a better benefit system for retiring educators than the Teachers' Retirement System of Mississippi (TRS), which had been established in 1944. MAE petitioned the Legislature to close TRS and allow teachers and school administrative personnel to become members of the new system. As a result, TRS was closed in 1952 and all eligible new employees joined PERS.

PERS Today

As the 67th largest pension plan in the U.S. (*Pensions & Investments*, February 6, 2017) and 152nd largest in the world (*Pensions & Investment*, September 4, 2017), PERS the System administers 25 programs/plans with a total combined membership of 330,805, defined benefit assets of $27 billion, and defined contribution assets of almost $3 billion. These programs/plans include the Public Employees' Retirement System of Mississippi, Mississippi Highway Safety Patrol Retirement System, Municipal Retirement Systems, the Supplemental Legislative Retirement Plan, the Mississippi Deferred Compensation Plan & Trust, the Optional Retirement Plan for the Institutions of Higher Learning, and PERS-sponsored Retiree Medical and Life Insurance Plans.

BENEFITS STRUCTURE

A defined benefit retirement plan established under Internal Revenue Code § 401(a), PERS provides a monthly retirement benefit for life determined by a formula based on length of service, compensation earned, and the benefit option selected at retirement. These options are set in statute (Miss. Code Ann. § 25-11-115 [1972, as amended]) and can only be changed by the Legislature. In addition to the base benefit, an additional annual payment, considered a cost-of-living adjustment (COLA), is paid to eligible retirees and beneficiaries. This payment may be paid either as an addition to the base monthly benefit or in a lump sum in December. PERS has four retirement tiers, each with its own benefit structure. *(Appendix B – PERS Retirement Tiers)* PERS provides survivor benefits, and it provides disability retirement for those members who become permanently physically or mentally incapacitated and can no longer perform essential duties of their job. As of June 2017, the total number of retirees for the PERS retirement plan is 102,260 and the average annual PERS benefit including the COLA is $23,223 with $2.5 billion paid in total retirement benefits during fiscal year 2017. Approximately 93 percent of all benefits paid through PERS remain in the state, supporting the economy and providing jobs.

FUNDING: CONTRIBUTIONS AND INVESTMENTS

Primary funding for PERS comes from three sources: employer contributions, member contributions, and earnings on investments. PERS is a pre-funded pension plan, which means it is designed to receive sufficient contributions and investment earnings during the member's career to pay the retirement benefits promised to that member throughout his or her lifetime in retirement. The funding of most defined benefit pension plans is explained by this equation:

Contributions + Investments = Benefits + Expenses

For fiscal year 2017, total member and employer contributions were $1.6 billion and net investment income was $3.5 billion.

Contributions

PERS is a contributory plan that requires each member to contribute a certain percentage of his or her pay and each employer to contribute a certain percentage of payroll. Each employer remits member and employer retirement contributions to PERS on a monthly basis and provides monthly wage and contributions reports. Pursuant to Miss. Code Ann. § 25-11-123 (1972, as amended), the Board is authorized to set the contribution rates for both member and employer contributions based the liabilities of the retirement system as shown by the actuarial valuation. However, the Board has, historically, gravitated to the employer contribution for changes, as the Mississippi Attorney General has opined that member rates can only be increased if accompanied by a matching increase in benefits. *(Appendix C – Attorney General Opinion on Changes to State Contractual Obligations and Appendix D – PERS Contribution Rate History)* The current member and employer contribution rates are as follows:

> **Member Contribution Rate -** 9 percent of earned compensation effective July 1, 2010; and
>
> **Employer Contribution Rate -** 15.75 percent of earned compensation effective July 1, 2013.

In addition to paying PERS' contributions, most members and employers also contribute an additional 6.2 percent of the member's monthly compensation toward Social Security and 1.45 percent to provide mandatory Medicare coverage.

Normal Cost

Active members of PERS accrue new future retirement benefits each year. The annual cost of providing those future benefits is called the normal cost. The normal cost is determined by an actuary through the use of assumptions regarding salaries, how long a member will work, mortality rates, inflation, investment returns, and other plan assumptions. The actuaries project the cost of future benefits and estimate the percentage of current payroll necessary to pay for the future benefits. Based on 2017 valuation reports, the cost of future PERS retirement benefits is an estimated 10.47 percent of the current payroll. The entire portion of the member's 9 percent contribution is dedicated to the normal cost of the plan. The employer's 15.75 percent contribution pays for the remaining portion of the normal cost (1.47 percent) and the plan's unfunded actuarial accrued liability (14.28 percent, the cost for the benefits projected to be paid to current and future retirees). *(Appendix E – Normal Cost since 1998)*

Investments

The returns generated by investing the contributions made by members and employers is the third arm of funding for PERS. By maintaining a broadly diversified portfolio aimed to minimize risk and maximize return over the long term, the System's investment program is designed to help provide funding for current and future pension obligations. PERS investments are held in trust in accordance with Miss. Code Ann. § 25-11-121. Headed by PERS' chief investment officer, the investment department, in conjunction with an investment consultant, assists and advises the Board on investment matters and directs the investment program in accordance with established Board policies. Callan Associates, LLC is currently employed by the Board as the System's investment consultant. *(Appendix F – PERS Present and Past Investment Performance)*

THE BOARD AS FIDUCIARY

The 10-member PERS Board of Trustees is comprised of eight constituent-elected Plan members and retirees, the Mississippi State Treasurer, and a gubernatorial appointee. This Board is the fiduciary of the Plan, and, as such, is responsible for oversight of the overall administration in accordance with its standard operating procedures and established policies. In this role, the Board, in conjunction with staff and its consultants, conducts asset/liability studies; establishes the asset allocation policy; reviews investment performance; and conducts annual actuarial valuations, 30-year projection reports, and biennial experience investigations. The Board's policy also includes a separate actuarial audit (performed every five years) and annual reviews of PERS' externally-audited financial statements and Comprehensive Annual Financial Report (published each December).

Unfunded Actuarial Accrued Liability (UAAL)

Actuarial accrued liabilities are the portion of the present value of expected future benefits not covered by future normal cost contributions. If actuarial accrued liabilities at any time are less than the plan's accrued assets, the plan has a surplus. If actuarial accrued liabilities at any time exceed the plan's accrued assets, the difference is called an Unfunded Actuarial Accrued Liability (UAAL). The existence of a UAAL among public pension plans is very common, but the changes in the UAAL from year to year are important and should be monitored.

Each time a plan adds a new benefit that applies to service already rendered (past service) or if actual financial experience is less favorable than assumed or if actuarial assumptions are modified to more conservative numbers, a UAAL is created. Payments for the increase in liabilities due to retroactive benefit changes, changes in actuarial assumptions, or unfavorable experience are typically spread over a period of years, called an amortization period.

Why Discuss Plan Structure

A Challenged Funded Status and Growing Unfunded Actuarial Accrued Liability (UAAL)

A plan's funded ratio (i.e., funded status) demonstrates the percentage of assets on hand to cover all projected future pension costs (liabilities) at a given point in time. The unfunded actuarial accrued liability (UAAL) is the portion of the overall liability that is not covered by current assets. PERS' funded status has hovered around 60 percent since 2010 *(Appendix G – Overview of Plan Performance since 2010)* and is currently 61 percent. This means that, as of June 30, 2017, PERS' $27.1 billion in current net assets is enough to cover 61 percent of the $43.2 billion needed to pay all projected benefits earned based on the actuarial assumptions recommended by the independent actuary and approved by the Board. The remaining 39 percent needed for all projected PERS' benefits (the UAAL) is $16.8 billion. *(Appendix H – PERS Funded Status History)*

The three primary factors negatively affecting PERS' funded status are the FY 2015 reduction of the investment return assumption from 8 percent to 7.75 percent, asset under-performance associated with the dot.com bust of 2001 and the Great Recession, and the benefit increases implemented between July 1, 1999, and July 1, 2002, for current and new members and current and new retirees. The reduction in the investment return assumption increased the UAAL more than $1 billion and extended the amortization period more than five years, while asset under-performance added almost $5.2 billion. The benefit increases implemented from 1999 through 2002 cost in excess of 10 percent of covered payroll; included prior-service or retroactive increases representing a cost of almost 9 percent (for which no employer or member contributions were paid); and were funded by surplus/excess investment returns that would have raised the PERS funded status to more than 100 percent. Instead these changes increased the UAAL period by almost 40 years.

In the spring of 2017, the Board requested the plan actuaries, Cavanaugh Macdonald Consulting, LLC, provide a detailed analysis of the funded status changes from 1998 to 2016, a timeframe that saw the Plan's UAAL increase from approximately $2 billion to nearly $17 billion. *(Appendix I – Analysis of the Funded Status Changes to PERS from 1998–2016)* In 1998, PERS was 85 percent funded on an actuarial basis and more than 100 percent funded on a market-value basis (the two approaches used to evaluate funding). Over the four-year period when the 1999–2002 benefit increases were implemented, the UAAL increased to a total of nearly $3 billion. This means that, of today's $16.8 billion UAAL, $3.6 billion (more than 21 percent) can be attributed solely to the benefit increases from 1999 to 2002.

Recent Adjustments to Assumptions

PERS' actuaries use economic and demographic assumptions to help predict how the Plan will perform. These assumptions are reviewed and adjusted on a regular basis so that PERS does not incur large gains or losses at any one time. While these changes are necessary from a prudent management perspective, they also affect plan numbers. Adjustments to plan assumptions change the numbers used to calculate the UAAL and can result in changes to the funded status and the projected funded status. Every two years, in accordance to Miss. Code Ann. § 25-11-119(9), PERS conducts experience investigations to review the prior four years of actual plan experience (i.e., performance) and to reevaluate the plan assumptions.

Actuarial Gains and Losses

Gains and losses are produced when actuarial assumptions (used for predicting how a plan will perform) and the actual experience (the plan's performance) predicted by those assumptions deviate from one another. The expected investment return on assets assumption is especially vulnerable to gains and losses due to the volatility of investment markets. *(Appendix F – PERS Present and Past Investment Performance)* Certain future key assumptions (i.e., investment return, inflation, wage growth, and mortality tables) are adjusted periodically to more closely reflect actual experience, and, in an attempt to improve the accuracy of actuarial calculations of liability gains and losses, to reflect the most realistic plan expectations possible.

ECONOMIC ASSUMPTIONS

There are three economic assumptions used in the actuarial valuations performed for PERS.

- Price Inflation
- Investment Return
- Wage Inflation

Price Inflation

Price Inflation is used as a building block for both the investment return assumption and the wage inflation assumption. The basic principle is that the investor demands a more or less level "real return" (i.e., the excess of actual investment return over price inflation). If inflation rates are expected to be high, investment return rates are also expected to be high, while low inflation rates are expected to result in lower investment returns (at least in the long run). The PERS price inflation assumption is 3 percent per year, which was reduced from 3.5 percent in 2015 following the 2014 Experience Investigation. Over the last 30 years, the average annual rate of increase in the Consumer Price Index-U has been below 3 percent. The period of high inflation from 1973 to 1982 has a significant effect on the averages over periods that include these rates. The volatility of the annual rates in the more recent years has been markedly lower, as indicated by the significantly lower annual standard deviations. Many experts attribute the lower average annual rates and lower volatility to the increased efforts of the Federal Reserve since the early 1980s to stabilize price inflation. *(Appendix J – Historical Annualized Rates and Annual Standard Deviation of the CPI-U Over Periods Ending June 30)*

Investment Return

Of all the PERS assumptions, the assumed return on investments is one of the most significant assumptions in the annual actuarial valuation process. The inflation assumption and the real rate of return assumption are combined to form the investment return assumption. This assumption provides an estimate of how much PERS' assets will earn over time and is used to discount the expected benefit payments for all active, inactive, and retired members. Minor changes in this assumption can have a major effect on valuation results. PERS actuaries assume the assets will generate a 7.75 percent return each year, compounded annually. The 7.75 percent is developed by adding the 3 percent inflation assumption and the real return assumption of 4.75 percent. Prior to June 30, 2014, the assumed rate of return was 8 percent. Following the 2014 Biennial Experience Investigation, the Board, based on the recommendation of the actuary, elected to lower the investment return assumption from 8 percent to 7.75 percent. *(Appendix F – PERS' Present and Past Investment Performance)*

Wage Inflation

PERS actuaries make assumptions regarding the salaries of plan participants and how those salaries will grow over the career of each participant. The salary-increase assumption combines inflation and real wage growth assumptions with an assumption for promotion and longevity (often called merit increases). In conjunction with the 2016 experience investigation, based on the recommendation of the actuary, the wage-inflation assumption was reduced from 3.75 percent to 3.25 percent due to the fact that actual experience related to salary increases have been less than expected. This change affects the plan liabilities in several different ways. It reduces projected salaries for the future and, therefore, reduces projected benefit payments. It also reduces the amount of contributions PERS expects to receive on future salaries.

DEMOGRAPHIC ASSUMPTIONS

PERS' actuaries use the actual experience of the System to determine the demographic assumptions of plan participants (e.g., years of service, mortality, additional service credit, benefit options, disability rates, refund rates, etc.). Those assumptions are then used in the valuation process. The number of active members contributing to PERS peaked in 2009 at 167,901 and has generally continued a trend of decline since that time. As of June 30, 2017, there were 152,382 active members contributing to PERS. Currently, more than 25 percent of active PERS members are eligible to retire or will reach retirement eligibility within five years. This data does not include additional service credit associated with unused personal and sick leave or military service that can be applied at retirement. *(Appendix K – PERS Membership and Retirement Eligibility Percentages)* Additional information regarding the demographic assumptions may be found in the State of Mississippi Retirement Systems Experience Investigation for the Four-Year Period Ending June 30, 2016. *(Appendix V – Additional Resources and Reading)*

PERS' Funding Policy and Current Status

The Board's funding policy establishes a funded ratio target of at least 80 percent in 2042. The policy includes two triggers so that, 1) should actuarial losses cause the projected funded status to fall below 60 percent in any one year or 2) if the projected funded status falls below 75 percent for two consecutive years, the Board is required to approve a contribution rate increase to a level that would be sufficient to generate an 85 percent projected funded status. *(Appendix A – PERS Funding Policy and Objectives)* As a result of the actuarial losses for FY 2016 and in conjunction with the decrease in the assumed rate of return, PERS' projected funded status for 2042 fell to 63 percent. While PERS experienced actuarial gains due to positive investment performance in 2017, the overall gains were not sufficient to increase the projected funded status above 75 percent. Therefore, PERS is currently projected to be 70.1 percent funded in 2042. *(Appendix L – PERS FY 2016 Funded Status Projection and Projections since 2012)*

Potential Options for Change

Time is relative when discussing the funding of a defined benefit plan like PERS. Like most states, the Mississippi Legislature has made adjustments to plan benefits with the expectation that the funded status would improve; however, because those benefit changes only applied to new hires, they could take as long as 30 years to have a meaningful effect on Plan funding over time. *(Appendix M - PERS' Benefit Modifications since 1985)* Along with the changes to benefits, contribution increases for both employers and members have been implemented. (*Appendix N – Employer and Employee Rates of Contribution and Maximum Covered Earnings)* While these actions will have an effect on Plan funding over time, the Board has explored additional avenues of change that would help improve the funded status in an effort to make the System more affordable. After researching ideas currently being used or considered by other public pension systems and studying PERS' past and projected performance *(Appendix O – NASRA Spot On: Significant Reforms to State Retirement Systems)*, the following options for improving the funding of PERS are being explained in this paper. Each of these changes, if implemented individually, would positively affect PERS' funding (either immediately or eventually); however, implementing combinations or variations of these changes could also positively affect PERS' funding, while softening the negative effect on the relevant parties.

These options, which are detailed on the following pages, are:

- **Changing Plan Structure**
  - Moving to a Defined Contribution Plan for New Hires
  - Moving to a Hybrid Plan for New Hires
  - Moving to a Cash Balance Plan for New Hires
  - Adding Additional Retirement Tiers for New Hires
- **Increasing Contributions**
- **Changing the Cost-of-Living Adjustment**

Changing Plan Structure

Before explaining the four options for changing PERS' plan structure, a basic understanding of the current plan structure is prudent. PERS is a defined benefit retirement plan established under Internal Revenue Code § 401(a). A defined benefit retirement plan is a traditional pension plan that pays recipients a fixed sum at retirement for the remaining years of the worker's life based on a formula that includes the worker's length of service, salary, and a retirement factor or multiplier. Benefits are financed by contributions and investment income on those contributions. Plan assets are invested in professionally managed portfolios. Benefits are not affected by the return on investments; the Plan bears the investment risk. PERS' benefit options are set in statute (Miss. Code Ann. § 25-11-115 [1972, as amended]) and can only be changed by the Legislature. The Mississippi Supreme Court and Mississippi Attorney General have opined that Mississippi public employees (members) acquire contractual rights at the time they join PERS and that such rights may not be impaired. Furthermore, "existing member and retiree benefits may not be reduced without a matching increase in benefits elsewhere." *(Appendix C – Attorney General Opinion on Changes to State Contractual Obligations)* Furthermore, changing the structure of PERS for new hires would not address the UAAL, which would continue to exist as members in the legacy plan finished working their careers and moved through their retirement.

Options for Changing Plan Structure for New Hires:

- *Moving to a Defined Contribution Plan*
- *Moving to a Hybrid Plan*
- *Moving to a Cash Balance Plan*
- *Adding Additional Retirement Tiers*

Effect on Funded Status:

- *Little to no immediate effect*

Considerations:

- *Potential increase in cost due to actuarial funding method*
- *More conservative investment portfolio*
- *Potential increase in administrative costs*

MOVING TO A DEFINED CONTRIBUTION PLAN FOR NEW HIRES

Where defined benefit plans provide secure retirement benefits for life based on a formula, defined contribution plans provide retirement benefits based solely on the amount accumulated at retirement as a result of the member's decisions related to investing their own and the employer retirement contributions. Closing PERS to new hires and creating a defined contribution plan would provide reduced retirement security for members and shift the total burden of investment risk to the members. The employer would have no financial liability for the member after the member terminates service.

A pension plan should be evaluated as part of the overall compensation package for employees. The goals of a retirement system are to provide future retirement security to workers. Secondarily, a sound, dependable retirement can be used as a way to recruit and retain employees. Generally, the public sector pays lower salaries than the private sector but can offset those lower salaries with the promise of a comfortable, secure retirement. The loss of a guaranteed retirement along with lower salaries would make recruitment more challenging for public employers in Mississippi. PERS also offers members disability and survivor benefits. Defined contribution plans can be designed to provide these ancillary benefits in some manner; however, they typically do not provide these benefits beyond the amount accumulated in the member's account.

In the event PERS was closed to new members and a defined contribution plan was provided as the retirement plan for future employees, the current UAAL of $16.8 billion would remain a liability of the System and

ultimately the State of Mississippi (Miss. Code Ann. § 25-11-133 [2]). Individual employers would not only have to pay contributions to the new defined contribution plan (typically 5 to 6 percent of salaries), they would continue to pay their required contributions toward the UAAL of the closed defined benefit plan until the liability is paid in full (currently 13.75 percent, or higher if determined by the actuary and the associated funding policy) unless the State chose to pay the entire amount. Clearly, moving to a defined contribution plan not only does little to improve the current situation, but it could actually increase the burden on employers in the short term.

MOVING TO A HYBRID PLAN FOR NEW HIRES

A hybrid retirement plan combines elements of a traditional defined benefit plan and a defined contribution plan; however, costs for a hybrid plan are generally lower than traditional defined benefit plans because the defined benefit portion of hybrid plans provides a smaller retirement benefit for retirees. Employer contributions for the defined contribution portion of the hybrid plan are set by the plan sponsor and do not change based on market performance. A portion of the risk is shifted from the employer to the member. As with the move to a defined contribution plan, moving to a hybrid plan would not affect the UAAL. Employers would still be required to pay down the UAAL while paying contributions into the hybrid plan. According to NASRA, “While most states have chosen to retain their defined benefit (DB) plan by modifying required employer and employee contributions, restructuring benefits, or both, some have looked to so-called ‘hybrid’ plans that combine elements of traditional pensions and individual account plans.” *(Appendix P – NASRA Issue Brief: State Hybrid Retirement Plans)*

MOVING TO A CASH BALANCE PLAN FOR NEW HIRES

According to the U.S. Department of Labor Employee Benefits Security Administration, "a cash balance plan is a defined benefit plan that defines the benefit in terms that are more characteristic of a defined contribution plan. In other words, a cash balance plan defines the promised benefit in terms of a stated account balance. In a typical cash balance plan, a participant's account is credited each year with a 'pay credit' (such as 5 percent of compensation from his or her employer) and an 'interest credit' (either a fixed rate or a variable rate that is linked to an index such as the one-year Treasury bill rate). Increases and decreases in the value of the plan's investments do not directly affect the benefit amounts promised to participants. Thus, the investment risks are borne solely by the employer [i.e., any shortfall in investment returns could result in a funding gap for which the employer would be responsible]." In many plans, the member is permitted to receive a lump-sum distribution of the vested balance in his or her account upon retirement or separation from service at any age. These accounts are recordkeeping accounts only. The employers do not make contributions to accounts for individual members. Instead, the employer makes contributions to the plan's trust based on the funding requirements for the plan. The benefit provided by a cash balance plan reflects a combination of market experience and a guaranteed minimum return on members' cash balances. Each unique plan varies in terms of contribution rates, benefit accrual rates, vesting, etc. As with the earlier examples, changing to this type plan does not eliminate the current UAAL.

ADDING ADDITIONAL RETIREMENT TIERS FOR NEW HIRES

Historically, the Mississippi Legislature has implemented benefit changes by creating new retirement tiers for new hires. Currently, PERS has four retirement tiers *(Appendix B – PERS Retirement Tiers)*, but members of all four tiers pay the same contribution rate (9 percent of their salary). While creating a new tier with less benefits would lower the cost of the Plan, consideration would have to be made as to how much members in the new tier should be required to contribute. All members are already paying about 90 percent toward the cost of their own future retirement benefits (the normal cost), while the majority of employer contributions are used to pay down the UAAL. Further reduction in benefits for new hires would reduce the normal cost. If this occurred without a reduction in contribution for members in the new tier, these members would, in all probability, be forced to pay more than the normal cost of their future benefit. This means, they would not only receive smaller benefits, but a portion of their contributions would be used to pay the UAAL (i.e., the cost of the benefits of retirees and members in other tiers), which could have legal implications. *(Appendix C – Attorney General Opinion on Changes to State Contractual Obligations)*

Increasing Contributions, Changing the COLA

> **Options for Changing Contributions and Benefits:**
> - *Increasing Contributions*
> - *Changing the COLA*
>
> **Effect on Funded Status:**
> - *Little to no immediate effect*
> - *Positive longer-term effect*
>
> **Considerations:**
> - *Effect on employer/member*
> - *Potential negative employer normal cost*
> - *Potential litigation*

Miss. Code Ann. § 25-11-123 grants the authority to the PERS Board to set the member and employer contribution rates based on the liabilities of the System as determined by actuarial valuations. Through the years, PERS has increased both member and employer contributions when additional funds were required. (*Appendix N – Employer and Employee Rates of Contribution and Maximum Covered Earnings)* However, the Board has, historically, focused on the employer contribution for changes. The Mississippi Attorney General opined in 2010 that member rates can only be increased if accompanied by a "matching increase in benefits" and that there is no statutory authority to allow payment of the UAAL from member contributions. *(Appendix C – Attorney General Opinion on Changes to State Contractual Obligations)* The Performance Evaluation and Experience Review (PEER) Committee of the Mississippi Legislature in 2012 reviewed the state's ability to modify benefits for current retirees and members *(Appendix V – Additional Resources and Reading)* and found that the State of Mississippi becomes obligated to employees who become members of PERS upon their employment. As such, any changes to benefits for existing members and current retirees would likely face a legal challenge and the courts would decide whether the changes would stand, as occurred in other states. *(Appendix Q – Moody's: Pension Reform Flexibility Affects Government Credit Quality)*

INCREASING MEMBER CONTRIBUTIONS

In a defined benefit plan, contribution rate increases are often necessary to prevent or slow the growth of the UAAL; however, increasing the member contribution rate also means balancing that increase with what members pay toward the normal cost (i.e., the total cost of a member's benefit earned in a given year). A shared responsibility, the normal cost demonstrates both the employer's and the member's financial commitment toward funding the member's retirement benefit. The normal cost for the PERS plan is 10.47 percent of payroll. With the current contribution rates, employers are contributing less than 1.5 percent to the member's benefit with the additional 13.75 percent of the employer contribution directed toward the UAAL. That means active members are currently paying almost 86 percent of the cost of their benefit, while employers contribute the remaining 14 percent. Increasing member contributions in excess of the normal cost would result in negative employer normal cost.

In September 2017, the National Association of State Retirement Administrators (NASRA) published an issue brief detailing member contributions across public pension plans. *(Appendix R – NASRA Issue Brief: Employee Contributions to Public Pension Plans)* NASRA found that the median member contribution rate for plans that (like PERS) also participate in Social Security was 6 percent. For plans without Social Security coverage, the median member contribution rate was 8 percent. PERS' member contribution rate of 9 percent well exceeds the average 6 percent rate for plans participating in Social Security and even exceeds the 8 percent average rate for those not participating in Social Security. The average PERS member earns a salary of $39,626 per year, paying mandatory contributions of 9 percent to PERS and 6.2 percent to Social Security. For a state-sponsored retirement plan that does not include retiree health insurance and requires contributions to Social Security, PERS'

member contribution rate is one of the highest in the nation. An increase in member contributions would mean members would pay the entire normal cost for their benefit and employers would make no contributions toward benefits for members who are providing services today.

INCREASING EMPLOYER CONTRIBUTIONS

Increasing employer contributions has a greater effect on plan funding than increasing member contributions. When an active member terminates employment and requests a refund from PERS, the member receives a refund of all member contributions paid to PERS, plus interest. Employer contributions, on the other hand, remain invested with the System and help reduce the UAAL. Employers have paid 15.75 percent of payroll since 2013 *(Appendix D – PERS Contribution Rate History*) with 13.75 percent going toward the UAAL. While employer contributions to PERS represent less than 5 percent of the State's annual expenses, this 15.75 percent of payroll can be significant to individual employers. As budgets continue to shrink across the state, some employers may find it challenging to increase the employer contribution rate while maintaining the necessary level of service to the public. Just as with the member contributions, the question of affordability of additional employer rate increases is a critical consideration.

CHANGING THE COST-OF-LIVING ADJUSTMENT

First authorized by the Mississippi Legislature in 1966, the cost-of-living adjustment (COLA) was instituted to help ensure that retirees' purchasing power remain relatively the same no matter how long they may live or how quickly prices might rise. All PERS retirees and beneficiaries who have been receiving benefit payments for at least one full fiscal year (July 1 through June 30) are eligible to receive a COLA. The current PERS' COLA is a guaranteed 3 percent of the annual base retirement benefit multiplied by the number of full fiscal years in retirement up to age 55 and 3 percent compounded at age 55. For those hired on or after July 1, 2011, compounding begins at age 60. Since first instituted, the COLA has undergone several modifications by the Legislature to bring it to its current structure. *(Appendix S – PERS COLA Check Rate History and Appendix T – Changes in PERS Retirement COLA Law)*

According to the National Association of State Retirement Administrators' 2017 Issue Brief: Cost-of-Living Adjustments *(Appendix U – NASRA Issue Brief: Cost-of-Living Adjustments)*, COLAs can be structured in a number of different ways: Automatic versus ad hoc, simple versus compounding, inflation-based, performance-based, etc. The NASRA Issue Brief also reports that, since 2009, 17 states have changed the COLA affecting current retirees, seven states changed the COLA for current active and future employees, and seven states changed the COLA structure for future employees. The legality of these modifications in several states has been or is currently being challenged in the courts.

While the base retirement benefit is the most expensive element of a defined benefit, the COLA is also a significant contributor to the total cost of benefits. Therefore, any changes to the COLA for current and/or future retirees would affect the overall funding of the Plan. However, changing the COLA for current and/or future retirees would likely result in legal challenges for changing promised benefits and, thus, breaking the employment contract. *(Appendix C – Attorney General Opinion on Changes to State Contractual Obligations)* Changing benefits for those who are already retired and receiving benefits from PERS would also have an immediate effect on the 102,260 retirees and beneficiaries who depend on PERS retirement benefits each

month. As of June 30, 2017, the average annual PERS benefit including the COLA was $23,223. The COLA comprises more than 25 percent of that benefit, and without the COLA, the average annual benefit would be about $17,473. However, changing or restructuring the COLA could be done in a variety of ways, each resulting in different reductions in the UAAL and different effects on members and retirees. *(Appendix U – NASRA Issue Brief: Cost-of-Living Adjustments)*

Changing the COLA Calculation

A reduction of the COLA for all current and future retirees would affect plan liabilities and change the projected funded status of the plan considerably. The actuary has provided data indicating that, by elimination of the 3 percent compounding of the COLA on a prospective basis and providing a 3 percent simple COLA for all current and future retirees, the 2042 projected UAAL would be reduced by approximately $9.4 billion, and the 2042 projected funded status would be 84.5 percent. With this option, retirees would still get a COLA every year, but the amount of that COLA would grow less rapidly from year to year.

Implementing COLA Holiday

A COLA holiday would maintain retirees' attained COLA payment amounts for a specified number of years before additional increases would occur. A COLA holiday for one year would reduce the 2042 projected UAAL by approximately $3.5 billion, and the 2042 projected funded status would be 75.6 percent. A three-year holiday would reduce the 2042 projected UAAL by approximately $10.2 billion, and the 2042 projected funding ratio would be 86.4 percent. A COLA holiday could be implemented one time and affect only current retirees, or instituted every so many years prospectively and affect all current and future retirees.

Comparison Chart of Options for Changing Plan Structure

Options for Change	Effect on New Plan Retirees	Effect on New Plan Members		Effect on Employers		Effect on Funded Status	Plan Considerations
Moving from Defined Benefit (DB) to Defined Contribution (DC) Plan	**NEGATIVE** Reduced retirement security	**POSITIVE** Plan portability	**NEGATIVE** No guaranteed benefit, benefit based on accumulated contributions plus investment income — Assume investment risk	**POSITIVE** Fixed contribution rate — No investment risk or liability for member upon termination — Employee recruitment and retention	**NEGATIVE** Employee recruitment and retention	**EVENTUAL** Little to no immediate effect — UAAL funding needs would continue for decades until all legacy members and their beneficiaries died	Does not address funding the UAAL — Effect on employee recruitment/retention — More conservative actuarial funding method — More conservative investment portfolio — Potential increase in administrative costs
Moving to Hybrid Plan	**NEGATIVE** Reduced benefits	**POSITIVE** Guaranteed benefit — Plan portability	**NEGATIVE** Assume investment risk	**POSITIVE** Fixed contribution rate — No investment risk — Employee recruitment and retention	**NEGATIVE** Employee recruitment and retention	**EVENTUAL** Little to no immediate effect — UAAL funding needs would continue for decades until all legacy members and their beneficiaries died	Does not address funding the UAAL — Effect on employee recruitment/retention — More conservative actuarial funding method — More conservative investment portfolio — Potential increase in administrative costs
Moving to Cash Balance Plan	**NEGATIVE** Reduced benefits	**POSITIVE** No investment risk, protected benefits (with limitations) — Degree of plan portability		**POSITIVE** Employee recruitment and retention	**NEGATIVE** Employee recruitment and retention — Assumes investment risk	**EVENTUAL** Little to no immediate effect — UAAL funding needs would continue for decades until all legacy members and their beneficiaries died	Does not address funding the UAAL — Effect on employee recruitment/retention — Employer assumes investment risk — Potential increase in administrative costs
Adding Additional Retirement Tiers	**NEGATIVE** Reduced benefits	**NEGATIVE** Without contribution decrease, members could end up unjustly paying toward cost of benefits for past members		**NEGATIVE** Employee recruitment and retention		**EVENTUAL** Little to no immediate effect — UAAL funding needs would continue for decades until all legacy members and their beneficiaries died	Does not address funding the UAAL — Potential litigation — Intergenerational fairness

Comparison Chart of Increasing Contributions, Changing the COLA

Change Factors	Effect on Current Retirees	Effect on Current Members	Effect on Employers	Effect on Funded Status	Plan Considerations
Increasing Member Contributions	**NONE**	**NEGATIVE** Reduced take-home pay	**NEGATIVE** Employee recruitment and retention	**EVENTUAL** Little to no immediate effect; longer term effect due to receipt of additional cash over time	Members could end up paying for more than normal cost,
Increasing Employer Contributions	**NONE**	**NONE**	**NEGATIVE** Reduces available funds for other budget areas	**EVENTUAL** Little to no immediate effect; longer term effect due to receipt of additional cash over time — Because money stays in plan even when members refund, it has greater effect on funded status than member contribution increase	Affordability for employer
Changing the COLA	**NEGATIVE** Would reduce expected benefit	**NEGATIVE** Could reduce expected benefit	**NONE**	**EVENTUAL** Reduces current and future liabilities — Decreases cash flow from plan today and for future	Potential litigation

Appendices

See corresponding Appendices document for appendices A through V.

Public Employees’ Retirement System of Mississippi
429 Mississippi Street, Jackson, MS 39201-1005
www.pers.ms.gov