January 26, 2023

Summary of Funding/Benefits Alternatives for Recommendations to Legislature for Fiscal Year Ending in 2024

Teachers' and State Employees' Retirement System (TSERS) Board of Trustees

Executive Summary

This document summarizes alternatives for the Board's funding and benefits recommendations to the North Carolina General Assembly for its 2023 session. This includes alternatives for funding during the fiscal year ending in 2024.

The current State budget law covers the biennium for the fiscal years ending in 2022 and 2023. In 2023, the General Assembly will enact a State budget for the fiscal years ending in 2024 and 2025. Retirement-related costs will be informed by the most recent annual valuation reports from the consulting actuaries, published in October 2022. These costs may be adjusted for the costs of any benefit changes enacted by the General Assembly.

The Board may make recommendations to the General Assembly regarding the appropriate funding levels for currently-promised benefits for the fiscal year ending in 2024, based on the actuarial valuation results. The Board also may recommend changes in benefits, as well as changes in funding that would be connected to benefit change recommendations.

Staff believes that the following are substantive issues for the Board to consider:

(1) Whether to recommend a one-time or permanent increase to retiree benefits already in payment in the Teachers' and State Employees' Retirement System (TSERS), Consolidated Judicial Retirement System (CJRS), and Legislative Retirement System (LRS), along with additional funding to provide for the increase.

(2) Whether to recommend a benefit improvement under the North Carolina National Guard Pension Fund (NCNGPF), along with additional funding if necessary to provide for the increase.

(3) Possible recommended program design changes to address the projected actuarial shortfall in the Retirees' Contributory Death Benefit Plan. This is addressed in a separate agenda item of today's meeting.

The remainder of this memo provides details regarding each Retirement System.

TSERS

Issue. G.S. 135-8(d)(3a) requires that employer contributions to TSERS in each year "shall not be less than the sum of the rate per centum known as the actuarially determined employer contribution [ADEC] rate… as adjusted higher under a contribution rate policy adopted by the Board of Trustees and known as the 'required employer contribution' rate." G.S. 135-8(d)(2a) requires that the ADEC rate "shall be calculated annually by the actuary using assumptions and a cost method approved by the Actuarial Standards Board of the American Academy of Actuaries and selected by the Board of Trustees."

In addition to the contributions described below, G.S. 143C-4-10(e) requires an increased contribution rate associated with appropriations made through the prior year to the Unfunded Liability Solvency Reserve. This is called the "ULSR contribution" for purposes of this memo. For example, an allocation of $40 million to the ULSR for the fiscal year ending in 2022 resulted in a TSERS ULSR contribution of 0.05% of covered pay for the fiscal year ending in 2023. The dollar amount allocated to the ULSR for the fiscal year ending in 2023 was $10 million (comparable to $40 million in the prior year), which would be the basis of any ULSR contribution the legislature may determine for the fiscal year ending 2024. All recommendations described in this section are prior to any addition of the ULSR contribution.

1. ADEC Prior to Contribution Rate Policy

The most recent TSERS actuarial valuation report documents the recommended employer contribution rate for the fiscal year ending in 2024. The "ADEC Prior to Contribution Rate Policy" is the mathematical contribution rate that would fund the system using the Board's assumptions and methods adopted on January 28, 2021, and plan population and asset information as of December 31, 2021. The "ADEC Prior to Contribution Rate Policy" for the fiscal year ending in 2024 is 12.39% of covered pay.

2. Adjustment for Employer Contribution Rate Stabilization Policy (ECRSP)

The Board adopted the current ECRSP on April 29, 2021. This policy serves to provide predictable incremental increases in the employer contribution rate to ameliorate any potential adverse experience. Under the ECRSP, the annual appropriation recommendation for the fiscal year ending in 2024 will be the greater of (A) or (B) below. The greater of the two is 16.44%.[1]

(A) the rate from parts (1) and (2) above, which is 12.39%.
(B) 0.35% greater than the Board's recommendation from the fiscal year ending in 2023, disregarding one-time items. The Board's recommendation for the fiscal year ending in 2023, disregarding one-time items, was 16.09%. Therefore, the rate under (B) is 16.09% + 0.35% = 16.44%.

This adjusted ADEC rate of 16.44% of pay is less than the appropriated employer contribution rate for the fiscal year ending in 2023 from S.L. 2022-74 (House Bill 103), Section 39.19, which was 17.38%. The 17.38% consisted of 16.09% on a recurring basis and 1.29% on a non-recurring basis. Therefore, while the total amount appropriated from the General Fund could decrease by $107.6 million while still meeting the requirements of the ECRSP for the fiscal year

[1] The ECRSP also provides that the recommended rate should be no greater than the ADEC if it were determined using a discount rate equal to the yield on 30-year Treasury securities, as adjusted for legislative benefit changes. According to the most recent actuarial valuation report, this upper bound would have been approximately 92.11%.

ending in 2024, this would consist of an increase of $40.1 million in recurring General Fund appropriations, and a decrease of $147.6 million in non-recurring General Fund appropriations.

Cost of Living Adjustment (COLA). The consulting actuaries' report from October 2022 shows that during calendar year 2021, the investment gains recognized on an actuarial basis were $2.062 billion, commensurate with the cost of a 3.86% permanent COLA. The report cautioned that in making any recommendation, the Board should consider the question, "Is the investment gain permanent?" The report also observed that despite the actuarial investment gains recognized in 2021, "the unfunded liability of TSERS remains significant at $9.2 billion," and that "[year-to-date] 2022 investment returns have been far below the assumed return."

The report summarized the costs of permanent COLAs and one-time supplements as follows. (Italicized numbers are filled in by RSD staff actuary based on consulting actuary's report.)

Permanent COLA Costs

Percent COLA	None	1.00%	2.00%	*3.00%*	3.86%
Increase in Unfunded Liab. ($M)	$0	$533	$1,067	*$1,600*	$2,059
Increase in Employer Contribution as Percent of Pay for 12 Years	0.00%	0.41%	0.82%	*1.23%*	1.58%
Increase in Recurring General Fund Appropriation for 12 Years ($M)	*$0.0*	*$46.9*	*$93.8*	*$140.8*	*$180.8*
Increase in Recurring Costs (All Sources) for 12 Years ($M)	*$0.0*	*$72.3*	*$144.6*	*$216.9*	*$278.6*

One-Time Supplement Costs

Percent of One-Time Supplement	None	1.00%	*2.00%*	*3.00%*	*4.00%*
Increase in Unfunded Liab. ($M)	$0	$51	*$102*	*$154*	*$205*
Increase in Employer Contribution as Percent of Pay for 1 Year	0.00%	0.30%	*0.60%*	*0.90%*	*1.20%*
Increase in Non-Recurring General Fund Appropriation for 1 Year ($M)	*$0.0*	*$34.3*	*$68.7*	*$103.0*	*$137.3*
Increase in Non-Recurring Costs (All Sources) for 1 Year ($M)	*$0.0*	*$52.9*	*$105.8*	*$158.7*	*$211.6*

In evaluating whether the investment gains of $2.062 billion recognized during 2021 are "permanent," the Board may consider that the estimated investment experience during calendar year 2022, on a market value basis, was a loss of $14.7 billion. This is the staff actuary's estimate based on an estimated percentage return of negative 10.4%, as compared to the assumed return of positive 6.5%. These losses will be recognized into actuarial figures over the coming years. In projections presented today, the consulting actuary estimates that the 2022 investment losses will require continued increases in employer contribution rates through the fiscal year ending 2029 (beyond the current ECRSP period) to fund already-promised benefits, even if the assumed return of positive 6.5% is achieved in each year 2023 and later. The cost of any COLA or one-time supplement, as determined by the above tables, would be added onto these anticipated contribution rate increases.

Policy Options for Consideration by the Board of Trustees.

- The Board could recommend that the legislature set a contribution rate of 16.44% to cover the "required employer contribution" for already-promised benefits pursuant to G.S. 135-8(d)(3a). The recurring amount appropriated from the General Fund would need to increase by $40.1 million from the amount appropriated for the fiscal year ending in 2023, but the non-recurring amount could decrease by $147.6 million, for a decrease in the total General Fund appropriation equal to $107.6 million.

- Alternately, the Board could recommend that the General Assembly provide a permanent COLA or a one-time supplement, with an increased funding recommendation pursuant to the tables in the “COLA” section above.

<u>Consolidated Judicial Retirement System (CJRS)</u>

Issue. G.S. 135-66(d) provides that an actuarially determined employer contribution (ADEC) rate "shall be calculated annually by the actuary using assumptions and a cost method approved by the Actuarial Standards Board of the American Academy of Actuaries and selected by the Board of Trustees." G.S. 135-66(e) provides that "the Board of Trustees may adopt a contribution policy that would recommend a contribution not less than the [ADEC]." G.S. 135-66(f) provides that "the recommended employer contribution rate by the Board of Trustees each year shall not be less than the [ADEC]."

The most recent valuation report shows the ADEC rate for the fiscal year ending in 2024. The ADEC is the mathematical contribution rate that would fund the system using the Board's assumptions adopted on January 28, 2021, and plan population and asset information as of December 31, 2021. It consists of a normal contribution rate and an accrued liability contribution rate. The ADEC for the fiscal year ending in 2024 is 32.84% of covered pay.

This ADEC rate of 32.84% of pay is less than the appropriated employer contribution rate for the fiscal year ending in 2023 from S.L. 2022-74 (House Bill 103), Section 39.19, which was 39.95%. The 39.95% consisted of 37.01% on a recurring basis and 2.94% on a non-recurring basis. Therefore, the total amount appropriated from the General Fund could decrease by $5.9 million while still meeting the ADEC requirements for the fiscal year ending in 2024. This would consist of a decrease of $3.5 million in recurring General Fund appropriations, and a decrease of $2.4 million in non-recurring General Fund appropriations.

Cost of Living Adjustment (COLA). Should the Board recommend a COLA or one-time supplement under TSERS, the estimated cost of a similar recommendation for CJRS would be as follows.

- For each 1% permanent COLA, the unfunded liability would increase by $5.9 million and the ADEC would increase by 0.89% of pay ($0.7 million per year) for 12 years. Source: Valuation report published October 2022 (p. 29).
- For each 1% one-time supplement, the ADEC would increase by 0.66% ($0.5 million) for one year. Source: Actuarial Note on One-Time Supplements, 2/11/2022.

Policy Options for Consideration by the Board of Trustees.

- The Board could recommend that the legislature set a contribution rate of 32.84% of pay to cover the sum of the "normal contribution" and the "accrued liability contribution" for already-promised benefits, as described in G.S. 135-69. The recurring amount appropriated from the General Fund could decrease by $3.5 million from the amount appropriated for the fiscal year ending in 2023, and the non-recurring amount could decrease by $2.4 million, for a decrease in the total General Fund appropriation equal to $5.9 million.
- Alternately, the Board could recommend that the General Assembly provide a permanent COLA or a one-time supplement in conjunction with similar recommendations for TSERS, with an increased funding recommendation pursuant to the "COLA" section above.

Legislative Retirement System (LRS)

Issue. G.S. 120-4.20(a) provides that "the State shall contribute annually an amount equal to the sum of the 'normal contribution' and the 'accrued liability contribution.'" G.S. 120-4.20(e) provides that "the normal contribution rate and the accrued liability contribution rate shall be determined after each annual valuation of the Retirement System and shall remain in effect until a new valuation is made."

The most recent valuation report shows the ADEC rate for the fiscal year ending in 2024. The ADEC is the mathematical contribution rate that would fund the system using the Board's assumptions adopted on January 28, 2021, and plan population and asset information as of December 31, 2021. It consists of a normal contribution rate and an accrued liability contribution rate. The ADEC for the fiscal year ending in 2024 is 18.61% of covered pay.

This ADEC rate of 18.61% of pay is less than the appropriated employer contribution rate for the fiscal year ending in 2023 from S.L. 2022-74 (House Bill 103), Section 39.19, which was 24.91%. The 24.91% consisted of 22.05% on a recurring basis and 2.86% on a non-recurring basis. Therefore, the total amount appropriated from the General Fund could decrease by $228,000 while still meeting the ADEC requirements for the fiscal year ending in 2024. This would consist of a decrease of $125,000 in recurring General Fund appropriations, and a decrease of $104,000 in non-recurring General Fund appropriations.

Cost of Living Adjustment (COLA). Should the Board recommend a COLA or one-time supplement under TSERS, the estimated cost of a similar recommendation for LRS would be as follows.

- For each 1% permanent COLA, the unfunded liability would increase by $207,000 and the ADEC would increase by 0.70% of pay ($25,000 per year) for 12 years. Source: Valuation report published October 2022 (p. 20).
- For each 1% one-time supplement, the ADEC would increase by 0.64% ($23,000) for one year. Source: Actuarial Note on One-Time Supplements, 2/11/2022.

Policy Options for Consideration by the Board of Trustees.

- The Board could recommend that the legislature set a contribution rate of 18.61% of pay to cover the sum of the "normal contribution" and the "accrued liability contribution" for already-promised benefits, as described in G.S. 120-4.20. The recurring amount appropriated from the General Fund could decrease by $125,000 from the amount appropriated for the fiscal year ending in 2023, and the non-recurring amount could decrease by $104,000, for a decrease in the total General Fund appropriation equal to $228,000.
- Alternately, the Board could recommend that the General Assembly provide a permanent COLA or a one-time supplement in conjunction with similar recommendations for TSERS, with an increased funding recommendation pursuant to the "COLA" section above.

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 2024. The ADC is the mathematical baseline contribution rate that would fund the system using the Board's assumptions adopted on January 28, 2021, and plan population and asset information as of December 31, 2021.

The ADC rate for the fiscal year ending in 2023 is 0.11% of covered pay. This is greater than the appropriated employer contribution rate for the fiscal year ending in 2023 from S.L. 2022-74 (House Bill 103), Section 39.19, which was 0.10%. Therefore, the amount appropriated from the General Fund on a recurring basis would need to increase by $1.3 million to meet the ADC requirements for the fiscal year ending in 2024.

Policy Option for Consideration by the Board of Trustees. The Board could recommend that the legislature set a contribution rate of 0.11% of pay to cover the ADC for already-promised benefits. The recurring amount appropriated from the General Fund would need to increase by $1.3 million from the amount appropriated for the fiscal year ending in 2023.

<u>North Carolina National Guard Pension Fund (NCNGPF)</u>

Issue. G.S. 127A-41(d) provides that an actuarially determined employer contribution (ADEC) rate "shall be calculated annually by the actuary using assumptions and a cost method approved by the Actuarial Standards Board of the American Academy of Actuaries and selected by the Board of Trustees." G.S. 127A-41(e) provides that "the Board of Trustees may adopt a contribution policy that would recommend a contribution not less than the [ADEC]." G.S. 127A-41(f) provides that "the recommended employer contribution rate by the Board of Trustees each year shall not be less than the [ADEC]."

The most recent NCNGPF actuarial valuation report documents the recommended ADEC amount for the fiscal year ending in 2024. The ADEC is the mathematical contribution that would fund the system using the Board's assumptions and methods adopted on January 21, 2021, and plan population and asset information as of December 31, 2021. The ADEC for the fiscal year ending in 2024 is $0.

This ADEC amount of $0 takes into account the current version of the State Contribution Rate Stabilization Policy (SCRSP), adopted on April 29, 2021, which provides for the recommended State contribution to be equal to the ADEC with no adjustment if the most recent measured funded percentage of the NCNGPF is at least 100%.

The ADEC of $0 is less than the appropriated State contribution for the fiscal year ending in 2023 from S.L. 2022-74 (House Bill 103), which was $11,031,715.

Benefit Improvements. The NCNGPF was measured to be 115.7% funded on an actuarial basis as of December 31, 2021, with $173 million in actuarial value of assets, as compared to $149 million in actuarial accrued liability. Because the funded percentage was at least 100%, the SCRSP provides that the Board may consider recommending a benefit increase up to the relevant inflation measure, which was 9.06%. The consulting actuary has estimated that based on the funded position of the plan, namely an actuarial "surplus" of $23.4 million as of December 31, 2021, any such increase in benefits could be recommended without a State funding request:

Monthly Ben. After 20 Yrs.	Monthly Ben. After 30 Yrs.	Full Actuarial Cost	Actuarial Surplus at 12/31/21	Net Funding Requirement
$105 (Current)	$210 (Current)	$0	($23,442,682)	$0
$108	$216	$4,274,445	($23,442,682)	$0
$111	$222	$8,548,890	($23,442,682)	$0
$114	$228	$12,823,333	($23,442,682)	$0

Note: The table shows benefit increases in $3 increments to the $105 amount. The Board could also recommend other $1 increments up to a maximum of $114, for example $107 or $112.

In assessing the durability of the funding surplus as of December 31, 2021, the Board may wish to consider the following factors:

- As of December 31, 2021, the market value of assets was $9 million greater than the actuarial value. That is, the surplus on a market value basis was $32.5 million, compared to a surplus of $23.4 million on an actuarial value basis.
- The estimated investment experience during calendar year 2022, on a market value basis, was a <u>loss of $31 million</u>. This is the staff actuary's estimate based on an estimated percentage return of <u>negative</u> 10.4%, as compared to the assumed return of

positive 6.5%. These losses will be recognized into actuarial figures over the coming years.
- Annual valuation results for the NCNGPF have been less predictable than for the other Retirement Systems, as a result of ongoing data updates described in the next section.

Continuing Data Updates. The NCNGPF has seen significant decreases and increases in its actuarial accrued liability in recent years as the National Guard has updated its data on plan membership. For example, there was a gain (liability reduction) of $12.4 million in 2018, a gain of $11.9 million in 2019, a loss of $4.4 million in 2020, and a gain of $25.9 million in 2021. Staff expects that these updates will continue to be reflected in the next one or two actuarial valuations. For example, the National Guard will continue to research the status of former service members who may be deceased and entitled to no benefit, or on the other hand, may be living well past their retirement age and entitled to many years of retroactive payments. RSD staff cannot predict whether the continuing research will cause an overall increase or decrease in plan liabilities, but the impact could be significant.

Other COLA Provision of SCRSP. If the Board recommends any COLA or one-time supplement under TSERS, the NCNGPF SCRSP calls for the Board to recommend that the General Assembly enact a benefit improvement of similar value for NCNGPF retirees. This could be covered by a recommendation of a general benefit improvement applying to both current and future retirees, as described in the prior section.

Policy Options for Consideration by the Board of Trustees.

- The Board could recommend no change in benefits, and no State contribution to the NCNGPF for the fiscal year ending in 2024, which would satisfy the ADEC requirement of G.S. 127A-41(d). The State appropriation could be decreased by $11.0 million while meeting the ADEC requirement.
- The Board could recommend a benefit improvement in accordance with the table on the previous page, increasing the benefit from $105 to as much as $114 per month for a retiree with 20 years of military service, and from $210 to as much as $228 per month for a retiree with 30 years of military service. The Board's policy would not require any funding request for such a benefit improvement. However, in view of investment losses experienced during 2022, the Board could optionally request funding guided by the "Full Actuarial Cost" in the table on the previous page.
- In view of the continuing updates to census data occurring at the National Guard, the Board could recommend that the General Assembly maintain the $11,031,715 per year funding amount during both years of the fiscal biennium (fiscal years ending 2024-2025). This could come with a recommendation to use some portion of the total $22,063,430 during the biennium toward a benefit increase – for example to use $8,548,890 toward an increase to the $111 / $222 level, with the remaining $13,514,540 protecting against continuing market turmoil or census data updates until valuations are more stable. RSD staff believes that such a recommendation (a benefit increase, along with funding more than the amount tied to the benefit increase) is within the SCRSP policy guidance.
- If the Board is recommending a permanent COLA or one-time supplement under TSERS, the Board should ensure that any benefit improvement recommended for NCNGPF has at least similar value for current retirees as the TSERS recommendation.

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, 2021, shows that the plan has liabilities of $155.3 million. Against these liabilities, the plan has current assets of $64.5 million. Prospective contributions by the state based on a contribution rate equal to 0.13% of covered pay have a present value of $211.2 million. The present and prospective assets, which amount to $275.7 million, exceed the liabilities of $155.3 million by $120.4 million.

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, 2021, shows that the plan has liabilities of $48.7 million. Against these liabilities, the plan has current assets of $62.1 million.

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, 2021, shows that the plan has liabilities of $1,476 million. Against these liabilities, the plan has current assets of $286 million. Prospective contributions of participants eligible for benefits have a value of $1,013 million. The total present and prospective assets amount to $1,298 million, which is less than the liabilities of $1,476 million by $178 million. The Board's consulting actuary has advised that, 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.

The consulting actuaries have consistently projected a shortfall in this plan, for a number of years. In January 2022, the Boards directed staff to engage with the consulting actuary to study a range of options to address the projected shortfall. Several such options are being presented today under another agenda item, and may form the basis of Board recommendations or further discussions. Pursuant to S.L. 2020-29, no decision of either the State Board or the Local Board related to this plan can take effect unless and until the same decision has been made and voted on by the other Board.

Policy Option for Consideration by the Board of Trustees. To be discussed in separate agenda item.

Summary of Alternatives
For Presentation to the 2023 General Assembly

Draft Prepared Under Assumption of No Benefit Enhancements. If the Board recommends any benefit enhancements, it is suggested that the Board direct staff to make any updates necessary to conform to Board decisions prior to communicating this summary to the legislature.

Retirement System	Employer Contributions	Enhance Benefits
Teachers' and State Employees' Retirement System	Decrease employer contribution rate by 0.94%, reducing cost by $107.6 million to General Fund and $3.5 million to Highway Fund. See document for recurring vs. non-recurring details.[1]	None
Consolidated Judicial	Decrease employer contribution rate by 7.11%, reducing General Fund cost by $5.9 million. See document for recurring vs. non-recurring details.[2]	None
Legislative	Decrease employer contribution rate by 6.30%, reducing General Fund cost by $228,000. See document for recurring vs. non-recurring details.[3]	None
Disability Income Plan	Increase employer contribution rate by 0.01%, increasing cost by $1.3 million to the General Fund and $0.4 million to the Highway Fund.[4]	N/A
National Guard Pension Fund	Decrease appropriation for fiscal year ending in 2024 by $11,031,715, to $0.[5]	None
Death Benefit Plans	No change	Separate decision of TSERS and LGERS Boards

<u>FOOTNOTES</u>:

[1]The estimated payrolls for the 2022 Session of the General Assembly were $11,444,009,000 for the General Fund and $368,682,000 for the Highway Fund.

[2]The estimated payroll for the 2022 Session of the General Assembly was $82,761,000.

[3]The estimated payroll for the 2022 Session of the General Assembly was $3,620,000.

[4]The estimated payrolls for the 2022 Session of the General Assembly were $12,755,315,000 for the General Fund and $368,682,000 for the Highway Fund.

[5]The total appropriated employer contribution for fiscal year ending June 30, 2023 is $11,031,715. For the fiscal year ending June 30, 2024, the Board's State Contribution Rate Stabilization Policy, in recognition of the fact that the most recent funded percentage measurement was greater than 100%, calls for a minimum contribution of the actuarially determined employer contribution amount, which is $0.