January 31, 2019

Decisions on Teachers' and State Employees' Retirement System (TSERS)

Issue. The most recent TSERS actuarial valuation report documents the recommended Actuarially Determined Employer Contribution (ADEC) rate for the fiscal year ending in 2020. The ADEC for FY 2020 is the mathematical baseline contribution rate that would fund the system using the Board's assumptions and methods adopted on January 21, 2016 (and April 26, 2018 with respect to the rate-of-return assumption including direct rate smoothing of that change). It uses plan population and asset information as of December 31, 2017.

The ADEC rate for FY 2020 is 12.97 percent of covered pay. This ADEC is greater than the appropriated employer contribution rate in the state budget for FY 2019, which is 12.29 percent of covered pay.

Further, the Board adopted the *Employer Contribution Rate Stabilization Policy (ECRSP)* on January 21, 2016, a policy that serves to provide predictable incremental increases in the employer contribution rate to ameliorate any potential adverse experience. Under the ECRSP, contributions will be 0.35 percent of covered pay greater than the appropriated contribution from the prior fiscal year, with the following bounds:

1. The ECRSP rate may not be less than the ADEC rate, and
2. The ECRSP rate may not be greater than a contribution rate determined using the same assumptions used to calculate the ADEC but with a discount rate equal to the long-term Treasury bond yield.

The appropriated employer contribution rate for FY 2019 is 12.29 percent. The ECRSP would indicate an employer contribution rate of 12.64 percent for FY 2020 (equal to 12.29 percent plus 0.35 percent), subject to the lower bound of the ADEC rate (12.97 percent) and the upper bound equal to the ADEC-type calculation using a long-term Treasury discount rate (approximately 68.46 percent). Therefore, the recommended employer contribution rate is equal to the ADEC, 12.97 percent of covered pay, which is the lower bound of the allowable contribution rates pursuant to the terms of the ECRSP. The state budget allocated from the general fund would need to increase by $72.4 million to meet this recommended contribution rate for the fiscal year ending in 2020.

Cost of Living Adjustment (COLA). Based on the actuarial losses recognized in this December 31, 2017, valuation, no Cost-of-Living Adjustment (COLA) effective July 1, 2019, could be funded by actuarial gains. In their presentation to the Board in October 2018, Cavanaugh Macdonald Consulting LLC estimated that a potential COLA effective July 1, 2020, could be funded by actuarial investment gains following the December 31, 2018, valuation as follows:

1. If calendar year 2018 market value returns exceed 8.0 percent (or about $5.5 billion for TSERS), the plan is estimated to have an actuarial investment gain (rather than a loss) and a COLA could be considered; and
2. If calendar year 2018 market value returns exceed 11.5 percent (or about $8.0 billion for TSERS), the plan is estimated to have an actuarial investment gain (rather than a loss) and such gain may be enough to provide a one percent recurring COLA.

These estimates assume no other offsetting actuarial losses in the December 31, 2018, valuation.

Policy Option for Consideration by the Board of Trustees. Recommend the legislature increase the appropriation to 12.97 percent, to cover the "required employer contribution" described in G.S. § 135-8(d)(3a). The additional appropriation needed from the general fund would be $72.4 million. This would consist of an increase of $105.5 million in appropriated recurring funds, and a decrease of $33.1 million in non-recurring funds.[1] ***Staff Recommendation.***

[1] Effective July 1, 2018, the employer contribution rate for TSERS increased from 11.98 percent to 12.29 percent of covered pay. The appropriations related to this increase (0.31 percent of pay) were non-recurring. Therefore, to provide a recurring appropriation equal to 12.97 percent of pay, the recurring appropriation would need to increase from 11.98 to 12.97 percent of pay, and the non-recurring appropriation would no longer be necessary.

As illustrated in the footnotes to the "Summary" page of this document, the approximate dollar amounts for appropriations effective July 1, 2019, are estimated using the "Estimated State Payrolls for Retirement Appropriations Purposes for the 2018 Session of the North Carolina General Assembly," set forth in a letter from the Executive Director of the Retirement Systems to the State Budget Director and the Director of the Fiscal Research Division of the General Assembly, dated April 17, 2018. For example, the approximate increase in recurring appropriations from the General Fund ($105.5 million) is estimated as $10,652,418,000 (the TSERS payroll from the aforementioned memo) times 0.99 percent (12.97 percent minus 11.98 percent). Once a similar payroll letter is finalized for the 2019 Session of the General Assembly, the dollar amounts would change in accordance with the new estimated payroll amounts.

Decisions on Consolidated Judicial Retirement System (CJRS)

Issue. The most recent valuation report shows the recommended Actuarially Determined Employer Contribution (ADEC) rate for the fiscal year ending in 2020. The ADEC for FY 2020 is the mathematical baseline contribution rate that would fund the system using the Board's assumptions adopted on January 21, 2016 (and April 26, 2018 with respect to the rate-of-return assumption including direct rate smoothing of that change). It uses plan population and asset information as of December 31, 2017.

The ADEC rate for FY 2020 is 33.60 percent of covered pay for the fiscal year ending in 2020, which is less than the state budget of 33.86 percent for the fiscal year ending in 2019. The General Assembly could lower the contribution rate to the actuarially determined contribution without negatively impacting the funding of the plan. Therefore the state budget allocated from the general fund may decrease by $192,514 to meet the new ADEC for the fiscal year ending in 2020.

It is likely that the ADEC rate for FY 2021 will increase from the rate for FY 2020. Factors in this increase will include the negative investment returns during calendar year 2018 (compared to the assumed return of seven percent) as well as a scheduled increase to the rate of 0.97 percent of pay per year through FY 2022 as a result of direct rate smoothing of the change to the rate of return assumption.

Policy Option for Consideration by the Board of Trustees. Recommend the legislature set an appropriation equal to at least 33.60 percent of covered pay, representing the sum of the "normal contribution" and the "accrued liability contribution" as described in G.S. § 135-69. The appropriation from the general fund could decrease by up to $192,514[2] based on the rate of 33.60 percent of pay, or the appropriation could remain the same. ***Staff Recommendation.***

[2] This would consist of an increase of $251,750 in appropriated recurring funds and a decrease of $444,264 in non-recurring funds.

Decisions on Legislative Retirement System (LRS)

Issue. The most recent valuation report shows the recommended Actuarially Determined Employer Contribution (ADEC) rate for the fiscal year ending in 2020. The ADEC for FY 2020 is the mathematical baseline contribution rate that would fund the system using the Board's assumptions adopted on January 21, 2016 (and April 26, 2018 with respect to the rate-of-return assumption including direct rate smoothing of that change). It uses plan population and asset information as of December 31, 2017.

The ADEC rate for FY 2020 is 26.46 percent of covered pay for the fiscal year ending in 2020 is greater than the state budget of 22.39 percent of covered pay for the fiscal year ending in 2019. Therefore the state budget allocated from the general fund will need to increase by $147,334 to meet the new ADEC for the fiscal year ending in 2020.

It is likely that the ADEC rate for FY 2021 will increase from the rate for FY 2020. Factors in this increase will include the negative investment returns during calendar year 2018 (compared to the assumed return of seven percent) as well as a scheduled increase to the rate of 0.82 percent of pay per year through FY 2022 as a result of direct rate smoothing of the change to the rate of return assumption.

Policy Option for Consideration by the Board of Trustees. Recommend the legislature increase the appropriation to 26.46 percent of covered pay, representing the sum of the "normal contribution" and the "accrued liability contribution" as described in G.S. § 120-4.20. The additional appropriation needed from the General Fund would be $147,334[3]. ***Staff Recommendation.***

[3] This would consist of an increase of $171,226 in appropriated recurring funds and a decrease of $23,892 in non-recurring funds.

Decisions on the Disability Income Plan of North Carolina (DIPNC)

Issue. The most recent valuation report shows the recommended Actuarially Determined Contribution (ADC) rate for the fiscal year ending in 2020. The ADC for FY 2020 is the mathematical baseline contribution rate that would fund the system using the Board's assumptions adopted on January 21, 2016. It uses plan population and asset information as of December 31, 2017.

The ADC rate for FY 2020 is 0.10 percent of state payroll for the fiscal year ending in 2020. This is less than the fiscal year 2019 contribution rate of 0.14 percent. The reduction is primarily related to the effect of Session Law 2018-52, which eliminated the plan's reimbursement of employers during the second six months of short-term disability for benefits beginning on or after July 1, 2019. The General Assembly could lower the contribution rate to the ADC without negatively impacting the funding of the plan. Therefore the state budget allocated from the general fund may decrease by approximately $4.7 million to meet the new ADC for the fiscal year ending in 2020.

Benefit enhancements are not being considered at this time.

Policy Option for Consideration by the Board of Trustees. Recommend that the General Assembly reduce the employer contribution rate from 0.14 percent to at least 0.10 percent of covered pay. The appropriation from the general fund would decrease by $4.7 million based on the contribution rate of 0.10 percent. ***Staff Recommendation***.

Decisions on the North Carolina National Guard Pension Fund (NCNGPF)

Issue. The most recent valuation report shows the recommended Actuarially Determined Employer Contribution (ADEC) for the fiscal year ending in 2020. The ADEC for FY 2020 is the mathematical baseline contribution amount that would fund the system using the Board's assumptions adopted on January 21, 2016 (and April 26, 2018 with respect to the rate-of-return assumption including direct rate smoothing of that change). It uses plan population and asset information as of December 31, 2017. The Board has not adopted a State Contribution Rate Stabilization Policy for NCNGPF.

The ADEC amount of $9,031,715 for the fiscal year ending in 2020 is less than the state budget of $9,071,933 for the fiscal year ending in 2019. Therefore the state budget allocated from the general fund could decrease by $40,218 to meet the ADEC for the fiscal year ending in 2020. Funding in addition to the ADEC amount would improve NCNGPF's funded position, which is more than 15 percentage points less than that of any of the other NC Retirement Systems.

Policy Options for Consideration by the Board of Trustees. Three policy options are available to the Board:

- **Option 1.** Recommend the legislature decrease the appropriation to $9,031,715. The general fund appropriation could decrease by $40,218 from the fiscal year 2019 level.

- **Option 2.** Recommend the legislature increase the appropriation to $11,031,715. Based on analysis from Cavanaugh Macdonald Consulting, this increase would provide for an accelerated payment schedule that would pay off the unfunded liability on this pension plan in about six years instead of the current 12-year schedule, assuming that:

    - The additional $2 million is appropriated each year until the unfunded liability is paid off, as a means to more rapidly improve the funded status;
    - All actuarial assumptions are met;
    - No further benefit increases are granted; and
    - The additional $2 million in contributions each year and earnings thereon are excluded in future years when estimating the unfunded actuarial accrued liability that must be amortized.

  The additional appropriation needed from the general fund would be $1,959,782. The additional contribution, relative to Option 1, would improve the funded percentage by more than one percent.

- **Option 3.** Recommend the legislature increase the appropriation to $11,031,715, with the same effects on plan funding as outlined for Option 2. In addition, direct Retirement System Division staff to develop a proposed State Contribution Rate Stabilization Policy (SCRSP) for the fund, which would include both a multi-year contribution pattern and conditions under which the Board would recommend benefit improvements. The SCRSP would ensure that the Board's intentions with regard to funding recommendations in excess of the ADEC are clear to the General Assembly (for example, funding to reduce the unfunded liability, versus funding to support benefit improvements). ***Staff Recommendation.***

Decisions on the Death Benefit Plans

Death Benefit Plan for Members of TSERS

Issue. The actuarial valuation of the Death Benefit Plan for members of TSERS as of December 31, 2017, shows that the plan has liabilities of $173,589,539. Against these liabilities, the plan has current assets of $44,180,266. Prospective contributions by the state based on a contribution rate equal to 0.16 percent of covered pay have a present value of $242,701,780. The present and prospective assets, which amount to $286,882,046, exceed the liabilities of $173,589,539 by $113,292,507.

Policy Option for Consideration by the Board of Trustees. Recommend no change to the current contribution rate or benefit structure. ***Making no recommendation does not require a vote of the Board.***

Separate Insurance Benefit Plan for Law Enforcement Officers

Issue. The actuarial valuation of the Separate Insurance Benefits Plan for Law Enforcement Officers as of December 31, 2017, shows that the plan has liabilities of $35,897,914. Against these liabilities, the plan has current assets of $56,229,321. Since current assets are more than adequate to support the benefits, the contributions to the plan could continue to be suspended or benefits could be improved.

Policy Option for Consideration by the Board of Trustees. Recommend no change to the current benefit structure and do not request additional appropriations. ***Making no recommendation does not require a vote of the Board.***

Retirees' Contributory Death Benefit Plan

Issue. Benefits payable under the Retirees' Contributory Death Benefit Plan are supported entirely by the contributions of the participants and the investment earnings on those contributions. The actuarial valuation as of December 31, 2017, shows that the plan has liabilities of $1,223,715,925. Against these liabilities, the plan has current assets of $251,994,986. Prospective contributions of participants eligible for benefits have a value of $945,074,704. The total present and prospective benefits amount to $1,197,069,690, which are less than the liabilities by $26,646,235. Based on the assumptions of the actuarial valuation, the current assets and contribution rates of the plan are not adequate with the current plan provisions and contribution rates. Further consideration could be given based on the results of future actuarial valuations and experience studies.

Policy Option for Consideration by the Board of Trustees. Recommend no change to the current premiums, interest rate for return of contributions, or benefit structure. ***Making no recommendation does not require a vote of the Board.***

Summary of Alternatives
For Presentation to the 2019 General Assembly

Retirement System	Employer Contributions	Enhance Benefits
Teachers' and State Employees' Retirement System	Increase employer contribution rate[1] by 0.68 percent for a cost in the first year to the general fund of $72,436,442 and to the highway fund of $2,099,670	No undistributed gain available for benefit enhancements
Consolidated Judicial	Reduce employer contribution rate[2] by 0.26 percent for a reduction in the first year's general fund appropriation of $192,514	No undistributed gain available for benefit enhancements
Legislative	Increase employer contribution rate[3] by 4.07 percent for a cost in the first year to the general fund of $147,334	No undistributed gain available for benefit enhancements
Disability Income Plan	Decrease employer contribution rate by 0.04 percent of payroll for a reduction in contributions totaling approximately $7.0 million in the first year	N/A
National Guard	Increase employer contribution[4] by $1,959,782	No undistributed gain available for benefit enhancements
Death Benefit Plans	No change	No change

<u>FOOTNOTES</u>:

[1]The total appropriated employer contribution rate for fiscal year ending June 30, 2019, is 12.29 percent. The estimated payrolls for the 2018 Session of the General Assembly were $10,652,418,000 for the general fund and $308,775,000 for the highway fund.

[2]The total appropriated employer contribution rate for fiscal year ending June 30, 2019 is 33.86 percent. The estimated payroll for the 2018 Session of the General Assembly was $74,044,000.

[3]The total appropriated employer contribution rate for fiscal year ending June 30, 2019 is 22.39 percent. The estimated payroll for the 2018 Session of the General Assembly was $3,620,000.

[4]The total appropriated employer contribution for fiscal year ending June 30, 2019 is $9,071,933.

Proposed Motion Language
Corresponding to Staff Recommendations

TSERS:

Move to recommend that the legislature increase the appropriation to 12.97 percent of covered pay.

CJRS:

Move to recommend that the legislature set an appropriation equal to at least 33.60 percent of covered pay.

LRS:

Move to recommend that the legislature increase the appropriation to 26.46 percent of covered pay.

DIPNC:

Move to recommend that the General Assembly reduce the employer contribution rate from 0.14 percent to at least 0.10 percent of covered pay.

NCNGPF:

Move to recommend that the legislature increase the appropriation to $11,031,715. In addition, direct Retirement System Division staff to develop a proposed State Contribution Rate Stabilization Policy for the fund, which would include both a multi-year contribution pattern and conditions under which the Board would recommend benefit improvements.